

Barwon Water draft decision

2018 Water Price Review

28 March 2018



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Summary

In September 2017, Barwon Water provided a submission to us proposing prices for a five year period starting 1 July 2018

This draft decision sets out our preliminary views on Barwon Water's price submission.¹²

We invite interested parties to comment on our preliminary views in this draft decision before we make a final decision and issue a price determination in June 2018. Details on how to make a submission on our draft decision are provided in Chapter 4.

Barwon Water has committed to improve outcomes for customers

Our draft decision proposes to approve a revenue requirement that will allow Barwon Water to deliver on its customer service commitments, government policy, and obligations monitored by Environment Protection Authority Victoria and Department of Health and Human Services.

Some of the ways Barwon Water plans to improve outcomes for customers are by:

- increasing the share of water usage charges in residential bills, in response to feedback that customers wanted greater control over their bills
- · increasing support for financially vulnerable customers
- providing more timely notice of water supply interruptions by SMS
- introducing programs to help customers use water more efficiently.

Overall, our view is that Barwon Water has demonstrated its proposals will deliver better value to its customers. This is reflected in its proposals to minimise price impacts, and to improve services in areas that its community engagement found are the highest priority among its customers.

We have approved a slightly lower revenue requirement than proposed by Barwon Water, reflecting our review of efficient costs

Our draft decision proposes to approve a revenue requirement of \$975.5 million for Barwon Water over the five year period starting 1 July 2018.³ This is \$11.2 million or 1.1 per cent lower than

¹ Clause 16 of the Water Industry Regulatory Order 2014 requires us to issue a draft decision.

² Barwon Water's price submission is available on our website at www.esc.vic.gov.au.

³ The revenue requirement is the forecast amount a water corporation needs to deliver on customer outcomes, government policy, and obligations monitored by technical regulators including Environment Protection Authority Victoria and the Department of Health and Human Services. Along with forecast demand, it is an input to calculating the prices to be charged by a water corporation.

proposed by Barwon Water. This means (on average) Barwon Water's prices over 2018-19 to 2022-23 will be 1.1 per cent lower than its original proposal.⁴

While we have accepted Barwon Water's capital expenditure forecasts (see from page 19), we have adopted a lower assumption for its operating expenditure.

Barwon Water proposed an increase in labour costs above inflation. Our view is that these increases should instead be managed through efficiency improvements, or funded via higher revenue generated from the customer growth forecast by the corporation. We have also adopted a lower forecast for Barwon Water's electricity costs. The operating expenditure section (page 9) provides more information on our review of Barwon Water's operating expenditure.

Barwon Water must respond to our draft decision and propose individual tariffs that reflect our initial views on the revenue requirement. Barwon Water's response will determine the price and bill impact of our draft decision on individual tariffs and customer groups.

Our draft decision is not to accept Barwon Water's proposed form of price control

Barwon Water proposed a new form of price control, a net revenue cap. It currently uses a price cap. Our draft decision is not to accept Barwon Water's proposed form of price control.

While we believe that parts of its proposed approach have merit, there are features that we believe are not consistent with the interests of its customers. In particular, its proposed approach could allow Barwon Water to hold any over-recovery of revenue for up to five years. Moreover, we found its proposal relatively complex, and consider it does not enable customers to readily understand prices or how they are set. See the price control section from page 24 for more information.

We accept Barwon Water's proposal to change the structure of residential water tariffs

We accept Barwon Water's proposed tariff structures.

For water services, Barwon Water proposed a fixed service charge and a variable component that depends on water used. In response to customer feedback that they wanted more control over bills, Barwon Water proposed to increase the share of water variable charges in bills. Our draft decision accepts this change, noting it was the subject of extensive consultation with customers.

For residential sewerage services, Barwon Water proposed a fixed charge only. For non-residential sewerage services Barwon Water proposed a two-part tariff with a fixed service charge and a variable usage component. We have approved these tariff structures, on the basis that they are a

⁴ This is an indicative percentage change on prices based on the percentage change in draft decision revenue requirement compared to the proposed revenue requirement.

continuation of Barwon Water's current approach and otherwise meet the criteria in our guidance. Our review of Barwon Water's proposed tariff structures is set out from page 25.

Barwon Water's price submission is rated as 'Advanced' under PREMO

Our draft decision is to accept Barwon Water's PREMO self-rating of its price submission as 'Advanced'. As noted above, in our view Barwon Water has demonstrated its proposals will deliver better value to its customers, consistent with an 'Advanced' price submission. In particular, we found Barwon Water's engagement was 'Leading', relying heavily on deliberative approaches to provide customers with the opportunity to influence its proposals.

We also found Barwon Water demonstrated a strong commitment to controlling its costs. Barwon Water's proposed operating expenditure incorporated one of the highest efficiency targets in the sector. We also found its price submission was of a high quality; its proposals were mostly clear and the supporting justification for proposals was generally sound.

We have reflected our views on Barwon Water's form of price control (as outlined above) in our draft decision on the Risk element of PREMO. Our draft decision proposes to rate Barwon Water as 'Standard' on Risk, compared with its proposed rating of 'Advanced' (Table A). More information on our assessment of Barwon Water's proposed PREMO ratings is set out from page 31.

Our PREMO rating is an assessment of the water corporation's price submission. It is not an assessment of the water corporation itself.

Table A PREMO Rating

	Overall PREMO rating	Risk	Engagement	Management	Outcomes
Barwon Water's rating	Advanced	Advanced	Leading	Advanced	Advanced
Commission's rating	Advanced	Standard	Leading	Advanced	Advanced

Among the 15 draft decisions we have released so far, Barwon Water is one of eight corporations for which we propose to approve an 'Advanced' rating (Table B).

Table B Draft decision on PREMO – overall rating

Leading	Advanced	Standard	Basic
Goulburn Valley Water	Barwon Water	Coliban Water	Wannon Water
	Central Highlands Water	East Gippsland Water	
	City West Water	Gippsland Water	
	GWMWater	Lower Murray Water	
	North East Water	(urban)	
	South East Water	Westernport Water	
	Southern Rural Water		
	Yarra Valley Water		

1. Our role and approach to water pricing

We are Victoria's independent economic regulator

Our role in the water industry is based on the Water Industry Regulatory Order 2014 (WIRO) which is made under the *Water Industry Act 1994* (Vic) (WI Act) and sits within the broader context of the *Essential Services Commission Act 2001* (Vic) (ESC Act). Our role under the WIRO includes regulating the prices and monitoring service standards of the 19 water corporations operating in Victoria.

We are reviewing the prices 17 water corporations propose to charge customers from 1 July 2018

Our review of the prices proposed by the water corporations covers the prescribed services listed in the WIRO.⁵ The prescribed services include retail water and sewerage services, and bulk water and sewerage services delivered by the water corporations.⁶

In September 2017, Barwon Water provided a submission to us proposing prices for a five year period starting 1 July 2018. Our task is to assess the price submission against the legal framework that governs our role, and make a price determination that takes effect from 1 July 2018. The price determination will specify the maximum prices Barwon Water may charge for prescribed services, or the manner in which prices are to be calculated, determined or otherwise regulated. We also issue a final decision that explains the reasons for our price determination.

We assess prices against the WIRO and other legal requirements

Clause 11 of the WIRO specifies the mandatory factors we must have regard to when making a price determination, including matters set out in the WIRO, the WI Act and the ESC Act. In reaching this draft decision we have had regard to each of the matters required by clause 11 of the WIRO, including:

the objectives and matters specified in clause 8 of the WIRO, which include economic efficiency
and viability matters, industry specific matters, customer matters, health, safety, environmental
and social matters, and other matters which are specified in sections 8 and 8A of the ESC Act
and section 4C of the WI Act

Our role and approach to water pricing

⁵ The review excludes Melbourne Water and Goulburn-Murray Water. In 2016 we approved prices for Melbourne Water to 30 June 2021 and for Goulburn-Murray Water to 30 June 2020.

⁶ The prescribed services are listed at clause 7(b) of the WIRO.

- the matters specified in our guidance⁷
- the principle that prices should be easily understood by customers and provide signals about the efficient costs of providing services, while avoiding price shocks where possible
- the principle that prices should take into account the interests of customers of the regulated entity, including low income and vulnerable customers.

A separate document lists the specific objectives and the various matters the commission must have regard to when making a price determination and provides a guide to where the commission has done so in this draft decision.⁸

In 2016, we issued guidance to Barwon Water to inform its price submission. The guidance set out how we will assess Barwon Water's submission against the matters we must consider under clause 11 of the WIRO.

If we consider the price submission has adequate regard for the matters in clause 11 of the WIRO and complies with our guidance, we must approve Barwon Water's proposed prices.⁹

If we consider the submission does not have adequate regard for the matters specified in clause 11 of the WIRO or comply with our guidance, we may specify maximum prices, or the manner in which prices are to be calculated, determined or otherwise regulated.¹⁰

The 2018 price review is the first we've undertaken under our new water pricing approach

In 2014, the Victorian Government reviewed and revised the WIRO. The changes allowed us more flexibility to decide on the pricing approach we use in Victoria's water sector. In April 2015 we released a consultation paper to start reviewing our pricing approach.¹¹

Over 2015, we held a series of workshops and hosted a conference (in November) to hear from stakeholders and explore alternative ways to approach water pricing.

In May 2016, we released a position paper setting out our proposed new pricing approach, and invited submissions.¹² We met with each water corporation and other interested parties to help

⁷ Essential Services Commission 2016, 2018 Water Price Review, Guidance paper, November.

⁸ Essential Services Commission 2018, *Barwon Water draft decision, 2018 Water Price Review – commission's consideration of legal requirements*, 28 March. This is located on our website at www.esc.vic.gov.au

⁹ This is a requirement of the WIRO, clause 14(b).

¹⁰ This is provided for under the WIRO, clause 14(b)(i).

¹¹ Essential Services Commission 2015, *Review of Water Pricing Approach, Consultation paper*, April.

¹² Essential Services Commission 2016, A new model for pricing services in Victoria's water sector, Position paper, May.

inform their submissions. Submissions were supportive of the overall proposal, in particular the greater focus on customer engagement and value.

We finalised our new approach to water pricing in October 2016.¹³

Our new pricing approach builds on many aspects of the previous approach. We continue to use the building blocks to estimate the revenue requirement for a water corporation.¹⁴ Our guidance explains the building blocks and how we use it to estimate the revenue requirement.¹⁵

Among the key changes, the new approach introduces new incentives to help ensure water corporations deliver the outcomes most valued by customers. Our new PREMO framework rewards stronger customer value propositions in price submissions, and an early draft decision is available for price submissions we can assess in a short timeframe. The PREMO incentive is described next.

Our consultation on the pricing approach informed the guidance we issued water corporations in November 2016 to inform price submissions for the 2018 water price review.

PREMO

PREMO stands for **P**erformance, **R**isk, **E**ngagement, **M**anagement, and **O**utcomes. The purpose of PREMO is to provide an incentive for water corporations to deliver outcomes most valued by customers. It includes incentives for a water corporation to engage with customers to understand their priorities and concerns, and take these into account.

PREMO links the return on equity allowed in the revenue requirement to the value delivered by a water corporation to its customers. Under PREMO, a higher level of ambition in terms of delivering customer value results in a higher return on equity.

Our PREMO rating is an assessment of the water corporation's price submission. It is not an assessment of the water corporation itself.

The 2018 water price review is the first time we've applied our PREMO incentive mechanism.

¹³ For more detail on the new water pricing approach see: Essential Services Commission 2016, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October.

¹⁴ The revenue requirement is the forecast amount that a water corporation needs to deliver on customer outcomes, government policy, and obligations monitored by technical regulators including Environment Protection Authority Victoria and the Department of Health and Human Services.

¹⁵ Essential Services Commission 2016, *Guidance Paper*, op. cit., pp. 8-9.

¹⁶ In December 2017 we issued early draft decisions for East Gippsland Water, South East Water, Westernport Water and Yarra Valley Water.

For the 2018 water price review, a water corporation's ambition in terms of delivering customer value is being assessed against four elements of PREMO – Risk, Engagement, Management and Outcomes.¹⁷

A water corporation must self-assess and propose a rating for its price submission as 'Leading', 'Advanced', 'Standard' or 'Basic'. Its proposed return on equity will then reflect its PREMO rating. A 'Leading' submission has the highest return on equity, and a 'Basic' submission the lowest. We assess the justification for the PREMO rating, and also rate the price submission. This process determines the return on equity reflected in the revenue requirement.¹⁸

¹⁷ The Performance element of PREMO will be assessed at the review following the 2018 water price review.

¹⁸ Essential Services Commission 2016, *Guidance paper*, op. cit., pp. 45–49.

2. Our assessment of Barwon Water's price submission

We have made our draft decision on Barwon Water's price submission after considering: Barwon Water's price submission, its responses to our queries, and written submissions from interested parties (a list of submissions is provided in Appendix A).

Any reports, submissions, or correspondence provided to us which are material to our consideration of Barwon Water's price submission are available on our website (to the extent the material is not confidential).

Our guidance included a number of matters water corporations must address in their price submissions. Barwon Water's price submission addressed each of these matters. Our preliminary assessment of these matters is provided in this chapter.

We found Barwon Water's price submission presented clear and comprehensive information to support its proposals. Barwon Water also provided evidence that its engagement sought to capture the main priorities and concerns of customers, and that it has taken this feedback into account (see the customer engagement section on page 6).

Barwon Water must submit a response to our draft decision and provide an updated financial model by 8 May 2018 (via email to water@esc.vic.gov.au). The response will be published on our website. We also invite other interested parties to make a submission.

We intend to make a price determination for Barwon Water in June 2018.

All financial values referred to in this chapter are in \$2017-18.

Regulatory period

Barwon Water proposed a five year regulatory period. Our draft decision accepts Barwon Water's proposal as it is consistent with our guidance. Our guidance proposed to approve a five year regulatory period, subject to any alternative and justified proposal.¹⁹

Customer engagement

Our guidance required Barwon Water to engage with customers to inform its price submission.

The engagement by Barwon Water:

- took place between June 2016 and September 2017
- included a range of methods such as workshops, focus groups, face-to-face, telephone and online surveys, and a citizens' jury whose members were representative of its customer base.
- was informed by input from community and indigenous groups, vulnerable customer advocacy groups, large business customers and an environmental consultative committee
- covered matters such as supply reliability, prices and tariff structures, and the level of assistance provided to vulnerable customers.

More detail on Barwon Water's engagement is available in its price submission.²⁰

Evidence that Barwon Water's engagement influenced its proposals includes:

- accepting ten recommendations made by the community panel in full, and another five with some amendment
- increasing the share of water variable charges in residential bills, in response to customer feedback that they wanted more control over their bills
- encouraging greater use of recycled water in response to feedback that customers see this as a
 way to improve water security.

The influence of Barwon Water's engagement on its proposals supports the objectives in our pricing framework relating to efficiency and the interests of consumers.²¹

¹⁹ For detail on the reasons for using five years as the default regulatory period, see: Essential Services Commission 2016, *Guidance paper*, op. cit., p. 21.

²⁰ Barwon Water's price submission is available on our website at www.esc.vic.gov.au.

²¹ See for example, WIRO clauses 8(b)(i), 8(b)(ii), 8(b)(iii), 11(d)(iii), and ESC Act Sections 8(1), 8A(1)(a).

Outcomes

Barwon Water proposed to deliver a number of outcomes over the five year period starting 1 July 2018. Barwon Water committed to delivering:

- a reliable, secure water future for our region
- timely, innovative services for our customers
- a healthier environment for all
- · deeper knowledge and partnerships within our community
- affordability for all our customers.

Barwon Water proposed a number of measures and targets that it will use to report on performance on each outcome. These are listed on page 6 of the executive summary in its price submission.

Barwon Water has committed to reporting annually to customers on how it has delivered on its proposed outcomes on its website, engagement portal, social media and email.

Where Barwon Water does not meet its service targets it has committed to return to customers up to \$2.3 million per year (or \$11.5 million over its five year regulatory period), either through lower prices or other initiatives informed through customer consultation.

We will engage with Barwon Water to finalise the measures and targets used to assess performance against its outcomes, and how it will report this publicly. Performance against these measures will inform our assessment during future price reviews.

Guaranteed service levels

Guaranteed service levels (GSLs) define a water corporation's commitment to deliver a specified level of service. For each GSL, a water corporation commits to a payment or a rebate on bills to those who have received a level of service below the guaranteed level.

Barwon Water's proposed GSLs are set out on pages 136 and 137 of its price submission. It has proposed to increase the rebate for all of its existing GSLs, including its hardship GSL to reflect movements in inflation. Barwon Water proposed to introduce compensation for sewer spills under which all customers who experience any sewer incident will receive some compensation. Barwon Water's proposed GSLs were based on recommendations of its community panel.²²

²² Justification for Barwon Water's proposed GSLs is set out in its price submission at appendix 2 – its price submission is available at www.esc.vic.gov.au.

We propose to accept Barwon Water's proposed GSLs, on the basis that they have been agreed with customers during its engagement. Final GSLs will be subject to our consideration of any feedback following the release of our draft decision.

Revenue requirement

The revenue requirement is the forecast amount a water corporation needs to deliver on customer outcomes, government policy, and obligations monitored by technical regulators including Environment Protection Authority Victoria and the Department of Health and Human Services.

Along with forecast demand, it is an input to calculating prices. ²³

Barwon Water proposed a revenue requirement of \$986.6 million over a five year period starting 1 July 2018. Our draft decision proposes to reject the revenue requirement in Barwon Water's submission, and instead approve a revenue requirement of \$975.5 million, 1.1 per cent lower than proposed by Barwon Water. This reflects our assessment of each element that comprises the revenue requirement, including forecast expenditure.

Our draft decision on the revenue requirement is set out at Table 2.1.

Table 2.1 Draft decision – revenue requirement \$ million 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Operating expenditure	98.7	97.5	96.2	96.4	95.7	484.6
Return on assets	55.3	55.9	56.7	57.1	57.4	282.3
Regulatory depreciation	37.7	40.3	42.5	44.2	43.8	208.5
Draft decision – revenue requirement	191.7	193.7	195.4	197.7	196.9	975.5

Note: Numbers have been rounded

²³ We met with officers of the Department of Environment, Land, Water and Planning, Department of Health and Human Services, and Environment Protection Authority Victoria, to discuss their expectations of Barwon Water in the regulatory period from 1 July 2018. We had regard to their views in our draft decision.

The main adjustments proposed in our draft decision on the revenue requirement relate to Barwon Water's forecast operating expenditure. Table 2.2 summarises proposed changes to the revenue requirement.

Our final decision will be based on the latest available information. Accordingly, as well as responding to our draft decision and providing an updated price schedule, Barwon Water must update its revenue requirement and prices to reflect our April 2018 updates to estimates for the cost of debt and inflation.

There may be changes in laws or government policy before we make a price determination. If any such changes occur between the draft decision and the price determination, and impact on the revenue requirement, Barwon Water should update its price submission and also provide us with an updated financial model. Any updates will be publicly available on our website.

Table 2.2 Adjustments to revenue requirement \$ million 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Proposed revenue requirement	193.1	195.2	198.1	200.5	199.7	986.6
Operating expenditure	-1.4	-1.6	-2.7	-2.8	-2.8	-11.2
Draft decision – revenue requirement	191.7	193.7	195.4	197.7	196.9	975.5

Note: Numbers have been rounded

Operating expenditure

Operating expenditure is an input to the revenue requirement. Barwon Water's price submission provides detail on its forecast operating expenditure from pages 57 to 77, with a cost breakdown shown in table 14 on pages 62 to 63.

We assess both:

- controllable costs those that can be directly or indirectly influenced by a water corporation's decisions
- non-controllable costs those that cannot be directly or indirectly influenced by a water corporation's decisions.

For controllable operating expenditure, our assessment process first confirms an efficient baseline, based on the last year of actual costs prior to our price review (that is, 2016-17). We then consider

the forecast costs relative to this baseline, including the proposed efficiency improvement rate and forecast growth, and any proposed cost changes relative to the baseline. We engaged Deloitte Access Economics to provide expert advice to inform our assessment of controllable operating expenditure. Deloitte's report on its assessment of Barwon Water's expenditure forecast is available on our website.24

For non-controllable expenditure (including bulk water and sewerage services, government charges and licence fees) we confirm the proposed forecasts, with reference to the relevant regulatory body where appropriate, and adjust forecasts where required.

Table 2.3 sets out our draft decision on Barwon Water's forecast operating expenditure, for the purpose of establishing the revenue requirement (Table 2.1). Details of our assessment and reasons for our proposed adjustments to Barwon Water's proposal follow, with a summary of our adjustments shown at Table 2.4.

We consider the proposed operating expenditure in this draft decision reflects the expenditure that a prudent service provider would incur when acting efficiently to achieve the lowest cost in delivering the outcomes specified in Barwon Water's price submission.

The benchmark operating expenditure that we propose to adopt for Barwon Water does not represent the amount that Barwon Water is required to spend or allocate to particular operational, maintenance and administrative activities. Rather, it represents assumptions about the overall level of operating expenditure (to be recovered through prices) that we consider sufficient to operate the business efficiently and to maintain services over the regulatory period.

²⁴ Deloitte Access Economics 2018, *Barwon Water – expenditure review for 2018 water price review*, February.

Table 2.3 Draft decision – operating expenditure \$ million 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Controllable costs	90.1	89.1	88.0	88.4	87.8	443.4
Non-controllable costs	8.6	8.4	8.2	8.0	7.9	41.2
Bulk services ^a	0.0	0.0	0.0	0.0	0.0	0.0
Environmental contribution ^b	8.2	8.0	7.9	7.7	7.5	39.3
Licence fees - ESC ^c	0.112	0.112	0.112	0.112	0.169	0.619
Licence fees - DHHS ^c	0.073	0.073	0.073	0.073	0.073	0.363
Licence fees - EPA ^c	0.185	0.185	0.185	0.185	0.185	9.926
Draft decision - operating expenditure	98.7	97.5	96.2	96.4	95.7	484.6

^a Bulk services covers the supply of bulk water and sewerage services. Barwon Water is proposing to capitalise the remainder of the Melbourne Water headworks charges to the Yarra-Thompson system

Note: Numbers have been rounded

Barwon Water proposed a total forecast controllable operating expenditure of \$431.2 million over a five-year regulatory period. For the reasons set out below, we propose to increase this by \$12.2 million to establish a benchmark controllable operating expenditure of \$443.4 million.

Baseline controllable operating expenditure:

• We corrected Barwon Water's financial model where it treated finance lease costs for a biosolids plant as non-controllable operating expenditure. We have moved this cost item to controllable operating expenditure because we consider finance lease costs can be directly or indirectly influenced by a corporation's decisions. This correction caused a \$5.23 million increase to the price submission 2016-17 controllable expenditure baseline of \$83.71 million, resulting in a new baseline figure of \$88.94 million. In making this correction, we have increased total controllable operating expenditure by \$22.1 million, and reduced the non-controllable by

^b The Environmental Contribution collects funds from water corporations under the WI Act

^c Licence fees are paid to cover costs incurred by Department of Health and Human Services, Environment Protection Authority Victoria, and the Essential Services Commission in their regulatory activities related to the water corporation

- the corresponding amount. We have ensured this expenditure shift has a net zero change on the total operating expenditure, as shown in Table 2.4.
- From this new baseline of \$88.94 million, Barwon Water proposed a downward adjustment of \$0.43 million to its actual 2016-17 baseline year controllable operating expenditure, removing rental costs incurred during the rebuild of its main offices. The resultant figure of \$88.51 million is 10.1 per cent below the benchmark of \$98.51 million allowed for 2016-17 in the previous price determination. Deloitte assessed the proposed 2016-17 baseline and recommended no adjustment.²⁵ We accept Deloitte's recommendation as we consider this reflects an efficient baseline cost to forecast annual operating expenditure.

Efficiency improvement:

 Barwon Water's proposed efficiency improvement rate on controllable operating costs is 2.3 per cent per annum. This is higher than its past performance (where it met our mandated 1 per cent efficiency rate). Barwon Water's efficiency improvement rate is the equal fourth highest rate proposed by water corporations in their price submissions. This rate exceeds Barwon Water's forecast connection growth rate of 1.6 per cent per annum, giving a declining annual baseline operating cost.

Proposed cost changes:

- Barwon Water has sought additional operating expenditure of \$26.02 million to its annual baseline cost for labour, electricity and gas, and for customer preferences identified during the engagement process. It will manage any other forecast cost increases or decreases within its efficiency improvement rate and growth allowance.
- Barwon Water proposed \$7.90 million above the baseline to cover wage increases above inflation resulting from its enterprise agreement. Deloitte considered that wage increases above inflation should be managed by the water corporation through productivity improvements or through the growth allowance applied to the baseline, as most other water corporations have proposed. Accordingly, Deloitte recommended the removal of the \$7.90 million.²⁶ We agree with Deloitte; we do not accept the proposed increase reflects efficient expenditure.
- Deloitte compared the forecast electricity costs of \$5.02 million above the baseline with its latest forecasts for electricity prices. Deloitte recommended an indicative reduction of \$2.0 million as it did not agree with Barwon Water's forecasted higher electricity prices continuing beyond

²⁵ Deloitte Access Economics, op. cit., p.13.

²⁶ Deloitte Access Economics, op. cit., p. 16 and p. 21.

2019-20 through to 2022-23.²⁷ We accept Deloitte's recommendation as we consider it reflects a more accurate forecast of efficient electricity costs during the 2018–23 regulatory period. However we do acknowledge that there is currently uncertainty in forecasting electricity prices and Barwon Water's electricity contract expires on 30 June 2018. We request that Barwon Water proposes a revised electricity forecast based on its new contract prices in response to our draft decision.

- Deloitte reviewed the proposed gas costs of \$6.17 million above the baseline, and accepted Barwon Water's justification. It noted that Barwon Water sought tenders for new gas prices in March and again in April 2017, which resulted in significantly higher prices.²⁸ We accept Deloitte's view as it is consistent with our guidance requirement for costs above the baseline year to be fully explained.
- Barwon Water proposed an additional \$6.94 million for a range of customer preferences arising
 from its engagement processes. Deloitte recommended no change to this expenditure because
 it considered Barwon Water had consulted thoroughly with its customers on these initiatives.²⁹
 We agree with Deloitte's assessment as we consider it reflects prudent operating expenditure.

We consider applying our proposed upward adjustment of \$12.2 million to Barwon Water's total proposed controllable operating expenditure reflects the requirements of the WIRO, and the criteria for prudent and efficient expenditure outlined in our guidance.³⁰ This results in controllable operating expenditure per connection declining by a greater amount (from the 2016-17 baseline year) than reflected in Barwon Water's proposal (Figure 2.1).

²⁷ Deloitte Access Economics, op. cit., pp.16–20.

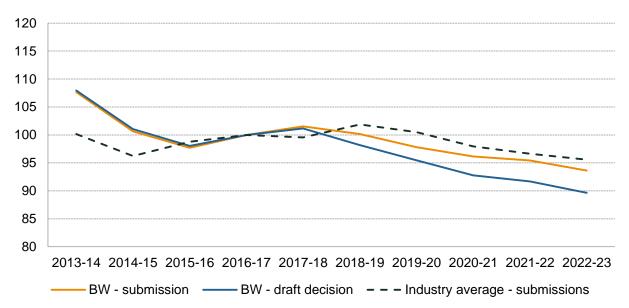
²⁸ Deloitte Access Economics, op. cit., p. 20.

²⁹ ibid.

³⁰ Essential Services Commission 2016, *Guidance paper*, op. cit., p. 31.

Figure 2.1 Controllable operating expenditure per water connection

Index: 2016-17=100



Submission – based on actual historical and forecast values provided by the water corporation in its price submission. Draft decision – includes any corrections or adjustments to historical and forecast values arising from our assessment. Industry average – drawn from the price submissions for all urban water corporations (excludes rural expenditure).

For non-controllable operating expenditure, we have adjusted Barwon Water's forecasts where required based on the latest information received from the relevant regulatory authorities on their licence fees and the environmental contribution. The values we have adopted for our draft decision are set out in Table 2.3 above.

For the environment contribution, we have used the 2018-19 value provided by the Department of Environment, Land, Water and Planning and assumed that this will remain flat in nominal terms (decline in real terms) across the 2018–23 regulatory period.

We have assumed the licence fees for the Department of Health and Human Services, the Environment Protection Authority Victoria and the Essential Services Commission remain flat in real terms across the period, but with a 50 per cent increase for our commission fee in 2022-23 to align with our regulatory review cycle.³¹

Barwon Water prepaid some external bulk charges in 2016-17 and is proposing to capitalise the remainder of the Melbourne Water headworks charges to the Yarra-Thompson system for the 2018–23 period.

³¹ The Department of Health and Human Services and the EPA Victoria provided their latest 2016-17 licence fees for making our draft decision. We have also based our forecast on our 2016-17 commission licence fee.

We have reduced Barwon Water's forecast non-controllable operating expenditure by \$23.42 million across the 2018–23 period, resulting from our adjustments to:

- move Barwon Water's \$22.10 million of finance lease costs for its biosolids plant from noncontrollable to controllable operating expenditure to account for the error in treatment of costs (as mentioned previously)
- decrease our commission licence fee to \$0.112 million per year and include a value of \$0.169 million in 2022-23 (a total reduction of \$0.368 million)
- decrease the Environment Protection Authority Victoria licence fee to \$0.185 million per year (a total reduction of \$0.020 million)
- increase the environment contribution from \$8.20 million up to \$8.22 million for 2018-19 and decline this value across the period (a total reduction of \$0.93 million).

Overall, non-controllable operating expenditure will increase by \$1.51 million from 2017-18 to 2018-19, due to the increase in the environment contribution from \$6.65 million to \$8.22 million.

Prior to making our final decision, we will adjust Barwon Water's forecast non-controllable operating expenditure for the latest inflation data.

Table 2.4 sets out our proposed adjustments to both controllable and non-controllable operating expenditure.

Table 2.4 Adjustments to operating expenditure \$ million 2017-18

	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Proposed total operating expenditure	100.1	99.0	98.9	99.2	98.5	495.8
Finance lease – biosolids plant	4.9	4.7	4.4	4.2	3.9	22.1
Labour	-1.3	-1.5	-1.7	-1.7	-1.7	-7.9
Electricity	0.0	0.0	-0.6	-0.7	-0.7	-2.0
Total adjustments to controllable costs	3.6	3.2	2.2	1.8	1.5	12.2
Licence fees	-0.089	-0.089	-0.089	-0.089	-0.033	-0.388
Environmental contribution	0.016	0.031	-0.349	-0.326	-0.303	-0.931
Finance lease – biosolids plant	-4.9	-4.7	-4.4	-4.2	-3.9	-22.1
Total adjustments to non- controllable costs	-5.0	-4.7	-4.9	-4.6	-4.3	-23.4
Draft decision - total operating expenditure	98.7	97.5	96.2	96.4	95.7	484.6

Note: Numbers have been rounded

Regulatory asset base

The regulatory asset base is used to estimate the return on assets and regulatory depreciation in the revenue requirement. Our guidance required Barwon Water to propose its:

- closing regulatory asset base at 30 June 2017
- forecast regulatory asset base for each year of the regulatory period from 1 July 2018.

Closing regulatory asset base

We update the regulatory asset base to reflect actual gross capital expenditure, less government and customer contributions, and asset disposals for the period to 30 June 2017. This helps to ensure prices reflect the actual net expenditure of a water corporation.³²

Barwon Water's proposed closing asset base at 30 June 2017 is provided at page 97 of its price submission.³³.

We compared Barwon Water's actual net capital expenditure for 2012-13 to 2016-17 with the forecast used to approve maximum prices for the period from 1 July 2013. We undertake a prudency and efficiency review where a water corporation's net capital expenditure is more than 10 per cent above the forecast used to approve maximum prices for the period from 1 July 2013. We believe this approach is reasonable given capital expenditure can be 'lumpy' in nature.

Barwon Water's net capital expenditure over the period from 2012-13 to 2016-17 was \$423.8 million, \$72.3 million or 20.6 per cent higher than the forecast used to approve maximum prices for the period from 1 July 2013. The majority of the net capital expenditure above forecast was incurred in 2012-13, and primarily related to the Black Rock Recycled Water Plant and Armstrong Creek capital projects. In our 2013 water price review, we allowed Barwon Water to include amounts for these projects to reflect expenditure incurred over the period from 2007-08 to 2011-12. This was on the basis that expenditure in 2012-13 would be reviewed at Barwon Water's next price review, before being confirmed in the regulatory asset base.

We requested additional information from Barwon Water in relation to the Black Rock Recycled Water Plant and Armstrong Creek projects, including how costs were managed in 2012-13.

For these projects, we reviewed delivery plans, business cases, and internal reports on the drivers of cost increases and data on the final project budgets as compared to initial forecasts.

After reviewing the information provided by Barwon Water, we are satisfied that the additional net capital expenditure incurred in 2012-13 was prudent and efficient. We have therefore allowed the 2013 water price review forecast and the additional net capital expenditure of \$72.3 million, in Barwon Water's closing regulatory asset base at 30 June 2017.

³² Net capital expenditure is calculated by deducting government and customer contributions from gross capital expenditure. Customer contributions reflect revenue earned from new connections made to the water corporation's water, sewerage or recycled water networks.

³³ This is set out at table 32 of its price submission (available at www.esc.vic.gov.au) – Barwon Water has used the term "opening RAB" for 2017-18 to describe its closing asset base as at 30 June 2017.

Barwon Water also calculated its closing regulatory asset base in accordance with the requirements of our guidance. For these reasons, our draft decision accepts Barwon Water's proposed closing regulatory asset base for 30 June 2017 of \$1,338.2 million.

Table 2.5 sets out our draft decision on Barwon Water's regulatory asset base at 30 June 2017.

Prior to our final decision, we will review Barwon Water's proposed treatment of labour costs gifted by a developer, for the purpose of establishing its closing regulatory asset base at 30 June 2017.³⁴

In 2016-17, Barwon Water decided to pre-pay \$21.6 million relating to access to the Melbourne water system. Barwon Water's price submission did not seek to reflect the pre-payment in its revenue requirement and customer prices.

Table 2.5 Closing regulatory asset base \$ million 2017-18

	2012-13	2013-14	2014-15	2015-16	2016-17
Opening RAB 1 July	1,081.5	1,198.5	1,256.5	1,274.2	1,305.8
Plus gross capital expenditure	170.4	95.2	66.6	82.7	85.1
Less government contributions	8.1	6.0	1.6	0.2	0.3
Less customer contributions	12.6	6.7	13.1	15.7	11.8
Less proceeds from disposals	1.7	-6.9	2.2	2.1	6.4
Less regulatory depreciation	31.0	31.4	32.0	33.0	34.2
Closing RAB 30 June	1,198.5	1,256.5	1,274.2	1,305.8	1,338.2

Note: Numbers have been rounded

Forecast regulatory asset base

The forecast regulatory asset base is calculated having regard to the closing asset base, and forecasts for capital expenditure, government and customer contributions, and asset disposals.

³⁴ This is to allow time to explore the reasons for differing approaches to the treatment of the labour costs in Barwon Water's regulatory accounts, and its price submission. The amount involved is around \$3 million, which is relatively small compared with Barwon Water's regulatory asset base.

Table 2.6 sets out our draft decision on Barwon Water's proposed forecast regulatory asset base from 1 July 2018.³⁵ Later sections provide an overview of our assessment of the components of the forecast regulatory asset base.

Table 2.6 Forecast regulatory asset base \$ million 2017-18

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Opening RAB 1 July	1,338.2	1,312.9	1,321.2	1,342.3	1,356.2	1,360.9
Plus gross capital expenditure	50.6	86.0	79.1	57.6	50.4	55.5
Less government contributions	0.0	0.0	0.0	0.0	0.0	0.0
Less customer contributions	12.3	6.3	6.6	6.7	6.6	6.8
Less proceeds from disposals	28.6	33.8	11.2	-5.5	-5.1	-5.1
Less regulatory depreciation	35.1	37.7	40.3	42.5	44.2	43.8
Closing RAB 30 June	1,312.9	1,321.2	1,342.3	1,356.2	1,360.9	1,371.0

Note: Numbers have been rounded

Capital expenditure

Capital expenditure is an input to estimating the regulatory asset base. Barwon Water's forecast capital expenditure and supporting information is provided at pages 78 to 96 of its price submission. This is summarised in Figure 2.2, for the current 2013–18 period, and as proposed by the water corporation for the 2018–23 period.

We engaged Deloitte Access Economics to provide expert advice to inform our assessment of capital expenditure. Deloitte's report on its assessment of Barwon Water's expenditure forecast is available on our website. ³⁶

³⁵ Our guidance required water corporations to provide an estimate of the components of its regulatory asset base for 2017-18. This is so we can assess the opening asset base for 1 July 2018. Our guidance noted that where the 2017-18 forecasts for net capital expenditure (gross capital expenditure less government and customer contributions) is lower than the forecast benchmark for that year in its 2013 price determination, the lower amount must be used. The estimates for 2017-18 will be confirmed at the price review following the 2018 water price review.

100 90 80 70 60 50 40 30 20 10 0 2013-14 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22 2022-23

Figure 2.2 Gross capital expenditure by service category \$ million 2017-18

Note: actuals for 2013-14 to 2016-17 and water corporation forecasts for 2017-18 to 2022-23

For the reasons set out below, we have accepted the forecast capital expenditure of \$328.6 million proposed by Barwon Water for our draft decision on its revenue requirement:

■ Water ■ Sewerage ■ Recycled Water

- Barwon Water's price submission provided evidence that its forecasts for capital expenditure
 are efficient. Total proposed capital expenditure is \$51.5 million (13.5 per cent) lower than
 capital expenditure in the current 2013–18 period. This is due to an 11.7 per cent reduction in
 overall renewals expenditure compared to the current period, and a larger proportion of much
 smaller major projects than in previous years.
- Deloitte requested selected documents from Barwon Water as a representative sample to
 demonstrate its asset management processes and justification for its capital expenditure
 program. Based on the sample of documents reviewed, these demonstrate that Barwon Water
 has a robust approach for developing project scope, the timing of works and cost estimates.
- Deloitte reviewed information for the property realisation projects (including Barwon Water's largest major project), renewals expenditure program and uncertain projects. Deloitte recommended no adjustments to Barwon Water's forecast capital expenditure.³⁷ We agree with

³⁶ Deloitte Access Economics, op. cit.

³⁷ Deloitte Access Economics, op. cit., pp. 24–28.

- Deloitte's view as we consider the prudency and efficiency of the expenditure has been justified, consistent with our guidance.
- We met with Barwon Water to discuss the property realisation projects, and we are satisfied that
 costs and asset disposals are being appropriately treated within the financial model. Further, we
 are satisfied that Barwon Water has sought to manage these projects so as to not place
 pressure on customer prices.
- We consider the planned capital expenditure program is achievable given Barwon Water's past track record delivering its capital expenditure program. Over the current 2013–18 period, Barwon Water is expected to deliver most of its planned major projects. The only exceptions are the Torquay West high level feeder main which is deferred until 2018-19 due to delays in the land use planning for this future growth area, and the Inverleigh low level feeder main which was cancelled because a more cost efficient solution is being implemented.³⁸
- Barwon Water has excluded approximately \$60.0 million of speculative projects from its price submission where there is uncertainty in timing, cost, scope and benefits of capital expenditure. This equates to about 20 per cent of the forecast capital expenditure and includes \$20 million for transition to digital water meters. This approach is consistent with our guidance for managing uncertain expenditure. For our draft decision, we accept Barwon Water's proposal for addressing uncertainty, noting the following:
 - Barwon Water will need to demonstrate the prudency and efficiency of these costs if they are indeed incurred during the 2018–23 period if seeking to include them in the regulatory asset base.
 - Variations in capital expenditure from forecast during the 2018–23 period will form a key part of our assessment of the Performance element of PREMO at the next price review.
 - With regards to the transition to digital meters, before proceeding with this project, we would expect Barwon Water to define the success criteria for any digital metering trials before any broader roll-out could proceed. At a minimum, we expect this would include the requirement that expenditure for a full roll-out would deliver a positive net present value for the water corporation, or meet customer willingness-to-pay criteria. Any expenditure incurred by Barwon Water for this project may be subject to a prudency and efficiency assessment before it can be included in the regulatory asset base.

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³⁸ Essential Services Commission 2018, *Status of major projects supplement: Water performance report 2016-17*, 1 March, pp. 12–13.

We agree with Deloitte's assessment and consider Barwon Water's approach to forecasting its capital expenditure is consistent with the requirements of our guidance and WIRO principles.³⁹

Our draft decision for total gross capital expenditure is to accept Barwon Water's proposed benchmark, as set out in Table 2.6.

The benchmark that we adopt for Barwon Water does not represent the amount that the water corporation is required to spend or allocate to particular projects. Where we have made an adjustment to exclude a project's capital expenditure from Barwon Water's revenue requirement, we are not requiring the corporation to remove that project. Rather, it represents assumptions about the overall level of expenditure (to be recovered through prices) that we consider sufficient to operate the business and to maintain or improve services over the regulatory period. Barwon Water determines how to best manage the allocation of its revenue and priority of its expenditure within a regulatory period.

Customer contributions

Revenue from customer contributions is deducted from gross capital expenditure so it is not included in the regulatory asset base.⁴⁰

We compared Barwon Water's forecast for customer contributions with past outcomes, and its forecasts for growth in customer connections.⁴¹ We consider Barwon Water's forecast contributions are reasonable, having regard to past trends and its growth forecasts.

Our draft decision proposes to accept Barwon Water's forecasts for customer contributions.

Cost of debt

Our guidance required Barwon Water to use estimates of the cost of debt provided by the commission to estimate its revenue requirement. Barwon Water used the cost of debt values we specified to calculate its revenue requirement. For this reason, our draft decision accepts the cost of debt proposed by Barwon Water, as set out in Table 2.7.

³⁹ Essential Services Commission 2016, *Guidance paper*, op. cit., p. 35.

⁴⁰ Revenue from new customer contributions reflects revenue earned from new connections made to the water corporation's water, sewerage or recycled water networks.

⁴¹ Growth in customer connections can be used as an indicator of growth in customer contributions.

Table 2.7 Trailing average cost of debt

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Cost of debt (nominal)	6.9%	7.4%	7.0%	6.3%	5.3%	7.1%	5.4%	5.3%	4.9%	4.9%*

^{*} Estimated cost of debt – we will update the 2017-18 figure before the final decision and price determination.

Note: Numbers have been rounded

From 2016, we accepted a ten-year trailing average approach to estimating the benchmark cost of debt, changing from an on-the-day approach. The trailing average approach better aligns the actual cost of debt for an efficient business to the regulated benchmark, compared with an on-the-day approach.⁴² We consider the ten year trailing average approach helps to minimise risk to water corporations and provides better incentives for long-term investment.

Return on equity – PREMO rating

Barwon Water rated its price submission as 'Advanced'. Based on its PREMO self-rating, Barwon Water proposed a rate of return on equity of 4.9 per cent per annum. This reflects the maximum return rate allowed in our guidance for a price submission rated as 'Advanced'.⁴³

The return on equity is similar to the range of rates we have approved in past reviews for the water industry. We have also had regard to the return on equity allowed or estimated by regulators in other Australian jurisdictions recently for the water industry.⁴⁴

Our draft decision accepts Barwon Water's PREMO self-rating and proposed return on equity of 4.9 per cent per annum. Our assessment of Barwon Water's proposed PREMO rating is set out in Chapter 3.

Regulatory depreciation

Regulatory depreciation is an input to calculating the regulatory asset base. Barwon Water's forecast regulatory depreciation was calculated using a straight line depreciation profile.⁴⁵ We

⁴² For more detail on the trailing average and on the day approaches to the cost of debt, see Essential Services Commission 2016, *Water pricing framework*, op. cit., p.27.

⁴³ Essential Services Commission 2016, *Guidance paper*, op. cit., p. 49.

⁴⁴ Essential Services Commission of South Australia 2016, *SA Water regulatory determination 2016, Final determination*, June; Independent Pricing and Regulatory Tribunal 2017, *WACC biannual update*, August.

⁴⁵ For the period from 2018-19 to 2022-23, Barwon Water proposed a regulatory depreciation of \$208.5 million.

noted in our guidance that we prefer this approach.⁴⁶ Barwon Water also calculated regulatory depreciation in a manner consistent with our guidance. For these reasons, our draft decision proposes to accept Barwon Water's forecast regulatory depreciation.

Our draft decision on regulatory depreciation is shown in Table 2.5.

Tax allowance

The tax allowance is an input into the revenue requirement. Barwon Water has proposed no allowance for tax in its revenue requirement. Our draft decision is to accept the forecast as it was calculated consistently with the method required by our guidance.⁴⁷

Demand

Along with the revenue requirement, demand forecasts are an input to calculating prices.

Barwon Water's demand forecasts are set out at pages 41 to 56 of its price submission, and are also included in its financial model. Our draft decision proposes to accept Barwon Water's demand forecasts for the purpose of approving maximum prices as we consider they were estimated in a manner that is consistent with the requirements of our guidance. This includes basing demand forecasts on the latest *Victoria In Future* population growth forecasts issued by the Victorian Government.

Form of price control

Our guidance noted we would have particular regard to whether a corporation proposes to continue its existing approach, or introduce a new form of price control.⁴⁸

Barwon Water proposed a net revenue cap form of price control as set out on pages 122 to 123, and supporting paper 7 of its price submission. It currently uses a price cap. The net revenue cap is a combination of a price cap (when demand is lower than the forecast used to establish prices) and a revenue cap (when demand exceeds the forecast used to establish prices).

In its price submission, Barwon Water proposed that the net revenue cap commence in 2017-18. We clarified the starting date with Barwon Water during our review. In response, Barwon Water advised that the net revenue cap would commence in 2018-19.

⁴⁶ Essential Services Commission 2016, *Guidance Paper*, op. cit., p. 42.

⁴⁷ Essential Services Commission 2016, *Guidance paper*, op. cit., pp. 50–51.

⁴⁸ Essential Services Commission 2016, *Guidance paper*, op. cit., p. 53.

Our guidance paper stated that as part of the transition to a trailing average approach to estimating the cost of debt, each water business must propose an adjustment mechanism (including price control formulas) that allows for prices to adjust on an annual basis to reflect movements in the cost of debt.⁴⁹ Barwon Water's proposed net revenue cap does not include an adjustment mechanism to reflect annual adjustments to the cost of debt.

Instead, it proposed a single adjustment that would cover variations in revenue arising from changes in the cost of debt and differences in demand from forecast. Also, over recovery of net revenue against its net revenue cap would be factored into customer prices in the following regulatory period (that is, the regulatory period from 1 July 2023).

Our draft decision is not to accept Barwon Water's proposed form of price control because:

- Barwon Water has not proposed an annual adjustment mechanism to reflect our approach to the cost of debt, as required by our guidance.
- Its proposed form of price control is relatively complex and does not enable customers to easily understand the prices charged, or the manner in which prices may be calculated, determined, or otherwise regulated.⁵⁰
- It may allow Barwon Water to hold any over-recovery of revenue arising from higher than
 expected demand, or a lower cost of debt, until the next regulatory period (that is, the regulatory
 period from 1 July 2023). As stated in our guidance paper, we prefer annual adjustments to
 prices for the cost of debt, as this better aligns prices with efficient costs.⁵¹
- Barwon Water has not demonstrated that the new price control better satisfies the requirements of the WIRO than the existing structure.

Barwon Water must resubmit a proposal for its form of price control which is consistent with our quidance and complies with the WIRO.⁵³

⁴⁹ Essential Services Commission 2016, *Guidance paper*, op. cit., p. 60.

⁵⁰ WIRO clause 11(d)(i)

⁵¹ WIRO clause 11(d)(ii).

⁵² In considering whether to approve a proposed form of price control, our guidance outlined at p. 53 that we would have particular regard to whether the proposal involves a continuation of an existing structure or the introduction of a new price control. When a change is proposed, businesses will need to provide evidence to demonstrate that the new price control better satisfies the requirements in clause 11 of the WIRO than the existing structure.

⁵³ We note that we will allow water corporations flexibility to apply to change from a price cap to a weighted average price cap or tariff basket within a regulatory period, provided their proposal is otherwise in accordance with the guidance and the WIRO.

Tariff structures

Barwon Water's proposed tariffs are set out at pages 158 to 160 of its price submission.

Barwon Water's prices will be affected by our draft decision on the revenue requirement, which is outlined at page 8. Barwon Water must respond with updated proposed prices that reflect our draft decision. Because of this, our draft decision does not approve maximum prices for each tariff. We will provide final maximum prices in our final decision. However, our draft decision considers proposals related to tariff structures, and any submissions relating to the level of prices or bills.⁵⁴

As outlined in our guidance, we have provided the water corporations with a large degree of discretion to decide on individual tariff structures.⁵⁵ This recognises water corporations are often best placed to consider the interests of customers in designing tariffs, and that existing tariff structures have been developed over time to deal with a variety of local circumstances. Barwon Water found that customers generally supported its existing tariff structures.

Generally, Barwon Water proposed to maintain its existing tariff structures. For residential and non-residential water services, it proposed a two-part tariff with a fixed service charge and a variable usage component that depends on water use. For residential sewerage services, Barwon Water proposed a fixed service charge only. For non-residential sewerage services Barwon Water proposed a two-part tariff with a fixed service charge and a variable usage component.

Two part tariffs

We consider the two-part structure proposed by Barwon Water for its water service tariffs will promote efficient use of services. The two-part structure for water tariffs sends customers a signal about costs of their water use, and is an approach that is commonly applied in other states and territories. ⁵⁶ We also consider two-part tariff structures are easy to understand.

In response to its residential customers seeking more control over bills, Barwon Water proposed to increase the share of variable water charges, relative to fixed service charges, in customer bills.

By proposing to reduce the fixed water service charge and increasing the water volume charge over the regulatory period, it will allow customers to reduce their water bills by using less water.

⁵⁴ Tariff structure refers to the way in which prices are grouped and the manner of charging, for example, water and sewerage charges, fixed and variable charges.

⁵⁵ Essential Services Commission 2016, *Guidance paper*, op. cit., p. 55.

⁵⁶ Includes the tariffs of Icon Water, Sydney Water, Hunter Water, Gosford City Council, Wyong Shire Council, Power and Water Corp, Urban Utilities, Unity Water, SA Water and TasWater.

Based on our review of Barwon Water's findings from its engagement program, we are satisfied that Barwon Water's proposed changes are in line with customer preferences.

For sewerage tariffs, we consider Barwon Water's proposed fixed charge only for residential customers and a two-part tariff for non-residential tariffs sends customers signals about efficient costs.⁵⁷

Recycled water tariffs

Barwon Water proposed to:

- set the Class A recycled water charge at 70 per cent of the water volume charge to encourage greater use of recycled water
- apply a 'take or pay' option and discounts on Class C recycled water to encourage greater use.⁵⁸

Submissions by Anglesea Golf Club⁵⁹ and the 13th Beach Golf Links⁶⁰ held opposing views on Barwon Water's proposed recycled water charges. Anglesea Golf Club supported the charges while 13th Beach Golf Links were concerned about the fairness and efficiency of the charge.

We reviewed Barwon Water's engagement strategy and consider that it consulted with customers on its proposal and found support for further price reductions. We also reviewed Barwon Water's proposed expenditures and found its proposed capital expenditure was prudent and efficient (see discussion in the expenditure section). We confirmed with Barwon Water that its proposed recycled water charges are cost reflective and were calculated consistent with our pricing principles. Our draft decision proposes to accept its proposed tariffs.

Price and bill levels

From 2014-15, Barwon Water's residential customers receiving a bill including water usage charges received an annual rebate. The rebate reflects the outcomes of a government efficiency review, and ends after 2017-18. While Barwon Water has proposed reduced or flat tariffs, the removal of the rebate means the bill impact of price changes on customer groups may vary. In particular, for some customers such as relatively low water users (including some residential tenants), bills may rise as a result of the rebate being removed.

⁵⁷ Our reasons are outlined in our 2013 draft decisions on price review 2012-13 to 2017-18.

⁵⁸ "Take or pay" option allows customers to lock-in an agreed volume of class c water at reduced charge.

⁵⁹ Anglesea Golf Club 2017, Submission, 9 November.

⁶⁰ 13th Beach Golf Links 2017, *Submission to Essential Services Commission on 2017-18 Water Price Review Process*, 9 November.

Submissions by Gerald Mallon and the Consumer Action Law Centre, highlighted the impact price changes may have on some customers, particularly those with low or fixed incomes.⁶¹

Barwon Water has sought to address the impact of the rebate removal, and its proposal to increase the share of variable charges in bills on customers, particularly vulnerable and low income customers. It has proposed to expand its support for customers experiencing payment difficulty by increasing the number of hardship grants by 30 per cent, from 1,150 to 1,500 per annum by 2022-23. It also proposed to introduce a transitional rebate for tenant customers of \$20 in 2018-19 increasing to \$43 in 2022-23.

We consider Barwon Water's proposed tariffs take into account customers' interests, including low income and vulnerable customers, because:

- its tariffs reflect efficient costs for delivering services
- its tariffs were informed by an extensive customer engagement program
- Barwon Water has payment options and assistance for customers experiencing difficulty in paying bills.

Unique services

Barwon Water has confirmed its proposed tariffs for trade waste and miscellaneous services are calculated in accordance with the pricing principles referenced in our guidance.

Other issues

A submission by the Victorian Environmental Water Holder (VEWH) noted Barwon Water as a future supplier of environmental water to VEWH.⁶² We do not have a role in setting prices for the environmental water service described by VEWH, as it is not a prescribed service listed in the WIRO.

Draft decision

For the reasons set out above, our draft decision proposes to accept Barwon Water's proposed tariff structures, as set out at pages 158 to 160 of its price submission.

Prior to our final decision and price determination, Barwon Water must submit updated prices to reflect our draft decision on the revenue requirement, and to reflect our updates to cost of debt and inflation estimates, which we will provide it in late April 2018.

⁶¹ Gerald Mallon 2017, *Submission*, 7 November; Consumer Action Law Centre 2017, *Initial Feedback: 2018 Water Price Review*, 15 November.

⁶² Victorian Environmental Water Holder 2017, Submission on water corporation water pricing proposals, 10 November.

Adjusting prices

Barwon Water proposed price adjustment mechanisms at pages 123 of its price submission and further detailed in response to our queries. It proposed:

- to continue with its existing uncertain and unforseen events mechanism
- a cost of debt adjustment mechanism
- a price adjustment mechanism based on its proposed form of price control.

Our draft decision accepts Barwon Water's proposal to continue the existing uncertain and unforseen events mechanism. We noted in our guidance that we propose that the mechanism continues in its current form.

We propose not to accept Barwon Water's proposed cost of debt adjustment mechanism as it is based on an actual, and not a benchmark cost of debt. We consider a benchmark cost of debt provides businesses with incentives to efficiently manage debt levels. We invite Barwon Water to submit a cost of debt adjustment mechanism based on our benchmark cost of debt.

As noted earlier, we propose not to accept Barwon Water's proposed form of price control. For this reason we propose not to accept Barwon Water's proposed price adjustment formulas. Barwon Water must respond to our draft decision with price adjustment formulas that ensure prices adjust annually to reflect efficient costs.

New customer contributions

New customer contributions (or developer charges) are levied by water corporations when a new connection is made to its water, sewerage or recycled water networks. New customer contributions can be either standard or negotiated. Standard charges apply to new connections in areas where infrastructure requirements and growth rates are relatively well known, while negotiated charges allow water businesses and developers to negotiate a site-specific arrangement.

Barwon Water's proposed charges for new customer contributions are set out at pages 120 and 121 of its price submission. Barwon Water proposed a restructure of its new customer contributions, offering different standard NCCs for infill and greenfield developments in response to feedback received from developers as outlined on page 28 of its price submission. Barwon Water proposed that a development would be considered infill if it could be serviced by existing infrastructure and did not trigger the need for a capacity upgrade.

For infill contributions, Barwon Water proposed a standalone standard water charge that is a 78.7 per cent reduction on the 2017-18 charge. This one-off decrease is proposed to be sustained throughout the regulatory period, and is caused by the lower capital outlay for infill connections.⁶³

For greenfield contributions, Barwon Water proposed an increase of 5.9 per cent on the 2017-18 charge. This one-off increase is proposed to be sustained throughout the entire regulatory period.

Barwon Water proposed to remove standard new customer contributions for sewerage connections due to reduced capital expenditure forecasts in sewerage assets catering for growth. Barwon Water also proposed to continue to apply area specific water and sewerage charges for the Fyansford growth area. These charges are proposed to increase on the 2017-18 charges in line with inflation.

For negotiated new customer contributions, Barwon Water proposes to continue to calculate a charge in accordance with the requirements of our new customer contribution pricing principles.

We have reviewed Barwon Water's proposed charges and consider they are consistent with the requirements of our guidance and the NCC pricing principles.^{64 65} For this reason, our draft decision proposes to accept Barwon Water's proposed new customer contribution charges.

Financial position

In approving prices, we must have regard to the financial viability of the water industry. ⁶⁶ We interpret the financial viability requirements under the *Essential Services Commission Act 2001* (Vic) and the Water Industry Regulatory Order (2014) to mean that the prices we approve should provide a high level of certainty that each water corporation can generate sufficient cash flow to deliver on service commitments, including financing costs arising from investments to meet service expectations.

Barwon Water's price submission and the supporting financial model provided estimates for key indicators of financial performance. These estimates were based on Barwon Water's assumptions about revenue and expenditure. Our draft decision proposes adjustments to revenue and expenditure. We have reviewed the key indicators of financial performance based on our draft decision. Under our draft decision, we consider Barwon Water will generate sufficient cash flow to

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⁶³ Following a request from the commission for further information.

⁶⁴ In response to a request for information, Barwon Water provided supporting modelling showing its regard for incremental costs and incremental revenue.

⁶⁵ Essential Services Commission 2016, *Guidance paper*, op. cit., p. 62.

⁶⁶ WIRO clause 8(b)(ii) and ESC Act s.8A(1)(b).

deliver on convice commitments, including financing costs origing from investments to most convice
deliver on service commitments, including financing costs arising from investments to meet service expectations.

3. PREMO rating

PREMO is an incentive mechanism that links the return on equity to a water corporation's level of ambition in delivering value to its customers.

For the 2018 price review, a water corporation must rate its price submission as 'Leading', 'Advanced', 'Standard' or 'Basic'. The rating is based on an assessment against the Risk, Engagement, Management and Outcomes elements of PREMO. A 'Leading' price submission is allowed the highest return on equity, and a 'Basic' the lowest.

The assessment tool included in our guidance directs a water corporation to consider its level of ambition in relation to matters covered in its price submission, such as proposals related to operating and capital expenditure, the form of price control, and tariffs.

In Chapter 2, we noted our draft decision is to accept Barwon Water's proposed return on equity of 4.9 per cent, based on the justification provided for the level of ambition in its price submission. Below, we set out our preliminary assessment of Barwon Water's proposed PREMO rating.

Our review of Barwon Water's PREMO self-rating

Barwon Water's proposed PREMO rating, and our draft decision is summarised below.

Table 3.1 PREMO Rating

	Overall PREMO rating	Risk	Engagement	Management	Outcomes
Barwon Water's rating	Advanced	Advanced	Leading	Advanced	Advanced
Commission's rating	Advanced	Standard	Leading	Advanced	Advanced

We agree with Barwon Water's proposed overall PREMO self-rating of 'Advanced'. This is reflected in the return on equity we propose to approve for Barwon Water at page 23.

In support of its Outcomes and Engagement self-ratings we note:

Barwon Water has demonstrated its proposals will deliver better value to its customers. This is
reflected in its proposals to minimise price and bill impacts, to improve services in areas
customers identified as high priority, and to compensate customers for outcomes it does not
deliver. This supports Barwon Water's proposed self-rating for the Outcomes element of
PREMO.

• We consider Barwon Water's self-rating of 'Leading' for Engagement is justified given the multiple ways customers could contribute to, and influence proposals. Early in the engagement program customers were able to influence how Barwon Water would engage with them. It established a customer challenge group, which provided a forum for customers to provide feedback on proposals and test early findings. We also note its approach to its community panel, which ran as a citizens' jury (Barwon Water was one of the few water corporations to run a citizens' jury). The panel was formed to deliberate on issues relevant to the price review and make recommendations to Barwon Water's board. We consider these types of deliberative processes are was well suited to the complexity of the issues it engaged on.

In assessing whether to accept Barwon West Water's self-rating of 'Advanced' for Management, we considered our proposed adjustments to its forecast expenditure, as set out from page 9. We consider that generally, these proposed adjustments are relatively minor in nature. In particular, we note that our review proposed to accept the capital expenditure forecasts proposed by Barwon Water. Other factors supporting its self-rating for Management include:

- The forecast rate of efficiency improvement in controllable operating expenditure per connection (based on Barwon Water's forecast operating expenditure), which places Barwon Water among the top performers in the sector.
- The high quality of Barwon Water's price submission and supporting financial model. In particular, its price submission clearly demonstrated the links between its engagement, proposed service outcomes, forecast expenditure, and tariffs.

Our draft decision proposes to rate Barwon Water's Risk element as 'Standard', compared to the 'Advanced' proposed by Barwon Water.

This reflects our views of Barwon Water's proposed form of price control. In particular, we note that any over recovery of net revenue under its proposed form of price control would be factored in to customers' prices in the next regulatory period (that is, the period from 1 July 2023).

Under this approach, Barwon Water may collect more revenue than it needs (for example, from higher than forecast demand, or lower than forecast cost of debt), relative to the revenue cap established through our assessment of its efficient costs. We note Barwon Water did not propose a mechanism that would allow prices to adjust annually to reflect movements in the cost of debt. Currently, estimates for the cost of debt in the early years of our ten year rolling average calculation for the cost of debt are well above the current estimate for the cost of debt calculated on an 'on-the-day' basis (implying that currently, the cost of debt will fall in future years).

We assess that Barwon Water's proposed form of price control increases the risk to customers that prices are higher than they need to be.

Supporting Barwon Water's Risk rating is its proposal to take on more revenue risk, by committing to return up to \$11.5 million over five years to its customers where the corporation fails to meet service targets. It also proposed to increase GSL payments.

In arriving at our rating of 'Standard' for the Risk element of PREMO we have put greater weight on Barwon Water's proposed form of price control. However, given the strength of the other three elements, we do not consider the lower Risk rating warrants a reduction in its overall rating.

4. We invite feedback on our draft decision

We invite feedback from stakeholders on our draft decision before we make a final decision and price determination. Our final decision and price determination will be made in June 2018.

Stakeholders may comment on any aspect of our draft decision, including the information we have relied upon in our assessment (such as Barwon Water's price submission). Feedback may also cover:

- additional matters or issues we should consider before making our final decision
- whether our draft decision on Barwon Water's price submission has adequate regard to the matters in clause 11 of the WIRO and our guidance.

How to provide feedback:

Attend a public forum

We will hold a public forum in April or May 2018. Forums provide an opportunity for interested parties to discuss key features of our draft decisions. We will publish details of public forums at www.esc.vic.gov.au/waterpricereview.

Provide written comments or submissions

Written comments or submissions in response to this draft decision will be due in early May 2018.

We require submissions by this date so we have time to fully consider submissions for our final decision. Comments or submissions received after this date may not be afforded the same weight as submissions received by the due date.

We would prefer to receive comments and submissions via our website at www.esc.vic.gov.au/waterpricereview.

Alternatively, you may send comments and submissions by mail to:

2018 Water Price Review
Essential Services Commission
Level 37, 2 Lonsdale Street
Melbourne VIC 3000

We usually make all comments and submissions publicly available in the interests of transparency. If you wish part or all of your submission to be private, please discuss with commission staff.

If you cannot access documents related to our price review, please contact us to make alternative arrangements (phone (03) 9032 1300).

Next steps

Indicative dates are provided below. To keep up-to-date, visit our website at www.esc.vic.gov.au/waterpricereview.

- April or May 2018 public forum.
- 8 May 2018 closing date for submissions on our draft decision.
- June 2018 release date for final decision and price determination.

APPENDIX A – submissions received

Name or organisation	Date received	
Environment Protection Authority Victoria	12 December 2017	
Consumer Action Law Centre	15 November 2017	
13 th Beach Golf Links	9 November 2017	
Anglesea Golf Club	9 November 2017	
Victorian Environmental Water Holder	9 November 2017	
Mr G Mallon	7 November 2017	