



Level 2, 35 Spring St
Melbourne 3000, Australia
Telephone +61 3 9651 0222
 +61 1300 664 969
Facsimile +61 3 9651 3688

BARWON WATER APPLICATION
FOR PRICE ADJUSTMENT
FINAL DECISION

JUNE 2012

An appropriate citation for this paper is:

Essential Services Commission 2012, *Barwon Water application for price adjustment: Final Decision*, June 2012.

CONTENTS

1	SUMMARY OF KEY POINTS	1
2	INTRODUCTION	3
3	COMMISSION'S APPROACH	6
4	ASSESSMENT OF BARWON WATER'S APPLICATION AND OUR FINAL DECISION.....	8
4.1	What are the total efficient costs of the MGP?	8
4.2	Estimated annual revenue impact of the MGP in 2012-13 and for the next regulatory period	11
4.3	Do we adjust prices now or during the next regulatory period?	12
4.4	Prices to apply in 2012-13 and timing of price change	14
5	OTHER CONSIDERATIONS.....	18
	Appendix 1: Assessment of the total efficient costs of the MGP	19
	Appendix 2: Assessment of the timing of price adjustment	22
	Appendix 3: Assessment of the prices that would apply in 2012-13.....	33

Background

- In December 2011, Barwon Water applied for an increase of 3.5 per cent (real) to its maximum water, sewerage and trade waste prices in 2012-13 to reflect costs associated with the Melbourne to Geelong Pipeline (MGP). This is on top of the already approved increase of 7 per cent for 2012-13.
- In 2008, we intended that costs associated with the MGP would be reflected in Barwon Water's asset base and prices once the project was completed and in service.
- We released our draft decision on Barwon Water's application on 23 April 2012. In our draft decision we proposed to:
 - add \$53.9 million to Barwon Water's asset base to reflect the full capital cost of the MGP from 1 July 2012
 - approve an increase of 3 per cent to Barwon Water's maximum fixed and variable water prices in 2012-13 (on top of the already approved 7 per cent).
- Our draft decision was conditional on Barwon Water satisfying us that the MGP is complete and in service prior to making our final decision.
- We invited submissions on our draft decision and held public meetings in Geelong and Colac on 14 May 2012.

Consultation

- We received two submissions on our draft decision.
- In letters dated 23 May and 28 May 2012, Barwon Water advised the Commission that construction of the MGP was completed in March 2012. However, during testing they have identified some defects in the installation of in-line valves which require repair. Barwon Water has started the repair works and expects to complete them by August 2012.

- Barwon Water provided updated advice to the Commission on the status of repair works in a letter dated 12 June 2012. Barwon Water advised us that the MGP is now expected to be capable of transferring water by the end of 2011-12.

Key issues

- We are satisfied that the conditions related to clause 4 (uncertain or unforeseen events) of Barwon Water's 2008 Determination have been met. Therefore, the efficient capital cost of the MGP may be added to Barwon Water's asset base. This will enable Barwon Water to recover the capital costs of the MGP over the life of the pipeline. Barwon Water advised that it will not seek to recover from customer prices the costs associated with the repair works.
- We are not satisfied that the MGP is in service at this stage. We will only allow Barwon Water to adjust their water prices up by 3 per cent (real) when the MGP is in service.
- We have amended Barwon Water's 2008 Determination to reflect the prices that will apply when the MGP comes into service during the 2012-13 billing period. The amended Determination will be released with this final decision.
- We note that other than the MGP, we have not assessed the prudence and efficiency of Barwon Water's other expenditure as part of our consideration of their application for a mid-period price adjustment. This will be addressed during the Water Plan 3 price review process.

Final decision

- The Commission has approved the addition of \$53.9 million to Barwon Water's asset base on 1 July 2012 to reflect the efficient capital cost of the MGP.
- The Commission has approved a further increase of 3 per cent to Barwon Water's maximum fixed and variable water prices in 2012-13 (on top of the already approved 7 per cent), the further increase to take effect only after Barwon Water has satisfied the Commission that the MGP is in service.

In 2008 the Essential Services Commission (the Commission) approved a five year price path for all Victorian regional water businesses. The approved prices are set out in the 2008 Determinations for each water business. Setting a price path over a reasonable timeframe is desirable as it provides customers and water businesses with some degree of certainty about water prices and bills.

However, recognising increased uncertainty about water demand and the timing and cost of major projects, we also established a mechanism that allows us or water businesses to initiate a review of approved prices, subject to certain criteria being met. The mechanism is set out in clause 4 of the 2008 Determinations.

In explaining our 2008 approval of prices, we identified a number of major projects that might be subject to an application for a mid-period price adjustment under clause 4. This included Barwon Water's Melbourne to Geelong Pipeline (MGP); then called the Melbourne Interconnector.

Forecast costs associated with the MGP were excluded from the calculations used to approve prices due to uncertainty about project costs and timing. Our intention was that the costs of the MGP would be reflected in customer prices once the project was completed and in service. In 2008 we noted:

The expenditure associated with the Melbourne Interconnector pipeline has been excluded from the capital expenditure forecasts. When the project is completed and comes into service the asset base, and in turn prices, will be adjusted to reflect the project costs as well as the capitalised interest cost (based on the WACC) incurred during construction less any government contributions.¹

¹ Essential Services Commission 2008, *2008 Water price review: regional and rural businesses' water plans 2008-2013, Melbourne Water's drainage and waterways water plan 2008-2013—Final decision*, June, p.61.

In December 2011 we received an application from Barwon Water under clause 4 of its 2008 Determination² for a mid-period price adjustment to reflect the costs of the MGP. The key elements of the application are set out below.

SUMMARY OF BARWON WATER APPLICATION³

- Barwon Water commenced construction of the MGP in November 2010, stating that the forecast completion and in service date of January 2012 will be comfortably achieved.
- Barwon Water proposes an increase of an additional 3.5 per cent to its maximum water, sewerage and trade waste services in 2012-13, on top of the already approved increase of 7 per cent.
- According to Barwon Water, the price increase will recover \$5.1 million of the claimed \$8.3 million required to recover the MGP costs in 2012-13. Barwon Water is seeking to recover only a portion of its estimate of MGP costs due to customer interests and affordability issues.
- Barwon Water estimates its proposal will result in an increase in the 2012-13 water and sewerage bill for a residential customer (owner-occupier) consuming 165 kilolitres per year of \$35. This rises to \$52 for a residential customer consuming 400 kilolitres.
- Barwon Water anticipates that the MGP will not be used in the foreseeable future, following initial commissioning. However, the pipeline will be on standby, ready for use if required.

We advertised Barwon Water's application in December 2011 and invited public submissions.

We assessed Barwon Water's application, engaging technical specialists to assist with a detailed expenditure audit and with water demand forecasting.

² A copy of Barwon Water's 2008 Determination is available at our website www.esc.vic.gov.au.

³ Barwon Water application is available at www.esc.vic.gov.au.

On 23 April 2012, we released our draft decision on Barwon Water's application for public consultation. We invited written submissions and held two public meetings in Geelong and Colac on 14 May 2012.

We thank those who took the time to provide us with their views on Barwon Water's application and participated in our public meetings.

This paper explains our final decision on Barwon Water's application.

From here, this paper is structured as follows:

Chapter 3 – Commission's approach

Chapter 4 – Assessment of Barwon Water's application and our final decision

Chapter 5 – Other considerations

3 | COMMISSION'S APPROACH

Under clause 4 of our 2008 Determinations we may only approve an adjustment to prices if doing so is necessary to take account of events that were uncertain or unforeseen at the time of making the Determination, and in the interests of customers. In assessing an application under clause 4, we have the discretion to take into account factors other than the reason for the application. We may also adjust prices during or at the end of a regulatory period, or take the application into account in the next regulatory period.

In 2008, we intended that costs associated with the Melbourne to Geelong Pipeline (MGP), covering project costs and capitalised interest costs, would be reflected in Barwon Water's asset base and prices once the project was completed and in service. Given the uncertainty regarding the timing and cost of the project we considered that the MGP could trigger an application under clause 4.

We engaged a technical consultant to assist in our review of the MGP project as well as Barwon Water's capital and operating expenditure. We also engaged a consultant to provide an independent view on the level of post-restriction residential water demand in Barwon Water's region.

Advice from our technical consultant notes some uncertainty about when the MGP will be in service. The MGP must be completed and in service for any adjustment to Barwon Water's asset base and prices that we may approve.

Notwithstanding this requirement, we have assessed whether their application for a price adjustment is in the interests of customers and consistent with clause 4 of their 2008 Determination. In undertaking this assessment, we have been guided by the regulatory principles of the *Water Industry Regulatory Order* (WIRO), which among other things, state that prices should:

provide for a sustainable revenue stream to the regulated entity that nonetheless does not reflect monopoly rents and or inefficient expenditure by the regulated entity

*take into account the interests of customers of the regulated entity, including low income and vulnerable customers.*⁴

In making our final decision, we have considered:

- Barwon Water's application and the views of customers (received through submissions and at public forums) .
- The findings of our technical and demand consultants. The reports prepared by our consultants are available separately on our website.⁵
- Barwon Water's submission on our draft decision.
- The completion status of the MGP project as advised by Barwon Water.

⁴ The regulatory principles in the WIRO are available on the Commission's website www.esc.vic.gov.au.

⁵ Sinclair Knight Merz 2012, *Barwon Water re-opening event (Melbourne to Geelong Pipeline): expenditure review*. Intelligent Software Development Pty Ltd 2012, *SimulAlt Water Forecasting & Barwon Model Configuration: Victoria Essential Services Commission (ESC)*.

ASSESSMENT OF BARWON WATER'S APPLICATION AND OUR FINAL DECISION

Our assessment of Barwon Water's application for a mid-period price adjustment considered the following:

- What are the total efficient costs of the Melbourne to Geelong Pipeline (MGP) that may be reflected in Barwon Water's asset base and customer prices?
- What is the annual revenue impact of the MGP in 2012-13 and for the next regulatory period?
- Do we adjust prices now or during the next regulatory period?
- What are the prices that would apply and the timing of price change in 2012-13?

4.1 What are the total efficient costs of the MGP?

Overview of our draft decision

Barwon Water's application specified a construction cost of \$66.6 million for the MGP, offset by government contributions totalling \$20 million, implying a net capital cost of \$46.6 million.⁶ Barwon Water also proposed that \$1.8 million of project operating expenditure in 2011-12 be recovered through customer prices.

Consistent with our 2008 decision on prices, we will reflect the MGP project costs into Barwon Water's asset base. This covers any efficient capital expenditure for construction and commissioning of the pipeline, and capitalised interest costs incurred during construction.

⁶ This information is provided at page 12 of Barwon Water's application. Table 8 on page 15 of Barwon Water's application quoted a real construction cost of \$80 million for the MGP, which is inconsistent with the cost referred to on page 12.

Our technical consultant assessed Barwon Water’s proposed MGP costs and assisted us to determine the efficient capital costs of the MGP. Table 1 summarises their recommended efficient capital costs. Table 1 also includes our estimated capitalised interest which is based on a real borrowing cost of 5 per cent (as explained in Appendix 1).

Table 1: Total MGP costs to be added to Barwon Water’s asset base

Capital cost element	Cost (2007 \$m)
Capital cost of construction, net of any contributions	50.9
Capitalised facility commissioning costs	1.1
Capitalised interest on financing costs	1.9
Total efficient capital cost of MGP project	53.9

We accepted and included these estimates in our calculation of the amount that should be added to Barwon Water’s asset base. We also accepted our technical consultant’s recommendation to capitalise the commissioning costs (including costs of putting the MGP in standby status) on the basis that this is part of project completion, and does not result in any immediate benefit to customers.

Our draft decision was to add \$53.9 million to Barwon Water’s asset base to reflect MGP costs subject to Barwon Water satisfying us that the pipeline is in service.

Refer to Appendix 1 for the details of this project cost assessment.

Response to draft decision and submissions received

In letters dated 23 May and 28 May 2012, Barwon Water advised us that the construction of the MGP was completed in March 2012, but during testing they have identified defects on a number of in-line valves which require repair. Barwon Water said that it has started the repair works and expects to complete them by August 2012.

Barwon Water provided updated advice to the Commission on the status of repair works in a letter dated 12 June 2012. Barwon Water advised us that the

MGP is now expected to be capable of transferring water by the end of 2011-12.

Barwon Water also shared the following information:

- drawing water from the Melbourne water supply for testing the MGP commenced in April 2012
- 99.5 per cent of capital budget was already spent at the time of testing
- 1000 megalitres of water was ordered from the Melbourne water pool for the MGP commissioning
- Costs of repairing defects will not be subject to any further pricing application
- No water will be required during the third regulatory period and the MGP will be taken out of service after commissioning
- The MGP will be in service and available to supply demand, if required, during the peak summer period of 2012-13.

We did not receive any other submissions on this matter.

Final decision

We recognise that the construction of the MGP is already complete and, subject to completion of repair works, will be available for service. We also note that 99.5 per cent of the capital budget has already been incurred. We are satisfied that the conditions related to clause 4 (uncertain or unforeseen events) have been met.

Given this, we consider that the \$53.9 million capital costs of the MGP should be added into Barwon's asset base from 1 July 2012. This will enable Barwon Water to recover the capital costs of the MGP over the life of the pipeline.

Final decision

The Commission has approved the addition of \$53.9 million to Barwon Water's asset base on 1 July 2012 to reflect the efficient capital cost of the MGP.

4.2 Estimated annual revenue impact of the MGP in 2012-13 and for the next regulatory period

Overview of our initial conclusion

Barwon Water's estimate of the additional revenue required in 2012-13 to cover costs incurred due to the MGP is \$8.3 million. It has applied to recover only an additional \$5.1 million⁷ in 2012-13, reflecting customer interests and affordability issues.

We estimate that the additional revenue required to reflect fully the MGP costs is currently \$3.3 million on an annual basis. This comprises a return on capital expenditure of \$2.7 million, and an annual depreciation allowance of \$0.5 million.⁸

The difference between Barwon Water's initial estimate of \$8.3 million and our decision of \$3.3 million is due to several key factors including:

- We have treated the cost of commissioning the pipeline as capital expenditure, whereas Barwon Water had considered this to be operating expenditure to be recovered in 2012-13.
- We have used a lower WACC of 5.1 per cent whereas Barwon Water had used a WACC of 5.8 per cent.
- We have used a depreciation period of 100 years for the pipeline, whereas Barwon Water had assumed 80 years.

Response to draft decision and submissions received

Barwon Water noted the assumptions we used in our financial modelling, namely, the 5.1 per cent weighted average cost of capital and 100 years depreciation life for the MGP.

We did not receive any other submissions on this matter.

⁷ In Barwon Water's application, commissioning costs are treated as operating expenditure.

⁸ Differences are due to rounding.

Conclusion

We maintain our view that the additional revenue required to reflect fully the efficient MGP costs is currently \$3.3 million on an annual basis. Our final decision on how and when this will be recovered from customers in 2012-13 is discussed in section 4.4.

4.3 Do we adjust prices now or during the next regulatory period?

Overview of our draft decision

Barwon Water's main reasons for seeking a price increase in 2012-13 are to provide a clear link to customers between the price increase and the MGP completion, and to support their financial position at the start of the next regulatory period. It also suggested a price increase in 2012-13 would not be followed by a price fall in 2013-14.

Consistent with our 2008 decision on prices, the MGP must be complete and in service prior to any adjustment to Barwon Water's asset base and prices. Other main considerations in our assessment of the timing of a price adjustment are Barwon Water's financial position and price stability.

Financial position

We do not believe financial grounds provide a basis for adjusting Barwon Water's prices in 2012-13. The financial information presented at page 27 of Barwon Water's application suggests that without a price adjustment in 2012-13, it will generate an operating cash surplus of more than \$45 million and be in a position to easily meet its interest payments on outstanding debt.

Price stability

Observations about the impact of non-MGP related expenditure on Barwon Water's revenue requirement and prices from 2012-13, and latest estimates of demand, provided important context for our decision on when prices should be adjusted.

As part of our assessment, we tested Barwon Water's contention that a price change in 2012-13 would not be followed by a price fall in 2013-14. We are less inclined to approve a price increase if prices are likely to fall shortly afterwards.

A number of submissions⁹ to us indicated a preference for a smooth transition of prices from 2012-13 to the next regulatory period. We note that a similar view was expressed by some members of Barwon Water's customer committee at our meeting with them in early February 2012. Representations for price stability were generally made in the context of a preference to limit any price change that may be required in 2012-13.

To test Barwon Water's contention that a price change in 2012-13 would not be followed by a price fall in 2013-14, we assessed their actual and forecast capital and operating expenditures and their demand forecasts to establish the price transition from 2012-13 to 2013-14. Our technical consultants assisted us in assessing the expenditure and demand forecasts.

Our assessment of the latest available estimates of Barwon Water's expenditure and demand suggest that allowing a price increase in 2012-13 to reflect the MGP costs is unlikely to be followed by a price fall in 2013-14. Also, allowing a price increase in 2012-13 would help to reduce the extent of the price change required in the next regulatory period.

Given this, our draft decision was to approve an upward adjustment to Barwon Water's maximum prices in 2012-13, subject to Barwon Water satisfying us that the MGP is in service.

Refer to Appendix 3 for the details of this assessment.

Response to draft decision and submissions received

Barwon Water supported our draft decision and also acknowledged the revised modelling assumptions we used in our assessment.

In response to our draft decision, Barwon Water also submitted their updated demand estimates. We observe that their June estimates are slightly higher than their April submission. These latest estimates are consistent with the findings of our technical consultant and fall within the range used in our draft decision. As a result, we did not make further adjustments to the demand forecasts we adopted in the draft decision.

These latest demand estimates are reflected in Appendix 3.

⁹ Submissions received on Barwon Water's application which we advertised in December 2011.

We did not receive any other submissions on this matter.

Conclusion

We are satisfied that Barwon Water's maximum prices can increase in the 2012-13 period to reflect the costs of the MGP, rather than be delayed until the next regulatory period.

However, the pipeline must be completed and in service before this price increase can take place. When Barwon Water has completed the repair works and confirmed that the MGP is available for service, we will allow an upward adjustment by Barwon Water to its maximum water prices during the 2012-13 billing period. This decision is consistent with clause 2.4 of Barwon Water's 2008 Determination, which allows any price changes occurring during a billing period to be pro-rated.

We have amended Barwon Water's 2008 Determination to also reflect the prices that would apply for 2012-13 when the MGP is in service. We have released the amended Determination with this final decision.

4.4 Prices to apply in 2012-13 and timing of price change

Overview of our draft decision

Barwon Water proposed that prices for water and sewerage services increase by an additional 3.5 per cent in 2012-13 (on top of the already approved 7 per cent) to recover an additional \$5.1 million in revenue.

We decided that any adjustment to prices will apply to water services only. This is consistent with the regulatory principles of the WIRO that support cost reflectivity and the sustainable use of Victoria's water resources.¹⁰ A number of submissions¹¹ to us indicated a preference that the MGP costs be recovered through charges for water services only.

Our preference would have been that only fixed water prices (the service charge) increase to enable the recovery of the MGP costs, on the basis that the MGP will be put on standby after commissioning (which implies that the MGP

¹⁰ The regulatory principles in the WIRO are available on the Commission's website.

¹¹ Submissions received on Barwon Water price application which we advertised in December 2011.

will represent a fixed cost to Barwon Water in 2012-13 and in the next regulatory period).

However, we have decided that fixed (service charge) and variable (volumetric charge) water prices will increase equally, on the basis that the MGP will have a relatively small impact on Barwon Water's annual revenue requirement, and that Barwon Water will explore the mix of fixed and variable charges with customers as it develops its Water Plan for the next regulatory period. Barwon Water's application proposed increases in fixed and variable prices.

Assessment of price change approved for 2012-13

In section 4.2 we estimated that the annual revenue impact of the MGP is \$3.3 million. Based on Barwon Water's demand forecasts we estimate that its water prices would need to rise by 4.5 per cent to recover this \$3.3 million.

We have considered the sensitivity of the required price change to demand in 2012-13. Based on the analysis undertaken by our demand consultant, we believe there is some risk that residential water demand in 2012-13 will exceed Barwon Water's forecasts. An upward adjustment to Barwon Water's demand estimates for 2012-13 would reduce the extent of the price change required.

We have modelled the impact of an upward 5 per cent adjustment to Barwon Water's residential demand forecasts for 2012-13, a reasonable maximum adjustment given the findings of our demand consultant, and taking into account difficulties associated with forecasting water demand.

Adjusting Barwon Water's residential demand forecast for 2012-13 up by 5 per cent would generate an estimated additional \$1.8 million in revenue in 2012-13. Recovering the remaining \$1.5 million would require a change in water prices of 2 per cent. Thus, we believe that a reasonable range of water price adjustments in 2012-13 that takes into account the uncertainty of demand is from 2 per cent to 4.5 per cent.

In making our decision on the approved price change, we have also considered the impacts on customers, particularly those experiencing hardship. A number of submissions¹² highlighted affordability issues for Barwon Water customers.

¹² Submissions received on Barwon Water application which we advertised in December 2011.

Barwon Water's application noted that it has a range of programs in place to address customer hardship. We expect that Barwon Water will put in place processes to manage the impact of our decision to allow a price rise in 2012-13 on customers experiencing financial difficulty.

We also note that the Commission released a final decision on 24 May that extends a hardship related guaranteed service level measure to Barwon Water and other urban water businesses. This will provide an additional safety net for customers in hardship.

Our draft decision was to approve a further 3 per cent increase to Barwon Water's maximum fixed and variable water prices for 2012-13, subject to Barwon Water satisfying us that the MGP is in service. This additional rise is on top of the already approved increase of 7 per cent.

Response to draft decision and submissions received

Barwon Water supported our draft decision. Barwon Water believed that 'the adjustment results in a fair and sustainable long term outcome for customers and stakeholders'.

We did not receive any other submissions on this matter.

Final decision

We have considered Barwon Water's submission. We decided to maintain our draft decision to approve an upward adjustment of an additional 3 per cent to Barwon Water's maximum fixed and variable water prices for 2012-13, subject to Barwon Water satisfying us that the MGP is in service.

We have amended Barwon Water's 2008 Determination to also reflect the prices that would apply for 2012-13 when the MGP comes into service.

The amended Determination, which we will release together with this final decision, will include two sets of water prices:

- The water prices that will apply prior to the MGP being in service will reflect the 7 per cent maximum increase already approved for 2012-13.
- The water prices that will apply once the MGP is in service will reflect the total 10 per cent approved maximum increase (7 per cent already approved plus additional 3 per cent due to the MGP).

The annual fixed water charge paid by customers will be pro-rated to reflect the timing of the change in prices.

We note that Barwon Water will not be able to recover the full \$3.3 million additional revenue in 2012-13 if the MGP is not in service at 1 July 2012. This decision provides an incentive for Barwon Water to bring the MGP into service as soon as possible.

Final decision

The Commission has approved a further increase of 3 per cent to Barwon Water's maximum fixed and variable water prices in 2012-13 (on top of the already approved 7 per cent), the further increase to take effect only after Barwon Water has satisfied the Commission that the MGP is in service.

If the MGP is in service from the start of 2012-13, and Barwon Water charges the full increase permitted, the annual water and sewerage bill for a residential owner-occupier consuming 165 kilolitres of water in 2012-13 will rise by \$15 as a result of this MGP related decision (see table 2). For a tenant with similar consumption, bills will rise by around \$10. The bill increase will be lower if the MGP comes into service after 1 July 2012.

Table 2: Impact of the MGP on customers' total water bills

Customer/consumption	Total bill in 2012-13 (7% increase + CPI)	Total bill in 2012-13 (7% + 3% increase due MGP + CPI)	Net impact of MGP in total bill in 2012-13
Residential owner occupier (165kL consumption)	\$1,062	\$1,077	\$15
Residential tenant (165kL consumption)	\$355	\$365	\$10
Small business (2000kL)	\$8,298	\$8,423	\$125

5 | OTHER CONSIDERATIONS

Other considerations for the next regulatory period (2013-2018):

- Observations about the impact of non-MGP expenditure on Barwon Water's revenue requirement and prices from 2012-13 provided important context for our decision on when prices should be adjusted.
- Based on latest estimates, Barwon Water's net capital expenditure will exceed the benchmarks used to approve prices for the current regulatory period by around \$130 million (excluding MGP expenditure).
- Exceeding the capital expenditure benchmark, combined with Barwon Water's forecast operating expenditure, may produce an upward impact on their prices in the next regulatory period.
- We have not assessed the prudence and efficiency of Barwon Water's actual or forecast expenditure (excluding the MGP), as part of our consideration of their application for a mid-period price adjustment.
- Barwon Water will need to justify any expenditure to be recovered through customer prices in the next regulatory period in their Water Plan, which is due to be completed in September 2012.
- Nothing in this decision should be taken as our approval or otherwise of the prudence or efficiency of non-MGP expenditure undertaken or planned by Barwon Water, or taken as any approval of their prices for the next regulatory period.

APPENDIX 1: ASSESSMENT OF THE TOTAL EFFICIENT COSTS OF THE MGP UNDER THE DRAFT DECISION

Note: Unless otherwise stated, all dollar figures in this chapter are in real dollars as at 1 January 2007, which was the base year used to approve prices for the current regulatory period.

Total efficient costs of the MGP

Commission's assessment

Consistent with our 2008 decision on prices, Barwon Water's asset base will reflect MGP project costs. This covers any efficient capital and operating expenditure, and capitalised interest costs incurred during construction.

Project costs

Our technical consultant estimates that the total capital cost of construction for the MGP will be \$68.5 million. The government contribution to the MGP comprised several payments across the construction period totalling \$17.6 million (different to the amount estimated by Barwon Water¹³). Therefore the net capital costs of construction incurred by Barwon Water are estimated to be \$50.9 million.¹⁴

We have included capital construction costs of \$50.9 million in our calculation of the amount that should be added to Barwon Water's asset base.

¹³ Barwon Water's estimate of \$20 million is in nominal dollars.

¹⁴ See pages 13 to 16 of SKM's report for a more descriptive overview.

Treatment of commissioning costs

Barwon Water's application sought the recovery of \$1.8 million in operating costs, covering costs of commissioning and proving the MGP.

Our technical consultant found that delays to the completion of the MGP means these costs will be spread across 2011-12 and 2012-13. The costs also include expenditure related to putting the MGP into standby status (which according to Barwon Water, is expected to occur shortly after commissioning).

Our consultant estimates the total costs associated with commissioning the MGP are \$0.5 million in 2011-12 and \$0.6 million in 2012-13, a total of \$1.1 million, lower than the \$1.8 million estimated by Barwon Water.¹⁵

Our consultant also recommends that these costs be capitalised.¹⁶ We agree on the basis that costs that form part of project completion, or that do not result in any immediate benefit to customers (including costs of putting the MGP in standby status), should be treated as capital costs.

We have included commissioning costs of \$1.1 million in our calculation of the amount that should be added to Barwon Water's asset base.

Capitalised interest

We have calculated interest costs based on a real borrowing cost of 5 per cent. This rate is equivalent to the debt components used to calculate the weighted average cost of capital (WACC) for the current regulatory period.

Interest costs have been allowed only in years where expenditure on the MGP has not been fully offset by government contributions.

Our estimate of interest costs is \$1.9 million.

Total MGP costs to be added to Barwon Water's asset base

Total MGP costs which will be reflected in Barwon Water's asset base are summarised in table 1:

¹⁵ See pages 17 to 19 of SKM's report.

¹⁶ See page 20 of SKM's report.

Table 1: Total efficient capital cost of the MGP

Capital cost element	Cost (2007 \$m)
Capital cost of construction, net of any contributions	50.9
Capitalised facility commissioning costs	1.1
Capitalised interest on financing costs	1.9
Total efficient capital cost of MGP project	53.9

APPENDIX 2: ASSESSMENT OF THE TIMING OF PRICE ADJUSTMENT UNDER THE DRAFT DECISION

Note: Unless otherwise stated, all dollar figures in this chapter are in real dollars as at 1 January 2007, which was the base year used to approve prices for the current regulatory period.

Timing of price adjustment

Commission's assessment

Consistent with our 2008 decision on prices, the MGP must be complete and in service prior to any adjustment to Barwon Water's asset base and prices. Other main considerations in our assessment of the timing of a price adjustment are Barwon Water's financial position and price stability.

Barwon Water's financial position

We do not believe financial grounds provide a basis for adjusting Barwon Water's prices in 2012-13. The financial information presented at page 27 of Barwon Water's application suggests that without a price adjustment in 2012-13, it will generate an operating cash surplus of more than \$45 million and be in a position to easily meet its interest payments on outstanding debt.

Price stability

Observations about the impact of non-MGP related expenditure on Barwon Water's revenue requirement and prices from 2012-13, and latest estimates of

demand, provided important context for our decision on when prices should be adjusted.

As part of our assessment, we tested Barwon Water's contention that a price change in 2012-13 would not be followed by a price fall in 2013-14. We are less inclined to approve a price increase if prices are likely to fall shortly afterwards, in the interest of price stability.

A number of submissions¹⁷ to us indicated a preference for a smooth transition of prices from 2012-13 to the next regulatory period. We note that a similar view was expressed by some members of Barwon Water's customer committee at our meeting with them in early February 2012. Representations for price stability were generally made in the context of a preference to limit any price change that may be required in 2012-13.

Submission from Ai Group:

'...requests that the Commission's analysis of the proposal for increases factor in the current outlook of rising costs and subdued business outlook and assess options for more graduated pass through of costs over an extended period of time to alleviate the burden on industry.'

Submission from Consumer Utilities Advocacy Centre:

'Barwon Water's application outlines two potential pricing options. CUAC strongly favours the first option, which smooths recovery of the revenue over 2012/13 and the five years of the next Water Plan period.'

¹⁷ Submissions received on Barwon Water's application which we advertised in December 2011.

Submission from City of Greater Geelong:

'...that the proposed 3.5 per cent increase be staged over the term of the 2013-8 Water Plan (5-years) rather than restricting the cost recovery to a single year. This would be sustainable to the community and reduce the impact of a 'one-off recovery'.

Capital expenditure

Table 2 shows actual and forecast gross and net capital expenditure for Barwon Water in the current regulatory period. Net capital expenditure deducts any government or customer contributions to capital projects from the gross amount.

The table compares the amounts in the 2008 Determination for Barwon Water, with figures provided by Barwon Water in their December 2011 application, and updated estimates provided by Barwon Water in February 2012 and verified by our technical consultant for accuracy.¹⁸ We used the February estimates to inform our decision on the timing of a price adjustment.

¹⁸ Note that our technical consultant has not assessed or provided a view on the prudence or efficiency of Barwon Water's capital and operating expenditure estimates, excluding expenditure related to the MGP.

Table 2: Actual (2008-09 to 2010-2011)/forecast (2011-2012 to 2012-13) capital expenditure for the current regulatory period

	2008-09	2009-10	2010-11	2011-12	2012-13	Total
2008 Determination						
Gross capital expenditure	114.45	75.90	101.49	82.83	62.70	437.37
Net capital expenditure	107.84	57.66	72.89	73.63	60.50	372.52
Actual/forecast [BW, December 2011 application]						
Gross capital expenditure	80.40	86.30	154.60	174.70	157.90	653.90
Net capital expenditure	71.00	75.80	133.50	123.30	126.50	530.10
Actual/forecast [BW, February 2012 update]						
Gross capital expenditure	80.91	86.19	157.14	196.77	141.31	662.32
Net capital expenditure	71.35	75.38	136.40	140.60	129.00	552.73

The February figures indicate that Barwon Water's net capital expenditure for the current regulatory period will exceed the 2008 Determination benchmark by \$180 million. Table 9 at page 28 of our technical consultant's report provides a breakdown of the \$180 million capital expenditure above the benchmark.

The MGP project accounts for \$50.9 million of this expenditure above the 2008 benchmark. Allowing for the MGP project, Barwon Water's net capital expenditure for the current regulatory period will exceed the benchmark by \$130 million.

We are not assessing the prudence and efficiency of this expenditure as part of our assessment of Barwon Water's application for a mid-period price adjustment. The prudence and efficiency of this expenditure will require strong justification in Barwon Water's Water Plan (should it seek to recover these costs through customer prices in the next regulatory period).

Barwon Water also provided their projected capital expenditure for the next regulatory period and it has changed considerably from that in their December 2011 application (table 3).

Table 3: Forecast capital expenditure for the next regulatory period

	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Forecast [BW, December 2011 application]						
Gross capital expenditure	110.12	80.65	39.80	33.90	34.59	299.06
Net capital expenditure	103.48	72.43	34.03	28.13	28.82	266.89
Forecast [BW, February 2012 update]						
Gross capital expenditure	89.73	63.79	77.36	61.93	74.73	367.54
Net capital expenditure	77.45	51.36	68.44	56.73	69.49	323.47

The December application showed an aggregate capital expenditure for the next regulatory period of \$267 million, net of government and customer contributions, with the annual figure falling to less than \$30 million for the last two years of the period. However, the revised projections provided by Barwon Water in February show an aggregate net capital expenditure of \$323 million, an increase of over \$50 million on the estimates provided in December.

Barwon Water states that some of the additional projects that commenced in the current regulatory period were brought forward from the next regulatory period to meet pressing needs. As such, we would expect to see a corresponding significantly lower capital expenditure requirement for the next regulatory period.

The latest projections show net capital expenditure for the next regulatory period is only 13 per cent lower than the capital expenditure benchmarks used for pricing in the current regulatory period, which was seen as an abnormally high period to respond to drought conditions. This does not suggest significant expenditure reductions as a result of bringing spending forward into the current regulatory period. We will assess the prudence and efficiency of Barwon Water's capital expenditure forecasts following submission of their final Water Plan for the next regulatory period in September 2012.

Operating expenditure

Table 4 shows estimates of Barwon Water's actual and forecast operating expenditure for the current regulatory period and compares these with the operating expenditure benchmark used in 2008 to determine prices. In February, Barwon Water provided updated operating expenditure estimates. These revisions are shown in table 4.

Barwon Water's aggregate operating expenditure for the current regulatory period is forecast to be \$381 million, which is \$3 million above the benchmark used in 2008 to determine prices. However, operating expenditure in 2012-13 will be more than \$7 million above the 2012-13 benchmark. This reduces to \$6.4 million after excluding commissioning costs for the MGP (which we have treated as project capital costs).

Table 4: Barwon Water's actual (2008-09 to 2010-11)/forecast (2011-12 to 2012-13) operating expenditure for the current regulatory period

	2008-09	2009-10	2010-11	2011-12	2012-13	Total
2008 Determination	73.10	77.73	74.50	75.32	77.20	377.85
Actual/forecast [BW, December 2011 application]	67.80	69.30	70.00	80.40	86.30	373.80
Actual/forecast [BW, February 2012 update]	71.92	73.60	73.49	77.37	84.49	380.87

The main drivers of the increase above benchmark by the end of the current regulatory period are labour and external resource costs (the latter mainly reflecting consultants and contractor costs).

Pages 35 to 54 of our technical consultant's report provide a detailed overview of the main variances to the 2008 operating expenditure benchmarks that were used to determine prices for the current regulatory period.

Barwon Water's projected operating expenditure for the next regulatory period continues on from the high levels forecast for the last two years of the current

regulatory period (table 5). Barwon Water's operating expenditure estimates for the next regulatory period have also changed considerably from their December application.

Table 5: Forecast operating expenditure for the next regulatory period

	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Forecast [BW, December 2011 application]	86.50	86.59	86.86	88.15	88.51	436.61
Forecast [BW, February 2012 update]	83.47	83.45	83.62	83.52	83.43	417.49

Each year is now \$3 million to \$5 million lower than in the application, with the aggregate operating expenditure for the next regulatory period now down to \$417 million from the initial \$436 million.

As noted in our technical consultant's report, Barwon Water has not provided any detail on the breakdown of their current forecasts for operating expenditure for the next regulatory period.¹⁹ Our technical consultant also provided a range of operating expenditure scenarios that we used to model Barwon Water's revenue requirement in the next regulatory period.²⁰

Demand

Barwon Water's application presented updated estimates of customer connections and water demand for both the current and next regulatory periods.

Barwon Water's application noted that it remained on stage four water restrictions for two years longer than was forecast in 2008, resulting in lower consumption and therefore lower revenue than anticipated. Barwon Water

¹⁹ See page 55 of SKM's report.

²⁰ The scenarios are presented at pages 56 to 62 of SKM's report.

returned to permanent water saving rules (the lowest level for water restrictions) in March 2011.

Barwon Water expects water consumption to rise during the next regulatory period due to population growth and lower restrictions on water use. It anticipates that increasing water consumption will be partly offset by new recycled water projects, such as the Northern Water Plant and the Black Rock Recycled Water Plant.

Barwon Water anticipates recycled water consumption to average more than 2 gigalitres per year from 2013-14, up from zero in 2011-12 and around 0.7 gigalitres in 2012-13.

Revised demand estimates were provided to us in February and April 2012. The April 2012 revisions include updates to correct for errors in the data provided to us in February (for estimates in the current regulatory period). Compared with the December estimates, the April revisions increase the demand forecasts (albeit modestly).

The estimates for demand provided to us by Barwon Water in April formed the basis for our consideration of their application. Along with expenditure, forecast demand is a key determinant of prices.

In response to our draft decision, Barwon Water provided their updated demand estimates in June 2012. We observed that their actual demand for 2011-12 and forecasts from 2012-13 to 2017-18 are slightly higher than their April 2012 updates. We note that these estimates are consistent with the observations made by our technical consultant.

Table 6 compares the 2008 Determination forecasts of total metered water consumption with the estimates in Barwon Water's application, and the updated estimates provided in February, April and June 2012. Table 7 shows projected total metered water consumption for the next regulatory period.

Table 6: Actual (2008-09 to 2010-11)/forecast (2011-12 to 2012-13) demand for the current regulatory period

Total customer metered water consumption (GL)	2008-09	2009-10	2010-11	2011-12	2012-13
2008 Determination	31.44	34.46	35.74	35.04	34.37
Actual/Forecast [BW, December 2011 application]	29.56	27.91	27.51	27.69	27.93
Actual/Forecast [BW, February 2012 update]	29.56	27.91	27.39	28.92	29.82
Actual/Forecast [BW, April 2012 update]*	29.56	27.91	27.51	28.92	29.19
Actual/Forecast [BW, June 2012 update]**	29.56	27.91	27.51	31.10	31.07

Note: *The April revisions include updates to correct for errors in the data provided to the Commission in February. ** The June updates include updated actual data for 2011-12 and forecast for 2012-13.

Table 7: Demand forecast for the next regulatory period

Total customer metered water consumption (GL)	2013-14	2014-15	2015-16	2016-17	2017-18
Forecast [BW, December 2011 application]	28.31	28.68	29.06	30.24	30.81
Forecast [BW, February 2012 update]	30.80	31.85	32.90	33.77	34.20
Forecast [BW, April 2012 update]	28.98	29.96	30.92	31.71	32.07
Forecast [BW, June 2012 update]	30.57	31.09	31.68	32.09	32.65

Barwon Water's residential demand figures

We engaged a consultant to provide an independent view on the level of post-restriction residential demand in the Barwon region. The methodology used by the consultant provides an alternative way to model the timing of any future upturn or downturn in demand.

On a per-connection basis, Barwon Water forecasts relatively low residential water demand per customer in the period from 2011-12 to 2014-15, compared with the estimates of our consultant (table 8). Based on our consultant's analysis, our view is that residential water demand in 2011-12 and 2012-13 may be higher than the level assumed by Barwon Water, and lower in the period from 2015-16.

Given the influence of demand on prices, we have used the consultant's findings to model sensitivity about the price change required to reflect MGP costs.

We observed that Barwon Water's June residential demand estimates are consistent with the observations of our technical consultants.

Table 8: Comparison of residential water demand per connection forecast for the next regulatory period

Metered residential water consumption per connection (kL)	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
	Actual			Forecast							
Barwon Water February 2012	155.92	149.43	141.98	149.58	158.50	169.08	171.93	174.73	176.51	175.96	175.43
Barwon Water April 2012	155.92	149.43	141.95	146.34	151.02	161.03	163.71	166.12	167.62	166.79	165.91
Barwon Water June 2012	155.92	149.43	141.95	151.23	159.33	161.97	161.60	161.57	160.32	159.87	159.17
	Forecast										
ISD baseline forecast	142.04	140.40	148.42	160.68	164.45	165.86	165.86	164.89	163.81	162.67	161.62
Difference between Barwon's April and ISD's forecast (%)	9.77	6.43	-4.36	-8.93	-8.17	-2.91	-1.29	0.74	2.33	2.54	2.66
Difference between Barwon's June and ISD's forecast (%)	9.77	6.43	-4.36	-2.15	-3.12	-2.35	-2.57	-2.02	-2.13	-1.72	-1.52

APPENDIX 3: ASSESSMENT OF THE PRICES THAT WOULD APPLY IN 2012-13 UNDER THE DRAFT DECISION

Prices to apply in 2012-13

Commission's assessment

Tariffs to be subject to a price change

We have decided that any adjustment to prices will apply to water supply services only. This is consistent with the regulatory principles of the WIRO that support cost reflectivity and the sustainable use of Victoria's water resources.²¹ A number of submissions²² to us indicated a preference that the MGP costs be recovered through charges for water services only.

Submission from Lesley Johnson:

'Since this review covers costs of the Melbourne to Geelong pipeline – which involves the transport of water only – not sewerage – there is no reason for sewerage costs to increase.'

²¹ The regulatory principles in the WIRO are available on the Commission's website.

²² Submissions received on Barwon Water price application which we advertised in December 2011.

Submission from Ai Group:

‘Large water users ... consulted by Ai Group also emphasised the significant impact that the proposed increase will have on their operations given the impact on trade waste charges for their effluent.’

Submission from Cathy Stevenson:

‘You can only charge for Water Usage as Sewerage charges have nothing to do with a supposed water supply.’

Submission from Paul Timpano:

‘Tariffs should be set on user pay method, on water only.’

Our preference would have been that only fixed water prices increase to enable the recovery of the MGP costs, on the basis that the MGP will be put on standby after commissioning (which implies that the MGP will represent a fixed cost to Barwon Water in 2012-13 and in the next regulatory period).

However, we have decided that fixed and variable water prices will increase equally, on the basis that the MGP will have a relatively small impact on Barwon Water’s annual revenue requirement, and that Barwon Water will explore the mix of fixed and variable charges with customers as it develops its Water Plan for the next regulatory period. Barwon Water’s application proposed increases in fixed and variable prices.

Assessment of price change approved for 2012-13

In section 4.2 we estimated that the annual revenue impact of the MGP is \$3.3 million. Based on Barwon Water's demand forecasts we estimate that its water prices would need to rise by 4.5 per cent to recover this \$3.3 million.

We have considered the sensitivity of the required price change to demand in 2012-13. Based on the analysis undertaken by our demand consultant, we believe there is some risk that residential water demand in 2012-13 will exceed Barwon Water's forecasts. An upward adjustment to Barwon Water's demand estimates for 2012-13 would reduce the extent of the price change required.

We have modelled the impact of an upward 5 per cent adjustment to Barwon Water's residential demand forecasts for 2012-13, a reasonable maximum adjustment given the findings of our demand consultant, and taking into account difficulties associated with forecasting water demand.

Adjusting Barwon Water's residential demand forecast for 2012-13 up by 5 per cent would generate an estimated additional \$1.8 million in revenue in 2012-13. Recovering the remaining \$1.5 million would require a change in water prices of 2 per cent. Thus, we believe that a reasonable range of water price adjustments in 2012-13 that takes into account the uncertainty of demand is from 2 per cent to 4.5 per cent.

In making our decision on the approved price change, we have also considered the impacts on customers, particularly those experiencing hardship. A number of submissions²³ highlighted affordability issues for Barwon Water customers.

Submission from Geelong City Council:

'With the already planned increases in water, gas and other utility charges, along with home loan mortgage rate increases, strong consideration needs to be given to the effect a further 3.5 per cent increase will have on our community.'

²³ Submissions received on Barwon Water application which we advertised in December 2011.

Submission from Lesley Johnson:

'As a customer of Barwon Water, I would prefer that there be no price increases at this financially difficult time for so many.'

Submission from Ai Group:

'Ai Group requests that the Commission's analysis of the proposal for increases factor into account the outlook for rising costs and subdued business outlook ...'

Barwon Water's application noted that it has a range of programs in place to address customer hardship. We expect that Barwon Water will put in place processes to manage the impact of our decision to allow a price rise in 2012-13 on customers experiencing financial difficulty.

We also note the Commission has released on 24 May 2012 a final decision that outlines our intention to extend a hardship related guaranteed service level measure to Barwon Water and other urban water businesses. This will provide an additional safety net for customers in hardship.

The proposed 3 per cent maximum increase is slightly below the mid-point of the 2 per cent to 4.5 per cent range identified on page 24 (of the draft decision). While we considered approving an increase in the mid-point of the range, we have allowed for a slightly lower adjustment, given recent price increases and the affordability issues raised in submissions.