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2009 WATER PRICE REVIEW

DRAFT DECISION VOLUME II:
MELBOURNE WATER

APRIL 2009

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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 by 19 May 2009 resubmit:

- (a) its proposed schedule of tariffs to apply for each year of the regulatory period commencing 1 July 2009 that reflects:
 - (i) the revised revenue requirement set out in table 4
 - (ii) the revised demand forecasts set out in tables 13–17 and
 - (iii) any tariff structure changes suggested by the Commission.
- (b) the service standards to apply over the regulatory period consistent with any revisions suggested by the Commission set out in tables 1–2.

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 2009-10 to 2012-13 as part of its Final Determination.

3. Service standards

The Commission proposes to approve each of the service standards proposed in Melbourne Water's Water Plan.

Table 1 Approved service standards

<i>Service standard</i>	<i>3yr Avg 2005-08</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Water					
Aggregated water pressure compliance with Bulk Service Arrangements at interface points (per cent)	99.9	99.6	99.6	99.6	99.6
Aggregated water quality compliance with Bulk Service Arrangements at interface points (per cent)					
Micro-biological standards (<i>E.coli</i>)	100	100	100	100	100
Disinfection by-products (Trihalomethanes and chloracetic acids)	100	100	100	100	100
Aesthetic standards (turbidity)	89.9	91.5	91.5	91.5	91.5
Aesthetic standards (aluminium)	99.2	100	100	100	100
Leakage (percentage of water supplied)	0.96	<1	<1	<1	<1
Sewerage					
Sewer spills and overflows (number)					
System failure	0.3	0	0	0	0
Hydraulic deficiency	3				0 ^a
Odour complaints	12	10	10	10	10

Note Data rounded to one decimal place. n.p. = Not provided. ^a Melbourne Water stated in its Water Plan that it will pursue a progressive target towards zero spills.

4. Guaranteed service level scheme

Melbourne Water does not have a guaranteed service level scheme in place.

5. Revenue requirement

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

Table 4 **Breakdown of revenue requirement implied by ESC draft decision**
\$ million in January 2009 prices

	<i>2009-10</i>	<i>2010-11</i>	<i>2011-2012</i>	<i>2012-13</i>
Operating expenditure	195.1	198.0	402.4	611.3
Return on existing assets	206.8	201.7	197.8	193.8
Return on new investments	67.9	100.7	118.9	126.0
Regulatory depreciation	90.4	100.8	109.7	118.4
Tax liability	16.6	17.4	20.5	21.7
Total	576.8	618.6	849.3	1 071.2

6. Rolled forward regulatory asset base

The regulatory asset base as at 1 July 2005 has been rolled forward to reflect actual capital expenditures net of customer contributions (new customer and shareholder contributions) and disposals for the 2005-06 to 2007-08 period less any approved allowance for regulatory depreciation. The rolled forward values are shown in table 5.

Table 5 **Updated regulatory asset base**
\$ million in January 2009 prices

	<i>2005-06</i>	<i>2006-07</i>	<i>2007-08</i>
Opening RAB	3 990.5	4 053.8	4 162.2
<i>Plus</i> Gross capital expenditure	139.4	187.3	373.5
<i>Less</i> Government contributions	0.0	0.0	0.0
<i>Less</i> Customer contributions	0.0	0.0	0.0
<i>Less</i> Proceeds from disposals	3.9	4.5	1.06
<i>Less</i> Regulatory depreciation	72.1	74.4	77.4
Closing RAB	4 053.8	4 162.2	4 457.3

The regulatory asset base as at 1 July 2008 will be rolled forward to reflect approved estimates of capital expenditure net of customer contributions (new customer and shareholder contributions) and disposals for the 2008-09 to 2012-13 period less any approved allowance for regulatory depreciation. These rolled forward values are shown in table 6.

Table 6 **Rolled forward regulatory asset base**
\$ million in January 2009 prices

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Opening RAB	4 457.3	5 377.0	6 068.8	6 530.8	6 663.9
<i>Plus</i> Gross capital expenditure	1 004.6	836.4	562.8	248.8	117.1
<i>Less</i> Government contributions	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Customer contributions	0.0	0.0	0.0	0.0	0.0
<i>Less</i> Proceeds from disposals	2.2	54.2	0.0	6.1	0.0
<i>Less</i> Regulatory depreciation	82.6	90.4	100.8	109.7	118.4
Closing RAB	5 377.0	6 068.8	6 530.8	6 663.9	6 662.6

7. Weighted average cost of capital

The Commission has adopted a weighted average cost of capital (WACC) of 4.8 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 7 **Real post-tax WACC**

<i>Real risk free rate</i>	<i>Equity beta</i>	<i>Market risk premium</i>	<i>Debt margin</i>	<i>Financing structure</i>	<i>Franking credit value</i>	<i>WACC (feasible range)</i>	<i>WACC (draft decision)</i>
<i>(per cent)</i>		<i>(per cent)</i>	<i>(per cent)</i>	<i>(per cent)</i>		<i>(per cent)</i>	<i>(per cent)</i>
1.508 - 1.755	0.65	6.00	2.0 - 2.7	60	0.5	4.3 – 4.9	4.8

8. Operating expenditure

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

Table 8 **Proposed and approved operating expenditure assumptions**

\$ million in January 2009 prices

	2009-10	2010-11	2011-12	2012-13
Proposed operating expenditure	197.7	209.2	415.6	627.7
Revisions and adjustments	-2.6	-11.2	-13.1	-16.5
Draft decision – operating expenditure	195.1	198.0	402.4	611.3

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

Table 9 **Adjustments to operating expenditure**

\$ million in January 2009 prices

<i>Expenditure item</i>	2009-10	2010-11	2011-12	2012-13
Maintenance cost escalation	-0.32	-0.48	-0.66	-0.85
VCEC productivity	-1.80	-2.70	-0.85	-0.85
Labour costs	-0.15	-0.28	0.03	0.19
Chemical costs - Tarago	0.48	-0.73	-0.94	-0.95
Sugarloaf pipeline	-1.00	0.00	0.00	0.00
Tarago water treatment plant	0.33	-0.35	-0.35	-0.32
Electricity	-0.50	-1.98	-3.90	-5.02
CPRS	0.00	-2.30	-2.30	-2.20
Water conservation	1.00	0.00	-0.23	-0.45
Transferred assets	-0.11	-0.11	-0.11	-0.11
Land tax	-0.53	-2.31	-3.82	-5.91
Total	-2.60	-11.24	-13.13	-16.47

- (a) Maintenance cost escalation reflects changes to forecast maintenance cost escalation as discussed in section 5.2.1 of Deloitte-Halcrow's expenditure review.
- (b) The Victorian Competition and Efficiency Commission recommended businesses achieve savings through shared services and bulk procurement. The allocation of savings is discussed in section 5.4.1 of Deloitte-Halcrow's expenditure review.
- (c) Government advice on CPI and expected wages growth resulted in the allowance for an real labour growth rates increasing from 1.25 to 1.5 per cent, as discussed in section 6.2.1 of Deloitte-Halcrow's expenditure review.

- (d) Chemical costs at the Tarago water treatment plant were adjusted to reflect changed treatment volumes, discussed in section 6.2.2 of Deloitte-Halcrow's expenditure review.
- (e) With commissioning of the Sugarloaf Pipeline forecast for July 2010, Deloitte-Halcrow considered that the 2009-10 expenditure was over estimated. In section 6.2.3 of the expenditure report, a \$1 million reduction in operating expenditure for the project in 2009-10 is recommended.
- (f) Operating expenditure, other than chemical costs, for the Tarago water treatment plant was adjusted to reflect changed treatment volumes, as discussed in section 6.2.3 of Deloitte-Halcrow's expenditure review.
- (g) Deloitte-Halcrow reduced Melbourne Water's forecast electricity expenditure in all years of the regulatory period. This expenditure includes allowances for carbon emission programs (see section 6.2.4 of the report).
- (h) Due to uncertainty surrounding expenditure for emission permits in the Australian Government Carbon Pollution Reduction Scheme, no expenditure has been included for pricing purposes. Melbourne Water may apply to use the uncertain and unforeseen events mechanism discussed in section 12 to adjust its revenue requirement during the regulatory period.
- (i) Deloitte-Halcrow recommended that operating expenditure for water conservation be reduced (see section 6.2.7 of the report).
- (j) Operating expenditure for assets transferred from Yarra Valley Water to Melbourne Water has been adjusted to achieve a consistent outcome between the two businesses. Deloitte-Halcrow discusses the adjustment in section 6.2.8 of the report.
- (k) Following the draft expenditure report, Melbourne Water provided revised estimates of land tax during the regulatory period, as discussed in section 6.2.9 of the report. The revised forecast was accepted by Deloitte-Halcrow.

9. Capital expenditure

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

Table 10 **Proposed and approved capital expenditure assumptions**

\$ million in January 2009 prices

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Proposed capital expenditure	1 016.1	805.3	564.4	277.3	127.0
Draft decision – capital expenditure	1 004.6	836.4	562.8	248.8	117.1

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

Table 11 **Adjustments to capital expenditure**

\$ million in January 2009 prices

	<i>2008-09</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
Sugarloaf pipeline projects	1.7	-53.6	-32.0	-6.0	0.0
ETP tertiary treatment upgrade	0.0	-0.2	-0.6	-0.2	0.0
Northern sewerage project	0.0	0.0	0.0	-3.6	0.0
Melbourne main sewer augmentation	0.0	0.0	0.0	-8.7	0.0
WTP wet weather capacity upgrade	-2.3	2.3	0.0	0.0	0.0
Water renewal between Preston and North Essendon	-2.0	-0.5	-0.5	0.0	0.0
Renewals program	-7.1	-8.1	-9.4	-10.0	-9.9
Tarago treatment plant	-11.6	0.0	0.0	0.0	0.0
Desalination interconnect	0.8	38.1	41.0	0.0	0.0
Dandenong treatment plant	16.0	6.3	0.0	0.0	0.0
Other adjustments	-46.7	46.7	0.0	0.0	0.0
Desalination contribution to DSE	39.7	0.0	0.0	0.0	0.0
Total adjustment	-11.6	31.1	-1.6	-28.5	-9.9

- (a) Sugarloaf pipeline projects – The changes result from cost escalation allowance, performance allowance, contingency allowance and shifting of expenditure (see Halcrow-Deloitte report section 7.3.1).
- (b) ETP tertiary treatment upgrade –Halcrow-Deloitte identified that differences in proposed and approved expenditure exists and Melbourne Water needs to

ensure that capital figures are based on correct data (see Halcrow-Deloitte report section 7.3.2).

- (c) Northern sewerage project – Halcrow-Deloitte recommended that only 50 per cent of the performance allowance should be included in the expenditure for this project, as opposed to the full amount included by Melbourne Water (see Halcrow-Deloitte report section 7.3.3).
- (d) Melbourne main sewer augmentation – Halcrow -Deloitte recommended that 50 per cent of the cost escalation allowance and performance allowance should be included in the expenditure for this project, as opposed to the full amount included by Melbourne Water (see Halcrow-Deloitte report section 7.3.4).
- (e) WTP wet weather capacity upgrade – Halcrow-Deloitte identified that the profile of capital expenditure has been changed due to delays (see Halcrow-Deloitte report section 7.3.6).
- (f) Water mains renewal between Preston and North Essendon – Halcrow-Deloitte recommended that cost escalation for inputs be removed due to the change in economic conditions (see Halcrow-Deloitte report section 7.3.7).
- (g) Renewals program – Halcrow-Deloitte identified that costs have been revised due to new information and expenditure can be shifted into the maintenance budget (see Halcrow-Deloitte report section 7.4.1).
- (h) Tarago treatment plant – Halcrow-Deloitte noted that, as the project is close to completion, actual costs are known and have been adjusted (see Halcrow-Deloitte report section 7.4.5).
- (i) Desalination interconnect – Halcrow-Deloitte identified this as new project and adjustments reflect changes in input costs (see Halcrow-Deloitte report section 7.4.5).
- (j) Dandenong treatment plant – Halcrow-Deloitte identified that the costs have been adjusted to reflect actual cost (see Halcrow-Deloitte report section 7.4.5).
- (k) Other adjustments – Halcrow-Deloitte identified deferrals across a number of projects (see Halcrow-Deloitte report section 7.4.5).
- (l) Melbourne Water was required to make a contribution for the desalination project.

Melbourne Water has identified the following key capital projects that it proposes to deliver during the regulatory period.

Table 12 **Key capital projects**

	<i>Expected completion date</i>
Sugarloaf Pipeline	2011
Eastern Treatment Plant (ETP) Tertiary Treatment	2012
Northern Sewerage project	2012
Melbourne Main Sewer	2012
ETP mechanical and electrical (M&E) renewals	ongoing
Western Treatment Plant (WTP) wet weather capacity upgrade	2010
Water mains renewals Preston to North Essendon	2011
Water mains renewals North Essendon to Footscray	2014
Sewerage transfer M&E renewals	ongoing
Upgrade grit and screenings removal facility at ETP	2012

10. Demand forecasts

- (a) The Commission has made the following assumptions about demand for various services over the regulatory period.
- (b) The Commission has adjusted proposed demand forecasts where shaded or otherwise indicated.

Table 13 **Bulk water volumes**
ML

	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
City West Water - proposed	94 429	97 004	97 699	96 232
City West Water - draft decision	94 682	97 874	98 931	98 144
South East Water - proposed	128 309	137 511	144 344	144 822
South East Water - draft decision	125 109	138 627	137 830	145 821
Yarra Valley Water - proposed	140 390	145 095	148 321	149 724
Yarra Valley Water - draft decision	138 991	145 466	144 168	147 574

Table 14 **Bulk sewerage volumes**
ML

	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>
City West Water - proposed	60 340	62 396	63 432	62 858
City West Water - draft decision	61 887	64 179	65 400	64 980
South East Water - proposed	94 935	105 778	109 332	109 324
South East Water - draft decision	93 884	106 483	105 697	110 371
Yarra Valley Water - proposed	107 264	106 852	106 487	106 177
Yarra Valley Water - draft decision	96 248	97 904	99 893	100 906

11. Form of price control

- (a) The Commission proposes to approve individual price caps for Melbourne Water.
- (b) Melbourne Water should submit a schedule of prices to apply from 1 July 2009, as well as a process by which tariffs can be adjusted on an annual basis that is consistent with the following adjustment mechanism.
- (c) Melbourne Water may apply for an adjustment to its prices or tariff strategy at the time of the annual price review. It would have to demonstrate in its application to the Commission that it has clearly articulated a new tariff strategy (or explained how the proposed price changes are consistent with its existing tariff strategy), undertaken appropriate customer consultation and addressed customer impacts. The average annual price increase across the range of tariffs could not be greater than the average increase calculated under a tariff basket approach. The Commission may then approve amended individual price caps for the remainder of the regulatory period.

12. Uncertain and unforeseen events mechanism

Melbourne Water may apply to the Commission to adjust its prices either at the end of the regulatory period or during the regulatory period to reflect increased or decreased costs incurred by Melbourne Water and/or increased or decreased revenue received by Melbourne Water as a result of events that were uncertain or unforeseen at the time the Determination is made. Events that may be taken into account under this mechanism include:

- (a) Any difference between assumed and actual licence fees levied by the EPA, DHS and the ESC. To avoid any doubt, the assumed licence fees payable for each year of the regulatory period are set out in table 18.

Table 15 **Approved licence fee assumptions^a**
\$ million in January 2009 prices

	<i>2009-10</i>	<i>2010-11</i>	<i>2011-2012</i>	<i>2012-2013</i>
Essential Services Commission	0.35	0.35	0.35	0.53
Environment Protection Authority	0.89	0.89	0.89	0.89
Department of Human Services	0.18	0.18	0.18	0.18

^a Included in forecasts of business as usual operating expenditure.

- (b) Changes in the timing or scope of expenditure by Melbourne Water on major capital projects.
- (c) A material difference between the forecast demand levels set out in tables 13–17 and actual demand levels for Melbourne Water.
- (d) Changes in relevant legislation, licences, relevant taxes or the Statement of Obligations or the introduction of a national emissions trading scheme.

The Commission will not take into account matters that:

- (a) are or should be within Melbourne Water's control;
- (b) were or should have been known, or could reasonably have been foreseen, by Melbourne Water;
- (c) should be or should have been planned for or managed by Melbourne Water; and/or
- (d) reflect inefficient expenditure by Melbourne Water.

13. Bulk water and sewerage tariffs

- (a) The Commission proposes to approve Melbourne Water's proposal to introduce uniform headworks usage charges for bulk water.
- (b) The Commission proposes to approve Melbourne Water's proposals to introduce a single volumetric charge for bulk sewerage and apply separate bulk sewerage service charges for the Eastern Treatment Plant and Western Treatment Plant.
- (c) The Commission proposes to approve Melbourne Water's proposed change in major trade waste load parameters from total nitrogen to total kjeldahl nitrogen and from total dissolved solids to inorganic total dissolved solids.

- (d) The Commission proposes not to approve the level of Melbourne Water's inorganic total dissolved solids charge for 2009-10. In response to this draft decision, Melbourne Water should propose a more gradual increase in the charge over the regulatory period.
- (e) The Commission proposes to approve Melbourne Water's bulk charges for 2009-10. For 2010-11 to 2012-13, the Commission requires Melbourne Water to propose a price path that more closely matches revenue and costs.
- (f) The Commission proposes to approve all other elements of Melbourne Water's proposed bulk water and sewerage tariffs, subject to verifying its methodology for allocating costs between retailers.

14. Recycled water

- (a) The Commission proposes to approve Melbourne Water's proposed pricing principles on the basis that they are consistent with the following principles that ensure that prices:
 - (i) 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:
 - (i) 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.
- (c) The Commission is satisfied with Melbourne Water's agreement with Southern Rural Water to extend the current supply agreements for a further two years until June 2011.
- (d) The Commission supports Melbourne Water's proposal to gradually phase in cost reflective pricing for its recycled water customers. The Commission is seeking further information and will work closely with Melbourne Water and Southern Rural Water to ensure that any move to full cost reflectivity is phased in to allow customers adequate time to adjust to price increases.

15. Miscellaneous charges

- (a) The Commission proposes to approve pricing principles for calculating any miscellaneous charges introduced by Melbourne Water during the regulatory period.