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# 2013-18 WATER PRICE REVIEW

DRAFT DECISION VOLUME II: MELBOURNE WATER

**APRIL 2013** 

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Essential Services Commission 2013, Water Price Review 2013: Greater Metropolitan Water Businesses—Draft Decision Volume II: Melbourne Water, April.

# MELBOURNE WATER

#### 1. Purpose of volume II of the draft decision

The Commission is required to issue a draft decision that proposes either to:

- (a) approve all of the prices which a regulated entity may charge for prescribed services, or the manner in which such prices are to be calculated or otherwise determined, as set out in the regulated entity's water plan, until the commencement of the next regulatory period or
- (b) refuse to give the approval referred to above and specifies the reasons for the Commission's proposed refusal (which may include suggested amendments to, or action to be taken in respect of, the Water Plan that, if adopted or taken, may result in the Commission giving that approval) and the date by which a regulated entity must resubmit a revised Water Plan or undertake such action as to ensure compliance.

This volume of the draft decision summarises for each business the suggested amendments or actions that if adopted or taken may result in the Commission giving its approval to the relevant business's proposed prices or the manner in which such prices are to be calculated or otherwise determined. The main reasons for suggested amendments or actions are summarised. More detailed reasons for the Commission's suggested amendments are outlined in volume I of the draft decision.

#### 2. Actions to be taken in response to this draft decision

In response to this draft decision, Melbourne Water should <u>by 20 May 2013</u> submit/resubmit:

- (a) its proposed schedule of tariffs to apply for each year of the regulatory period commencing 1 July 2013 that reflects:
  - (i) the indicative revenue requirement set out in table 2
  - (ii) the resubmission of a proposal relating to the treatment of its desalination security costs (see (b) below)

- (iii) the revised demand forecasts set out in tables 14-15 and
- (iv) any tariff structure changes suggested by the Commission.
- (b) a proposal relating to the treatment of its desalination security costs demonstrating that it has taken into account the requirements of the WIRO, the Water Industry Act and the Essential Services Commission Act.
- (c) information on how it proposes to improve the cost reflectivity of the nonresidential waterways and drainage charge during the third regulatory period.
- (d) a proposal for a more cost reflective price structure for bulk water and sewerage.
- in support of its depreciation forecast documentation covering disaggregated capital projects reflecting proposed adjustments in response to this draft decision and
- (f) revised demand forecast volumes consistent with the Commission's revisions to City West Water's, South East Water's and Yarra Valley Water's forecast volumes.

If a business does not submit a revised schedule of tariffs and/or the service standards to apply, or otherwise make a submission as to why it has not adopted the Commission's suggested amendments by the due date, the Commission will specify the prices, or manner in which prices are to be calculated or otherwise determined and the service standards to apply for the regulatory period 2013-14 to 2017-18 as part of its Final Determination.

### 3. Service Standards

The Commission proposes to approve the service standards proposed in Melbourne Water's Water Plan set out at table 1.

 Table 1
 Service Standards: Waterways and Drainage

Service standard	Average 2008-09 to 2011-12	2013-14	2014- 15	2015-16	2016-17	2017-18
Achieve Waterways Operating Charter performance targets (per cent)	97.48	100	100	100	100	100
Responses to referred town planning permit applications will comply with flood protection standards	n.a.	100	100	100	100	100
10 per cent of currently known intolerable (extreme) flood risks will be reduced by 2018	n.a.	n.a.	n.a.	n.a.	n.a.	Achieved
Achieve Water Plan implementation targets set out in the Stormwater Strategy (per cent)	n.a.	100	100	100	100	100
Achieve Water Plan implementation targets set out in the Healthy Waterways Strategy (per cent)	n.a.	100	100	100	100	100
Statutory and agreed industry response times will be achieved for all development referrals	100	100	100	100	100	100

# 4. Revenue requirement

The Commission has used the following assumptions in relation to the revenue required over the regulatory period.

Table 2 **Breakdown of revenue requirement** \$m 2012-13

	2013-14	2014-15	2015-16	2016-17	2017-18
Operating					
expenditure <sup>a</sup>	997.0	989.5	979.6	942.3	942.3
Return on assets	410.4	403.5	396.8	390.1	383.4
Return on new investments	10.6	31.8	51.5	68.8	82.6
Regulatory					
depreciation	152.3	173.9	192.9	208.0	217.7
Tax liability	10.9	16.3	19.9	23.7	27.2
Total	1581.3	1615.0	1640.7	1632.9	1653.2

 $<sup>{</sup>f a}$  Desalination costs used for draft decision are included in operating expenditure.

### 5. Rolled forward regulatory asset base

The regulatory asset base as at 1 July 2008 has been rolled forward to reflect actual capital expenditures net of customer contributions (new customer and shareholder contributions) and disposals for the 2008-09 to 2011-12 period less any approved allowance for regulatory depreciation. The rolled forward values are shown in table 3.

Table 3 **Updated regulatory asset base** \$m 2012-13

	2008-09	2009-10	2010-11	2011-12
Opening RAB	5 942.6	6 995.3	7 872.2	8 444.3
Plus Gross capital expenditure	1 212.9	1 058.0	791.6	555.8
Less Government contributions	0.0	0.0	0.0	0.0
Less Customer contributions	45.8	47.9	55.5	66.9
Less Proceeds from disposals	4.8	13.0	30.7	5.4
Less Regulatory depreciation	109.5	120.3	133.2	143.9
Closing RAB	6 995.3	7 872.2	8 444.3	8 783.9

The regulatory asset base as at 1 July 2012 will be rolled forward to reflect approved estimates of capital expenditure net of customer contributions (new customer and shareholder contributions) and disposals for the 2012-13 to 2017-18 period less any approved allowance for regulatory depreciation. These rolled forward values are shown in table 4.

Table 4 Rolled forward regulatory asset base

\$m 2012-13

	2012-13	2013-14	<i>2014-15</i>	2015-16	2016-17	2017-18
Opening RAB	8783.9	8808.0	9107.0	9417.3	9658.8	9867.4
Plus Gross capital expenditure	239.6	512.7	541.0	495.9	480.0	379.6
Less Government contributions	60.4	0.0	0.0	0.0	0.0	0.0
Less Customer contributions	0.0	50.0	54.7	59.0	61.6	64.0
Less Proceeds from disposals	0.0	11.4	2.0	2.5	1.9	2.0
Less Regulatory depreciation	155.1	152.3	173.9	192.9	208.0	217.7
Closing RAB	8 808.0	9 107.0	9 417.3	9 658.8	9 867.4	9 963.3

### 6. Weighted average cost of capital

The Commission has adopted a weighted average cost of capital (WACC) of 4.7 per cent for all metropolitan water businesses. The table below outlines the individual components adopted by the Commission to calculate the WACC (including feasible ranges where relevant).

Table 5	Real post-tax WACC

Real risk free rate	Equity beta	Market risk premium	Debt margin	Financing structure (gearing)	Franking credit value	WACC
per cent	β	per cent	per cent	per cent	Y	per cent
0.679 – 1.023	0.65	6.0	3.03 – 4.53	60	0.5	4.7

### 7. Desalination security costs

The Commission requires Melbourne Water to resubmit its pricing proposal on desalination security payments demonstrating that it has taken into account the requirements of the WIRO, the Water Industry Act and the Essential Services Commission Act. In doing so, the Commission encourages Melbourne Water to consult with the water retail businesses, end-use customers and relevant representative bodies.

The Commission has used the following estimates for desalination security payments to estimate prices, revenue, expenditure and bills for the purposes of the draft decision.

Table 6 **Desalination security costs** 

\$m 2012-13

Expenditure item	<i>2013-14</i>	<i>2014-15</i>	<i>2015-16</i>	<i>2016-17</i>	<i>2017-18</i>
Business proposed desalination costs – Water Plan	644.2	632.2	620.6	578.0	567.7
Business desalination costs update – February 2013	-11.0	-11.6	-11.4 -4.4	-10.9	-8.2 -6.8
Commission CPI adjustment	-1.5	-3.0	-4.4	-5.5	-0.8
Desalination costs used for purposes of draft decision	631.7	617.6	604.8	561.6	552.7
Total desalination cost adjustment	-12.6	-14.7	-15.8	-16.4	-15.0

# 8. Operating expenditure

The Commission has taken the following approach in setting the total prescribed operating expenditure for the next regulatory period (table 10).

Total prescribed operating expenditure comprises:

- total controllable operating expenditure adjusted to remove non-recurrent expenditure and to allow for new initiatives or obligations to the business's baseline year 2011-12 (table 7);
- · desalination project management costs (table 8); and
- regulatory charges (table 9).

Table 7 shows the Commission's proposed:

- business-as-usual (BAU) allowance, incorporating both growth and the productivity efficiency requirement
- allowance (or reduction) for each of Melbourne Water's proposed new expenditure initiatives or obligations
- allowance for total waterways and drainage costs.

Together these comprise the total recommended controllable operating expenditure.

Table 7 **Allowance for controllable operating expenditure** \$m 2012-13

	2013-14	2014-15	2015-16	2016-17	2017-18
Baseline BAU expenditure	249.6	251.6	253.6	255.7	257.7
New initiatives or obligations					
Tertiary treatment upgrade at Eastern Treatment Plant	12.6	12.7	12.3	13.1	13.4
Carbon tax - scope 1	3.9	4.1	3.5	3.6	3.8
Carbon tax - scope 3	2.6	2.8	2.4	2.3	2.5
Office accommodation	2.6	3.0	3.1	3.3	3.4
Energy price	3.4	3.8	3.3	3.4	3.0
Labour for sub-contractors and maintenance contracts	0.0	0.0	0.0	0.0	0.0
Land tax	0.6	0.8	1.1	1.4	1.7
Superannuation	0.0	0.0	0.0	0.0	0.0
IT operational benefits	0.0	-1.5	-1.6	-1.6	-1.6
Total new initiatives or obligations	25.7	25.7	24.2	25.6	26.2
Total waterways and drainage allowance	87.9	92.5	94.9	97.3	103.3
Total recommended controllable operating expenditure	363.2	369.8	372.7	378.6	387.2

- (a) PwC recommended the Eastern Treatment Plant upgrade expenditure proposed by Melbourne Water be reduced to reflect revised energy and labour forecasts (see section 4.4.2 of PwC's expenditure review).
- (b) PwC recommended an allowance for the carbon tax relating to direct emissions (scope 1) and increases in supply chain costs (scope 3), lower than that proposed by the business in its Water Plan. This is consistent with the Commission's guidance to allow for the impact of the carbon tax (see section 4.4.2 of PwC's expenditure review).
- (c) Melbourne Water's increased allowance to reflect full costs of operating expenditure pertaining to its office relocation part way through the base year 2011-12. (see section 4.4.2 of PwC's expenditure review).
- (d) PwC recommended the allowance for energy price increase in line with the Commission's guidance to allow for the impact of the carbon tax.

- (e) PwC recommended that Melbourne Water's proposal for additional expenditure related to contract labour and subcontractors was not justified and was removed (see section 4.4.2 of PwC's expenditure review).
- (f) Melbourne Water's proposal for increases in operating expenditure relating to increases in the valuation of land have been adjusted and a smaller allowance has been made in line with Department of Treasury and Finance forecasts at a rate of 1.4 per cent per annum (see section 4.4.2 of PwC's expenditure review).
- (g) Melbourne Water's proposed increase to cover increased superannuation contribution rates has been removed, consistent with the government's wages policy (see section 4.4.2 of PwC's expenditure review).
- (h) Some operating expenditure has been removed to reflect savings resulting from the implementation of proposed IT capital expenditure, in particular the Systems' strategic capital project (see section 4.4.2 of PwC's expenditure review).

The Commission has adjusted Melbourne Water's proposal to recover desalination project management costs in 2016-17 and 2017-18 (table 8).

Table 8 **Desalination project management costs** \$m 2012-13

Expenditure item	2013-14	2014-15	2015-16	2016-17	2017-18
Business proposed desalination project management costs	0.00	0.00	0.00	8.15	7.95
Draft decision – desalination project management costs	0.00	0.00	0.00	0.00	0.00

The Commission has adjusted licence fees to reflect its own projections and advice provided by EPA Victoria and the Department of Health. The environmental contribution payable to the state government has also been adjusted to reflect advice provided by the Department of Sustainability and Environment.

Table 9 **Regulatory charges** \$m 2012-13

Expenditure item	2013-14	2014-15	2015-16	2016-17	2017-18
Environmental contribution	0.02	0.02	0.02	0.02	0.01
Essential Services Commission	0.95	0.95	0.95	1.00	1.15
Department of Health	0.20	0.20	0.20	0.20	0.20
EPA Victoria	0.95	0.95	0.95	0.95	0.95
Draft decision – total regulatory charges	2.12	2.12	2.12	2.16	2.31

Table 10 **Operating expenditure adjustment summary** \$m 2012-13

Expenditure item	2013-14	2014-15	2015-16	2016-17	2017-18
Total recommended controllable operating expenditure	363.2	369.8	372.7	378.6	387.2
Desalination security costs – used for purposes of draft decision	631.7	617.6	604.8	561.6	552.7
Desalination project management					
costs <sup>a</sup>	0.0	0.0	0.0	0.0	0.0
Total regulatory charges	2.1	2.1	2.1	2.2	2.3
Draft decision – total prescribed operating expenditure	997.0	989.5	979.6	942.3	942.3
Business proposed total prescribed operating expenditure <sup>b</sup>	1 026.9	1 025.3	1 021.4	992.0	986.6
Total prescribed operating expenditure adjustment	-29.9	-35.8	-41.8	-49.7	-44.4

 $<sup>{}^{\</sup>mathbf{a}}$ Desalination project management costs have been removed from Melbourne Water's operating expenditure for our draft decision.  ${}^{\mathbf{b}}$ This is the amount requested by Melbourne Water in its Water Plan.

# 9. Capital expenditure

The Commission has made the following assumptions about capital expenditure forecasts over the regulatory period:

Table 11 **Proposed and approved capital expenditure** assumptions

\$m 2012-13

	2013-14	2014-15	2015-16	2016-17	2017-18
Proposed capital expenditure	667.3	564.2	499.6	421.2	304.8
Draft decision – capital expenditure	512.7	541.0	495.9	480.0	379.6

The Commission's assumptions reflect the following adjustments to Melbourne Water's proposed capital expenditure:

Table 12 **Adjustments to capital expenditure** \$m 2012-13

	2013-14	2014-15	2015-16	2016-17	2017-18
St Albans Werribee pipeline stage 2	-69.2	41.5	8.2	0.0	0.0
Waterways and drainage – land development change	3.3	-2.2	-9.3	-10.6	-11.9
Upgrade to the capacity of Class A recycled water at the Western Treatment Plant (WTP)	0.0	0.0	-4.8	0.0	0.0
Renewals expenditure	-44.1	-60.7	1.9	39.4	76.0
IT cost decreases	4.8	-1.0	-1.6	-1.6	-1.9
Air treatment and civil works	1.4	-0.1	-2.8	2.7	0.0
Kenny St link main	-2.5	-21.0	2.3	20.2	0.1
Corrosion and odour management	-13.2	-13.8	12.2	-0.1	13.1
Northern sewer project	-2.4	0.0	0.0	0.0	0.0
Melbourne Water proposed balancing adjustment	-32.6	34.0	-9.8	8.7	-0.6
Total	-154.6	-23.3	-3.7	58.8	74.8

- (a) St Albans Werribee pipeline stage 2 Melbourne Water advised PwC that expenditure can be deferred by 1 year based on a review of its capacity to deliver the project, and a revised design allowing for capital savings. The revised project cost is \$76.4 million (\$19.5 million lower than the original cost) and project will start in 2014-15 instead of 2013-14. PwC has reviewed and accepted Melbourne Water's revised timing and cost (section 6.1 of PwC expenditure report).
- (b) Waterways and drainage land development change Adjustments reflect Melbourne Water's recommended reduction in land development charges relating to waterways and drainage (section 6.1 of PwC expenditure report).
- (c) Upgrade to the capacity of Class A recycled water at the WTP Proposed expenditure has been removed to reflect PwCs' recommendation to also remove City West Water's proposed expenditure relating to the Altona Stage 2 project, which was the driver for this upgrade (section 6.3 of PwC expenditure report).
- (d) Renewals expenditure PwC recommended smoothing renewals expenditure over the next period. Melbourne Water also provided a revised estimate (not related to PwC's recommended timing adjustments) which is \$12.5 million higher than the original forecast (\$266 million). PwC assessed and accepted the revised estimate as reasonable and noted that this increase is more than offset by decreases to cost estimates also provided by Melbourne Water in other capital projects (section 6.4 of PwC expenditure report).
- (e) Adjustments to the following projects reflect Melbourne Water's revised costing and timing (section 6.9 of PwC expenditure report).
  - IT cost decreases
  - Air treatment and civil works
  - Kenny St link main
  - · Corrosion and odour management
  - Northern sewer project
  - Melbourne Water proposed balancing adjustment.

Table 13 Key capital projects

	Expected completion date
Western treatment plant (WTP) capacity augmentation – stage 2	2015-16
WTP sludge drying augmentation	2016-17
St Albans Werribee pipeline – stage 2	2015-16
<ul> <li>Water and sewer mains renewals program:</li> <li>Eastern Treatment Plant mechanical and electrical renewals</li> <li>Water main renewals (Preston)</li> <li>Water mains renewals (North Essendon)</li> <li>Sewer mains rehabilitation (North Yarra)</li> </ul>	2013-14 to 2017-18
<ul><li>Waterways program</li><li>Flood mitigation program</li><li>Retarding basin spillway upgrades</li></ul>	2013-14 to 2017-18
Sewerage transfer and odour management program	2013-14 to 2017-18

#### 10. Demand forecasts

The Commission has used the following assumptions about demand for various services over the regulatory period.

The Commission's assumptions reflect revisions to Melbourne Water's volumes to reflect adjustments to City West Water, South East Water and Yarra Valley Water's volumes.

Table 14 **Bulk water volumes** 

 $\mathsf{ML}$ 

	2013-14	2014-15	2015-16	2016-17	2017-18
City West Water - proposed	95 564	97 398	98 545	97 272	95 620
Draft decision- City West Water	96 959	98 859	100 024	101 231	102 054
South East Water - proposed	130 813	129 958	131 042	132 034	132 535
Draft decision - South East Water	134 171	133 369	134 529	135 600	136 173
Yarra Valley Water - proposed	139 373	139 068	139 913	140 113	140 475
Draft decision - Yarra Valley Water	141 844	141 532	142 394	142 597	142 966
Western Water – proposed	1 500	2 000	2 000	8 000	8 000
Draft decision - Western Water	1 500	2 000	2 000	8 000	8 000

Table 15 **Bulk sewerage volumes** 

ML

	2013-14	2014-15	2015-16	<i>2016-17</i>	2017-18
City West Water - proposed	75,564	77,286	78,598	79,847	81,093
Draft decision- City West Water	76,698	78,445	79,777	81,044	82,309
South East Water - proposed	103,263	103,649	104,133	104,945	105,723
Draft decision - South East Water	106,214	106,667	107,200	108,079	108,924
Yarra Valley Water - proposed	114,760	113,196	112,184	112,193	112,284
Draft decision - Yarra Valley Water	123,049	121,125	119,778	119,516	119,336

### 11. Form of price control

The Commission proposes to approve a hybrid form of price control for Melbourne Water:

- It approves price caps for Melbourne Water.
- Melbourne Water may propose a tariff basket at the time of the annual price review.

Where Melbourne Water proposes to transfer to a hybrid form of price control during the third regulatory period, and where that proposal results in a material tariff change, the Commission proposes to require the business to consult with customers. The determinations will require water businesses to provide evidence of customer consultation and a statement about customer impacts and how the business will address those impacts.

#### 12. Bulk water, sewerage tariffs, and trade waste tariffs

- (a) The Commission proposes to approve Melbourne Water's proposed bulk water and bulk sewerage tariff structures.
- (b) Melbourne Water may consider re-submitting a more cost reflective tariff structure for bulk water and sewerage in light of the reduced allowed revenue in the draft decision.
- (c) The Commission proposes to not approve Melbourne Water's bulk variable sewerage tariff. The Commission requires Melbourne Water to resubmit a more cost reflective proposal for its bulk variable sewerage tariff, having regard to long run marginal cost.
- (d) The Commission proposes to approve the trade waste tariff structures proposed by Melbourne Water.
- (e) The Commission requires Melbourne Water to continue to:
  - include the Commission's trade waste pricing principles in their tariff schedules. All metropolitan water business are required to use the trade waste pricing principles when determining trade waste charges for customers to whom scheduled prices do not apply
  - (ii) consult with trade waste customers before changes to trade waste structures occur.

#### 13. Waterways and drainage charges

The Commission proposes to approve Melbourne Water's proposed waterways and drainage charge structures subject to:

- Melbourne Water providing information, prior to the final decision, on how it proposes to improve the cost reflectivity of the non-residential waterways and drainage charge during the third regulatory period.
- The Commission requires Melbourne Water to submit a pricing proposal for Patterson Lakes Precept Area in response to this draft decision.

The Commission proposes to approve Melbourne Water's proposed diversion charge structures.

#### 14. Recycled water

The Commission proposes to approve Melbourne Water's proposed prices for recycled water.

- (a) The Commission proposes to approve Melbourne Water's recycled water pricing principles that ensure that prices:
  - have regard to the price of any substitutes and customers' willingness to pay
  - (ii) cover the full cost of providing the service (with the exception of services related to specified obligations or maintaining balance of supply and demand)
  - (iii) include a variable component.
- (b) Where a business does not propose to fully recover the costs associated with recycled water, it must demonstrate to the Commission that:
  - it has assessed the costs and benefits of pursuing the recycled water project
  - (ii) it has clearly identified the basis on which any revenue shortfall is to be recovered
  - (iii) if the revenue shortfall is to be recovered from non-recycled water customers, either that the project is required by 'specified obligations' or that there has been consultation with the affected customers about their willingness to pay for the benefits of increased recycling.

# 15. Miscellaneous charges

(a) The Commission proposes to approve the miscellaneous services fees and charges proposed by Melbourne Water.

### 16. Adjusting prices

For the third regulatory period, the Commission proposes to approve an uncertain and unforeseen events mechanism that sets out a process for a reopening of price determinations to account for events that were uncertain or unforeseen at the time of the price review, which the businesses could not control or effectively manage such as:

- unsustainable or unwarranted differences between actual and forecast demand level
- changes in legislative and other government imposed obligations
- catastrophic events (such as fire, earthquake or act of terrorism).

Key features of the mechanism are:

- A water business (by application to the Commission) or the Commission may initiate a reopening.
- Prices can either be raised or reduced as a result of an uncertain or unforeseen event.
- An adjustment to prices may be implemented by the Commission at any time within a regulatory period (and not only on 1 July in any year), or at the end of the regulatory period.
- There will be no nominal thresholds for applications (based on differences between forecast and actual outcomes for expenditure, revenue and demand). However in applying to reopen a decision, the water business will need to demonstrate it does not have the financial resources or operational capacity to manage its exposure.

- The Commission proposes to reserve the discretion to limit the reopening of a determination to a single event, rather than the full suite of factors influencing business costs and revenues where:
  - the impact of an uncertain and unforseen event on business costs or revenues is material, and
  - ii. the effects of which can be isolated with certainty

The Commission will only approve a mid-period price adjustment proposed by a water business, when it is satisfied:

- the event is clearly outside the business's control and not predictable with any confidence
- the business has exhausted all opportunities within its control to mitigate against the circumstances in which it finds itself, including demonstrable reprioritisation of its operating and capital expenditure programs
- customers are not unduly exposed to risk or price fluctuations
- the impact of the event is material, clearly observable and verifiable, and
- the net impact on costs or revenue of all changes that occurred during the period being considered is significant (except in cases where the Commission identifies a material event for which the effects can be isolated).

In determining whether a mid-period price adjustment is appropriate the Commission will focus on the business's ability to absorb the impacts of any event on costs or revenues, with particular emphasis on the business' viability ratios.

Adjusting prices for desalination costs

The Commission proposes to approve Melbourne Water's proposed approach to adjusting prices for any water orders.

The Commission considers that Melbourne Water's proposal to pass through desalination security cost changes via an adjustment factor sends appropriate price signals to customers about the costs of desalinated water.

When Melbourne Water responds to this draft decision with an alternative approach addressing our draft decision on the treatment of its desalination security costs (see 8 above), it should consider the implications for the security payment and how it is passed through to the retailers and their end use customers.