

Essential Services Commission

Response to metropolitan
Melbourne's water
companies' responses to
the ESC's Draft Decision

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June 2013

Disclaimer

In preparing this Report we have only considered the circumstances of the Essential Services Commission, and the Commission's requirements as set out in our engagement terms dated 31 May 2013.

Our Report should not be relied upon by any other person, or for any other purpose. We do not accept or assume responsibility to any person other than Essential Services Commission in respect of our Report.

Introduction

In April 2013 we submitted our final findings to the ESC on our review of the metropolitan Melbourne water companies' proposed expenditure for the upcoming regulatory period.¹ Our advice was considered by the ESC in determining its Draft Decision, released in April 2013.²

In May 2013, the water companies responded the ESC's Draft Decision. A number of issues raised in their responses concerned the advice that we gave to the ESC as part of our final findings.

The ESC has asked PwC to undertake further analysis on a number of these issues, specifically:

- Melbourne Water
 - Contract labour expenditure forecasts
 - Carbon tax scope 1 expenditure forecasts
 - Carbon tax scope 3 expenditure forecasts
 - Land tax expenditure forecasts
 - Eastern Treatment Plant (ETP) upgrade expenditure forecasts
- City West Water
 - Carbon tax scope 3 expenditure forecasts
 - Land tax expenditure in the base year
- South East Water
 - Non-carbon tax energy expenditure forecasts
 - Carbon tax scope 3 expenditure forecasts
 - Expenditure allowances related to the superannuation guarantee levy increase
- Western Water
 - Proposed expenditure relating to supervisory control and data acquisition (SCADA) and telemetry projects
 - Proposed expenditure relating to additional water storage in Sunbury (Bald Hill tank project)

We were not asked to consider any issues raised by Yarra Valley Water.

¹ *Review of Metropolitan Melbourne's water companies' proposed expenditure: final findings*, PwC, April 2013

² Essential Services Commission 2013, *Price Review 2013: Greater Metropolitan Water Businesses – Draft Decision, Volume I*, April 2013 and Volumes II, April 2013

The ESC has asked us to focus on these issues specifically, and only for those companies which raised them.

Below we detail our findings and recommendations for each of the issues we have been asked to address. Our findings should be read in conjunction with:

- the water companies' Water Plans
- our final findings
- the ESC's Draft Decision
- the water companies' submissions to the ESC in response to the Draft Decision.

Melbourne Water

Contract labour expenditure forecasts

In response to the ESC's Draft Decision, Melbourne Water has argued that it is inappropriate for the ESC to apply the Victorian Government's wages policy to outsourced contracts, given that contractors are not bound by that wage policy.³ Melbourne Water instead proposed above consumer price index (CPI) rises in input costs (at a weighted average of 1.66% per year) for:

- water and sewerage mechanical and electrical maintenance contract labour (excluding expenditure relating to the Eastern Treatment Plant)
- waterways maintenance contract labour.

Expenditure on these two items was \$48.3m in the 2011/12 base year.

On the assumption that the ESC considers it appropriate to apply input price growth above CPI for contract labour (in light of the discussion in section 3.2.3 of our final findings), we agree with Melbourne Water that it is not appropriate to apply the Victorian Government's wages policy to contractors. Instead, we recommend the application of Deloitte Access Economics' latest Victorian utilities wage forecasts which the AER is using to inform SP AusNet's 2013-17 access arrangement.⁴ These forecasts are given in the table below:

³ *Response submission to the ESC's draft decision*, Melbourne Water, May 2013, pages 25-26

⁴ *Forecast growth in labour costs in Victoria: Report prepared for the AER*, 4 February 2013, page 65

Table 1: Labour escalation factor (year on year percentage increase)

Calendar year	2012	2013	2014	2015	2016	2017	2018	
Labour escalation factor (Utilities - Feb 2013 forecast)	2.20%	0.90%	0.50%	1.00%	1.00%	0.90%	1.10%	
Financial year ⁵	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Average (2012/13 – 2017/18)	
Labour escalation factor (Utilities - Feb 2013 forecast)	1.55%	0.70%	0.75%	1.00%	0.95%	1.00%	0.99%	

We recommend (on the assumption that the ESC accepts that input price rises above CPI are appropriate for contract labour) applying the labour input cost escalators above to the contract labour proposed by Melbourne Water to be escalated, resulting in the following changes to the operational expenditure baseline expenditure:

Table 2: Recommended changes to the operational expenditure baseline

	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
Annual input price rise (%)		1.55%	0.70%	0.75%	1.00%	0.95%	1.00%	
Expenditure subject to real input price rise (\$m)	48.27	49.02	49.36	49.73	50.23	50.71	51.21	
Recommended increase to the baseline (\$m)			+1.09	+1.46	+1.96	+2.44	+2.94	+9.89

Carbon tax scope 1 expenditure forecasts

In our final findings, we recommended an allowance for Melbourne Water for scope 1 emissions relating to the carbon tax. This allowance was based on Water Services Association of Australia (WSAA)/SKM forecasts for the price per tonne of carbon.⁶ These recommendations were implemented by the ESC in its Draft Decision.

Since our final findings, new information has come to light which indicates that the WSAA/SKM forecasts may be too high. In particular, the Commonwealth Treasury has released updated forecasts for the price of carbon over the regulatory period that are substantially lower than those of the WSAA/SKM report.⁷

We consider that the latest Treasury forecasts are the most authoritative forecast currently available, and recommend that these are used to forecast scope 1 expenditure for Melbourne Water. The Treasury's forecasts for the (nominal) price

⁵ Deloitte Access Economics' forecasts were for calendar years. We have assumed the average of two calendar years to create a financial year forecast.

⁶ Water Services Association of Australia and Sinclair Knight Merz – McLennan Magasanik Associates, *Energy Price Forecasts 2013 to 2032: Final draft 1.0*, 13 November 2012.

⁷ Commonwealth Treasury, *Budget Strategy and Outlook: Budget Paper No. 1 2013/14*, Box 9, p2-48

of carbon for the upcoming regulatory period are given below, assuming a CPI of 2.75% over the period:

Table 3: Carbon price forecast (\$ per tonne)

	2013/14	2014/15	2015/16	2016/17	2017/18
Treasury carbon price forecast (\$2012/13)	23.82	24.39	11.31	16.89	22.17

The result of this recommendation on the ESC's Draft Decision expenditure allowance is as follows:

Table 4: Recommended adjustment to the ESC's Draft Decision (\$m)

Description	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
Recommended adjustment vs. ESC's Draft Decision	0.00	0.00	-1.55	-0.72	+0.07	-2.19

We are aware of concerns with regard to the Treasury forecasts, including that the forecasts use a methodology which ensures that by 2019/20, the Treasury's original forecasts and its updated forecasts are aligned.

Some commentators have suggested that the use of forecasts for the European Union Allowances (EUAs) is suitable once the Australian carbon market is 'floated' from 2015/16, given the inter-tradability of Australian carbon units for EUAs. We have reservations with this approach, because:

- the Carbon Price Mechanism (CPM) only allows for half of credits surrendered to be EUAs until 2018/19 (the latest time by which the Australian and EU emissions trading systems are to be fully linked), and Australian carbon units may not be surrendered in Europe until that time, meaning the exchange rate may not be parity.
- any forecast of the European price is itself likely to be highly uncertain. European policy makers are currently considering reducing the number of EUAs in the market, which all things being equal would tend to increase prices. This requires the support of European Union (EU) member countries, and is currently in political negotiation. The extent and price impact of any limit in EUAs is unknown.
- Europe is in negotiation with other jurisdictions which have carbon markets (e.g. California) to link their markets. As a result, the price of EUAs may be influenced by these other markets, and therefore makes forecasting the European market even more challenging.
- it relies on judgements regarding the stability or direction of future foreign exchange rates between the Australian dollar and the Euro. The Australian dollar has for the past 18 months been trading at historically high levels relative to both the US dollar and other major international currencies such as the Euro, but in recent weeks has depreciated. Continued further currency depreciation would tend to increase the Australian dollar-equivalent value of EUAs.

We note that any forecast for the price of carbon is likely to prove inaccurate, potentially materially, given that the price is highly dependent on political decisions, both here in Australia and in other jurisdictions, and there is little historical data on which to base forecasts.

Carbon tax scope 3 expenditure forecasts

In our final findings, we accepted Melbourne Water’s (non-desalination plant related) methodology for calculating scope 3 carbon tax emissions expenditure. This was based on an Integrated Sustainability Analysis (ISA) model developed by the University of Sydney for use by a number of organisations. Melbourne Water assumed that, across all industries, approximately 71% of the carbon price would be passed on by businesses up its supply chain, which we accepted as reasonable. We used WSAA/SKM forecasts for the price per tonne of carbon to determine the expenditure allowance relating to scope 3 effects of the carbon tax. These recommendations were implemented by the ESC in its Draft Decision.

As discussed above with regard to Melbourne Water’s scope 1 expenditure forecasts, since our final findings, new Treasury data causes us to suspect that the WSAA/SKM forecasts are too high. In accordance with our recommendations for scope 1 emissions, we recommend that the ESC uses Treasury’s latest forecasts for the price of carbon, but highlight the limitations with using any forecasts for carbon pricing due to the political uncertainty and limited historical data.

The result of this recommendation on the ESC’s Draft Decision expenditure allowance is as follows:

Table 5: Recommended adjustment to the ESC’s Draft Decision (\$m)

Description	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
Recommended adjustment vs. ESC’s Draft Decision	0.00	0.00	-1.08	-0.46	0.05	-1.49

We make the following observations with regard to the total recommended expenditure allowance for Melbourne Water’s scope 3 carbon emissions:

- Through the prices review process, prices are set in real dollars. The actual prices charge to customers are the (real) prices set in the price review, adjusted to reflect actual inflation, at a rate equal to CPI. CPI is a measure of changes, over time, in retail prices of a constant basket of goods and services representative of consumption expenditure by resident households in Australian metropolitan areas, as defined by the Australian Bureau of Statistics (ABS). The prices of the basket of goods and services which constitute CPI will be impacted by scope 1, 2 and 3 carbon tax emissions. As such, there is the possibility that, by allowing Melbourne Water expenditure with regard to the carbon tax (scopes 1, 2 and 3), the prices that water customers pay may reflect a double-counting of carbon costs – once through a rise in CPI, the other through an explicit allowance in real terms.

The extent to which this double-counting occurs is difficult to quantify without a very sophisticated economic and market model (the creation of which is beyond the scope of our review). With regard to scope 1, 2 and 3 emissions, the extent of double-counting is a function of how closely related the basket of goods and services bought by Melbourne Water is to the basket of goods and services used to calculate CPI. For scope 1 and 2 emissions, the correlation is likely to be weak. Scope 1 emissions result in a tax on

specific businesses which directly produce emissions, while scope 2 emissions are related to energy usage only, and hence the “goods and services” of scope 1 or scope 2 emissions are unlikely to closely approximate the basket of goods and services included in the ABS’s calculation of CPI. The impact on CPI of scope 1 and 2 emissions is likely to be modest relative to the increase in expenditure incurred by Melbourne Water. Double-counting is likely to be limited.

However, Melbourne Water’s scope 3 emissions are likely to be more closely related to CPI, as its scope 3 emissions are related to increases in price in its supply chain. While the distribution of Melbourne Water’s expenditure is not exactly representative of the weighted basket of goods and services used by the ABS, there is likely to be a degree of correlation in underlying cost drivers such as the use of transport and logistics supply chains and embedded energy, and hence the expenditure allowance we have recommended may be overestimations.

- The allowance is just 0.6% of the total recommended controllable operating expenditure as allowed in the ESC’s Draft Decision (excluding Victorian Desalination Plant operating expenditure), and that regardless of whether or not the ESC includes an expenditure allowance for scope 3 emissions, the impact on prices is likely to be modest.

Land tax expenditure forecasts

In our final findings, we recommended that either no increase to the baseline expenditure be allowed for land tax, or that the forecast for Melbourne Water’s land tax expenditure should be proportional to the forecast growth in land tax revenue, as forecast in the Victorian State budget of 2012/13.⁸ The ESC implemented the second of these options in its Draft Decision.

Incorrectly, we interpreted the budget forecasts to include a real increase of 1.4% in each year subsequent to the base year throughout the regulatory period, instead of a nominal 11.9% increase in 2012/13, followed by a nominal average increase of 1.4% in subsequent years to 2015/16.

Subsequent to our final findings, the Victorian Government has revised its land tax revenue forecasts in its 2013/14 budget; the new average annual percentage increase in land tax revenue over the forecasting period (2012/13 – 2016/17) is substantially higher than that forecast over the forecasting period of the 2012/13 budget (2011/12 – 2015/16).⁹

The reason for the increase in budget forecasts is due to the timing of the biennial land tax revenue cycle. Every two years, revaluations of land occur which have historically (and are forecast by Treasury to continue to) revalue land substantially higher, driving increases in land tax revenues in these years. In the intervening years, revenues have historically fallen slightly. During the period 2011/12 – 2015/16 (the forecasting period of the 2012/13 budget), there is a forecast rise of 11.9% (nominal) in 2012/13 (a revaluation year) followed by an average rise of just 1.4% (nominal) subsequently, corresponding to two non-revaluation years and one revaluation year.

⁸ Victorian 2012-13 Budget Paper No 2, p39; Victorian 2012-13 Budget Paper No 5, p23

⁹ Victorian 2013-14 Budget Paper No 2, p46; Victorian 2013-14 Budget Paper No 5, p23

In contrast, in during the period 2012/13 – 2016/17 (the forecasting period of the 2013/14 budget), there is a forecast fall of 1.4% (nominal) in 2013/14 (a non-revaluation year) followed by an average rise of 8.2% (nominal) subsequently, corresponding to one non-revaluation year and two revaluation years.

The difference in the number of revaluation and non-revaluation years in the forecasting periods is the main reason for the large difference in average land tax revenue change between the two forecasting periods.

Furthermore, we note that although Melbourne Water has stated that the Budget percentage increases are in real terms, we have been advised by the ESC that figures within the budget are quoted in nominal dollars.¹⁰

The table below show:

- our original forecasts, based on an incorrect interpretation of the Treasury’s 2012/13 budget forecasts of a 1.4% real increase per year
- the actual real 2013/14 budget forecasts assuming 2.75% CPI (up to 2016/17)
- our projections based on 2013/14 budget forecasts (in real dollars), using:
 - an average of the non-revaluation years in the 2013/14 budget forecasts for 2017/18 (another non-revaluation year), therefore taking into account the biennial nature of land revaluations
 - a CPI rate of 2.75% per year
- Melbourne Water’s current (and original) proposal, namely an increase varying between a range of 2.0% and 2.9% real per year.

Table 6: Annual year-on-year increase to land tax expenditure under various scenarios (\$2013 real)

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
PwC final findings recommendation	% increase per year (real)		1.4%	1.4%	1.4%	1.4%	1.4%	
	Regulatory allowance (\$m)	19.67	19.95	20.22	20.51	20.79	21.09	21.38
Budget 2013/14 forecasts	% increase per year (real)		10.6%	-4.2%	12.4%	-5.0%	9.8%	
	Regulatory allowance (\$m)	19.67	21.75	20.84	23.42	22.24	24.43	
PwC projections based on 2013/14 Budget figures	% increase per year (real)		10.6%	-4.2%	12.4%	-5.0%	9.8%	-4.6%
	Regulatory allowance (\$m)	19.67	21.75	20.84	23.42	22.24	24.43	23.30
Melbourne Water current (and original) proposal	% increase per year (real)				2.2%	2.0%	2.9%	2.7%
	Regulatory allowance (\$m)	19.67		21.71	22.18	22.63	23.28	23.91

¹⁰ Melbourne Water’s response to the Expenditure review - draft findings report, February 2013, p35

Melbourne Water’s current (and original) proposal is less than our projections based on the 2013/14 budget forecasts. As a result, we recommend that the ESC accepts Melbourne Water’s original proposals as reasonable. We recommend the following change to the ESC’s Draft Decision (on the assumption that it continues to implement option 2 in our final decision with regard to land tax):

Table 7: Recommended adjustment to the ESC’s Draft Decision (\$m)

Description	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
Recommended adjustment vs. ESC’s Draft Decision	+1.49	+1.67	+1.84	+2.19	+2.53	+9.72

Eastern Treatment Plant upgrade expenditure forecasts

In its Water Plan (and the supporting material submitted to us), Melbourne Water provided forecasts for the increase in expenditure above the baseline relating to the Tertiary treatment upgrade at Eastern Treatment Plant (ETP). Subsequent to submitting these forecasts (but prior to our final findings) Melbourne Water revised its forecast expenditure. It revised a number of line items, with a net downward proposed adjustment of \$3.0m over the regulatory period. Within that net downward adjustment was an upward adjustment of \$1.7m, relating to the maintenance of the plant. Melbourne Water argued that this adjustment was the correction of its error in converting nominal to real dollars.

In our final findings, we accepted all of the changes proposed by Melbourne Water to its ETP forecast expenditure other than the maintenance costs, on the basis that it was unclear whether or not the ETP estimate already included (or was meant to include) CPI.

In response to the ESC’s Draft Decision and our final findings, Melbourne Water has supplied some evidence to suggest that its original forecasts for maintenance declined in real terms, rather than remained constant in real terms.

We have been unable to verify all aspects of Melbourne Water’s original and revised forecasts. In particular, our understanding is that Melbourne Water applied a CPI adjustment to its maintenance forecasts which already were in real dollars. However, the implied CPI rate which might have been erroneously applied the real numbers appears to be approximately 5.9%, in excess of the CPI rate that should have been applied.

Notwithstanding our inability to verify all aspects of Melbourne Water’s forecasts, we consider that Melbourne Water’s original forecasts were incorrect, and that its revised forecasts should be used. It is clear that the original forecast maintenance expenditure is declining in real terms. Furthermore, Melbourne Water’s upward adjustment to maintenance expenditure was made in the context of an overall downward adjustment to expenditure relating to its ETP upgrade as a whole. As such, we recommend the following changes to the ESC’s Draft Decision:

Table 8 Recommended adjustment to the ESC’s Draft Decision (\$m)

Description	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
Recommended adjustment vs. ESC’s Draft Decision	0.00	+0.19	+0.37	+0.55	+0.62	+1.72

City West Water

Carbon tax scope 3 expenditure forecasts

In our final findings, we recommended an expenditure allowance above the base year for Melbourne Water’s carbon tax scope 3 emissions expenditure. The ESC based its Draft Decision on this advice. In its response to the ESC’s Draft Decision, City West Water has made a forecast for the expenditure it will occur for its scope 3 emissions.

In principle, there is no reason why scope 3 emissions expenditure was not also allowed for City West Water.

We have therefore assessed City West Water’s scope 3 emissions expenditure proposals, and make the following observations:

- As stated in our final findings (pages 72 to 73), we consider that it is appropriate to escalate *capital* expenditure input costs in line with CPI because:
 - commodity prices rose through to the peak of the minerals boom, but price rises have more recently been closer to CPI due to the slowing economy and the lower costs of construction
 - there is recent regulatory precedent for allowing CPI input price rises in price setting decisions. The AER recently approved SP AusNet’s proposed materials cost escalators of CPI.¹¹

As such, we do not recommend an increase to City West Water’s *capital* expenditure allowance for scope 3 carbon emissions. This is in keeping with our final findings recommendations for Melbourne Water, whereby we only recommended input price rises with regard to *operating* expenditure for carbon tax scope 3 emissions.

- City West Water has assumed that 75% of the operating expenditure scope 3 emissions costs will be passed to them along the supply chain, in addition to an assumed reduction in emissions intensity over the period, to 80% of 2011/12 levels by 2017/18.
- We recommend that the forecast carbon price used should be in accordance with the Commonwealth Treasury’s latest forecasts, as detailed in our discussion of Melbourne Water’s scope 1 emissions expenditure, above.

¹¹ AER, *Access arrangement final decision, SPI Networks (Gas) Pty Ltd 2013–17, Part 3: Appendices*, March 2013, p5

- We note that it is unclear from the material provided by City West Water how its forecasts have been derived, and that we have not verified whether the Sydney model used was either correctly utilised or the results correctly interpreted by City West Water.
- As discussed with regard to Melbourne Water’s scope 3 expenditure allowance, there is likely to be a degree of double-counting of scope 3 expenditure through the actual increase in CPI passed through to City West Water, although the extent of this is extremely difficult to quantify.

Despite these reservations, given the relatively modest operational expenditure allowance increase implied by including an allowance for operating scope 3 carbon emissions, we recommend an additional allowance be allowed to City West Water’s operating expenditure allowance, in accordance with the following table:

Table 9 Recommended adjustment to the ESC’s Draft Decision (\$m)

Description	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
Recommended adjustment vs. ESC’s Draft Decision	+0.13	+0.14	+0.06	+0.10	+0.13	+0.55

We note that the resultant allowance for scope 3 carbon expenditure is just 0.1% of the total recommended controllable operating expenditure (excluding bulk and regulatory charges) as allowed in the ESC’s Draft Decision, and that regardless of whether or not the ESC includes an expenditure allowance for scope 3 emissions, the impact on prices is likely to be extremely modest.

Assessment of land tax in base year

In accordance with the operating expenditure assessment methodology, we removed material non-recurrent expenditure from the 2011/12 actual expenditure incurred by the businesses in order to form a base year expenditure, from which we extrapolated a business as usual expenditure forecast.¹²

In its response to the ESC’s Draft Decision, City West Water has highlighted a non-recurring *negative* operating expenditure relating to land tax in 2011/12. This item was the result of the reversal of an incorrect land tax assessment in the previous year (2010/11).¹³

In accordance with our methodology, we consider that this item is one-off and sufficiently material to justify its exclusion, and recommend an increase in the base year compared to the Draft Decision of \$0.24m.

We note that the impact of this increase is slightly greater than \$0.24m per year for the upcoming regulatory period, due to the impact of adjusting the (altered) base

¹² Review of Metropolitan Melbourne’s water companies’ proposed expenditure: final findings, PwC, April 2013, section 3.2.1.

¹³ We note that we have not independently verified that the negative line item in City West Water’s 2011/12 accounts is related to the reversal of land taxation in 2010-11.

year by customer growth less the productivity factor through the regulatory period (stage 2 of our operating expenditure methodology). Assuming a customer growth rate of 2.8% (as per the Draft Decision), the customer and productivity adjusted baseline is as follows:

Table 10: Recommended adjustment to the ESC’s Draft Decision (\$m)

Description	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
ESC baseline draft decision	90.13		93.40	95.09	96.80	98.54	100.31	484.14
PwC baseline revised recommendation	90.37		93.65	95.34	97.05	98.80	100.58	485.43
PwC recommended alteration to Draft Decision	+0.24		+0.25	+0.25	+0.25	+0.26	+0.27	+1.29

City West Water has argued that the revised total adjustment (once the above adjustment is made) to the 2011/12 actual operating expenditure to create the base year expenditure is immaterial, and that it should therefore be removed. We do not agree with this position. The revised base year of \$90.37m is significantly less than the 2011/12 actual expenditure of \$90.69m.

South East Water

Non-carbon tax energy expenditure forecasts

In our final findings we presented the ESC with two options with regard to energy input price rises.

Option 1 was to exclude expenditure related to the (non-carbon tax related) increase to energy prices in addition to the base line. This was based on the principle that no input price changes should be allowed to the base line on the basis that real increases in prices in one input might be accommodated by real falls in prices for other inputs. This option was in strict accordance with the ESC’s operating expenditure forecasting methodology.

Option 2 was to allow an increase to the base line for (non-carbon tax related) energy prices, on the basis that the increase in energy prices is sufficiently material that it might be considered unlikely that the fall in prices of other inputs would accommodate the rise in energy prices. The increase for non-carbon tax related increases to the base line that we recommended was in line with the medium scenario of the WSAA study.¹⁴

The ESC implemented option 1 in its Draft Decision.

In its reply to the ESC, South East Water subsequently has argued that:

- the ESC should have opted for our option 2 (presumably on the basis that the principle for implementing option 1 is unfounded)

¹⁴ Water Services Association of Australia and Sinclair Knight Merz – McLennan Magasanik Associates, *Energy Price Forecasts 2013 to 2032: Final draft 1.0*, 13 November 2012.

- option 2 represents the actual expenditure observed for South East Water's year to date. We note that this is strictly irrelevant in deciding, *in principle*, between options 1 and 2, but does give some limited evidence that the WSAA forecast used in option 2 is reasonable, over the very short proportion of the WSAA forecast period that has now occurred.
- allowance for electricity cost increases other than carbon was also included in Deloitte's recommendations for the regional businesses, which were accepted by the ESC in its Draft Decision for regional businesses.

Our position with regard to this matter remains unaltered from our final findings. We continue to recommend to the ESC two options within our final findings, the choice between them based on the principle as to whether the ESC diverges from its methodology for individual input prices.

We note that in the case of the regional water businesses, a Procurement Australia quote for energy which Deloitte used as a basis of its energy forecast was lower than that forecast by WSAA.¹⁵ That is, the actual (or likely) price based on signed contracts or contract negotiations is lower for the regional water companies than the WSAA forecasts. In light of this new information not available to us at the time of the final findings, we are concerned that were option 2 to be implemented by the ESC, the actual allowance implied by the WSAA forecasts is too high, notwithstanding the evidence that, to date, the WSAA forecasts are reasonably representative of South East Water's actual expenditure.

However, we have received no information from South East Water to demonstrate that its actual (or likely) future price, based on signed contracts or contract negotiations, is likely to be in line with the WSAA forecast, owing to the tight timeframes between an additional request made to South East Water for the information and the creation of this report. Nor have we been provided with information in order to create a suitable alternative to the WSAA forecast, were option 2 to be implemented, again owing to the tight timeframes between our request being made to South East Water and the creation of this report. As a result, were the ESC to opt for option 2, we are unable to provide a suitable forecast for energy prices, nor a forecast that is consistent with Deloitte's methodology.

We also note that the ESC implemented option 1 at the Draft Decision stage, and that South East Water has not provided any additional *evidence* in support of option 2. It has instead appealed to the fact that the ESC has allowed an increase in expenditure to the base line relating to energy costs for the regional businesses.

Carbon tax scope 3 expenditure forecasts

In our final findings, we allowed an expenditure allowance above the base year for Melbourne Water's carbon tax scope 3 emissions expenditure. The ESC based its Draft Decision on this advice. As with City West Water, in its response to the ESC's Draft Decision, South East Water has made a forecast for the expenditure it considers it will occur relating to its scope 3 emissions.

In principle, there is no reason why scope 3 emissions expenditure was not also allowed for South East Water.

We have therefore assessed South East Water's scope 3 emissions expenditure proposals, and make the following observations:

¹⁵ Deloitte Touche Tohmatsu, *Expenditure Review – Water Plan 3. Final overview document*, 18 February 2013

- South East Water has stated that it has only sought scope 3 emissions expenditure for operating expenditure, a fact we have not independently verified. An application of only operating expenditure related scope 3 emissions is in keeping with our final findings, as discussed with regard to Melbourne Water’s scope 3 emissions expenditure, above.
- South East Water has assumed that 62% of the operating expenditure scope 3 emissions costs will be passed to them along the supply chain. South East Water has assumed that scope 3 emissions will remain constant throughout the regulatory period.
- We recommend that the forecast carbon price used should be in accordance with the Commonwealth Treasury’s latest forecasts, as detailed in our discussion of Melbourne Water’s scope 1 emissions expenditure, above.
- We note that it is unclear from the material provided by South East Water how its forecasts have been derived, and that we have not verified whether the Sydney model used was either correctly utilised or the results correctly interpreted by South East Water.
- As discussed with regard to Melbourne Water’s scope 3 expenditure allowance, there is likely to be a degree of double-counting of scope 3 expenditure through the actual increase in CPI passed through to South East Water, although the extent of this is extremely difficult to quantify.

Despite these reservations, given the relatively modest operational expenditure allowance increase implied by including an allowance for operating scope 3 carbon emissions, we recommend an additional allowance be allowed to South East Water’s operating expenditure allowance, in accordance with the following table:

Table 11 Recommended adjustment to the ESC’s Draft Decision (\$m)

Description	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
Recommended adjustment vs. ESC’s Draft Decision	+0.44	+0.45	+0.21	+0.31	+0.41	+1.84

We note that the resultant allowance for scope 3 carbon expenditure is just 0.3% of the total recommended controllable operating expenditure (excluding bulk and regulatory charges) as allowed in the ESC’s Draft Decision, and that regardless of whether or not the ESC includes an expenditure allowance for scope 3 emissions, the impact on prices is likely to be extremely modest.

Expenditure allowances related to the superannuation guarantee levy increase

In our final findings we recommended that no allowance should be made in addition to the base line for the increase in the superannuation guarantee levy. This was made on the basis that the legislated increase in the superannuation guarantee levy does not imply an increase in total remuneration (and hence the total expenditure by South East Water on this item).

We argued that the fact that many of the businesses have committed, through their EBA, to increase total remuneration as a result of this change is not relevant (within a strict interpretation of the ESC’s methodology) in determining whether the increase is an obligation and therefore should be added to the baseline to

determine the overall maximum operating expenditure allowance. Increasing total remuneration as a result of the increase in the superannuation guarantee levy is a *contractual* obligation and not a legislative or regulatory obligation.

As such, while we accept that South East Water is required to increase its expenditure as a result of its Employees' Collective Agreement (ECA) until it expires in October 2014, this increase should not be borne by water customers. This remains our recommendation.

Western Water

Proposed expenditure relating to SCADA and telemetry projects

In our final findings, we recommended that Western Water's proposed SCADA and telemetry upgrade expenditure be removed from the expenditure allowance, on the basis that:

- we did not believe that project need has been established based on the evidence provided
- the benefits from these projects appeared, at the time of the analysis, to be quite speculative.

Western Water has provided additional information with regard to these projects. However, Western Water has mischaracterised our reasons for the projects' exclusion from the expenditure allowance. It has stated that "*The draft paper [the ESC's Draft Decision, based on our recommendations] outlined that there was not enough justification for the costs.*"¹⁶ We did not take issue with the costs proposed, but instead the justification for the *projects* (i.e. whether the benefits of the projects had been established).

Furthermore, Western Water has stated that "*it has been assumed that PwC and the ESC understands and accepts the criticality of SCADA systems within water utilities.*"¹⁷ While we do not deny that there may be benefits from SCADA systems, we do not accept that *any* SCADA project is, by its functional character, critical (indeed, this was our original reservation with the projects, namely that the need for the projects has not been established, and that benefits appear speculative, as opposed to be of critical importance). Western Water has not provided substantial additional evidence to demonstrate the need for the projects. As a result, the recommendation found in our final findings remains unchanged – namely that expenditure relating to these projects should not be included in the expenditure allowance.

Proposed expenditure relating to additional water storage in Sunbury (Bald Hill tank project)

As part of our discussions with Western Water, the business accepted (at our final findings stage) our recommendation that the investment at the *Sunbury*

¹⁶ Western Water, *Response to 2013-2018 Water Price Review Draft Decision, Attachment 2*, p2.

¹⁷ Western Water, *Response to 2013-2018 Water Price Review Draft Decision, Attachment 2*, p3.

Additional Water Storage - Bald Hill Tank be delayed for one year to allow for Western Water to develop options analysis.¹⁸

Western Water has now provided the options analysis. We have a number of reservations regarding the option analysis that has now been provided:

- Western Water appears not to have undertaken a net present value (NPV) analysis of the various options considered, which is our preference for options analysis (noting that NPV analysis is not always suitable or sufficient within an option analysis).
- Instead, Western Water has undertaken a multi-criteria analysis which rates the options along a number of criteria:
 - capital costs
 - operating and maintenance costs
 - operability
 - security of supply
 - environmental and community costs
 - flexibility with future strategy.

Each option is assigned a score of -4 to +4, with 0 being equal to the base case, positive numbers being better than the base case and negative numbers being worse than the base case. The criteria are equally weighted. Unlike an NPV analysis, such an approach does not allow for a direct comparison financial impacts of the project. Furthermore, it introduces factors into the decision making process which are not strictly regulatory obligations.

While we have reservations about the option selection process, we note that:

- of the other options considered, all except the no-investment option had very similar capital expenditure (\$4.5m and \$5.0m, compared to Western Water's preferred option of \$4.8m). The no-investment option was assessed by Western Water not to meet its regulatory obligations.
- the timing of the investment has been justified.

Given the above, we consider that the expenditure should be allowed as originally proposed by Western Water, but, given our reservations as to the options analysis, advise that:

- Western Water undertakes more detailed analysis (including NPV analysis of each option's expected lifecycle costs) prior to this investment, to ensure that expenditure is efficiently incurred
- in accordance with our final findings, the ESC considers, at the start of Water Plan 4, whether expenditure on this project was efficiently incurred,

¹⁸ Western Water stated that it "does not object to the deferral of this project as recommended in the PwC draft findings", Western Water, *Response to Water Plan 2013-2018 Draft Finding Sections 6.1-6.3*, p8.

and that it considers not including any inefficiently incurred expenditure in the regulatory asset base at the start of Water Plan 4.

The impact of our revised recommendation on the expenditure allowance is given below:

Table 12: Recommended adjustment to the ESC’s Draft Decision (\$m)

Description	2013/14	2014/15	2015/16	2016/17	2017/18	Water Plan 3 Total
Recommended adjustment vs. ESC’s Draft Decision	+0.19	-0.19	0.00	+4.60	-4.60	0.00

