

ESSENTIAL SERVICES COMMISSION
Final Review of Desalination Return of Funds
by Water Businesses

Final Report

September 2013

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1.0 Overview

In accordance with the engagement letter dated 16 August 2013, BDO reviewed the return of unrequired desalination payments to water, sewage, trade waste and recycled water customers, by Melbourne Water retailers, on behalf of the Essential Services Commission (“ESC”).

This document outlines the key activities undertaken during BDO’s engagement and observations therefrom.

2.0 Background

In 2007, the Victorian Government released the “Our Water Our Future: The Next Stage of the Government’s Water Plan”, which included the building of the Victorian Desalination Plant (“Plant”). The plant was introduced as a response to counteract the effects of a rising population, threats in climate change and severe water restrictions.

In 2009, the Victorian Government (through a Public Private Partnership, managed by the Department of Environment and Primary Industries (“DEPI”)) contracted the AquaSure consortium (which included Degrémont, Macquarie Capital and Thies) to construct (including financing, designing and building) the Plant (“Project”) and operate and maintain the plant for a period of 30 years (including construction period). The Plant was commissioned in December 2012.

How the Desalination Plant was reflected in Customer Prices

In 2009, ESC authorised the maximum prices the water businesses could charge for the period to June 2013. These prices included a component for the desalination plant.

At the time, it was expected that the desalination plant would commence operation in December 2011. The ESC authorised the water businesses to collect approximately \$230 million in 2011-12 and \$460 million in 2012-13 to cover forecast costs associated with the desalination plant.

Because the desalination plant ran behind schedule, the amount required was substantially less than allowed for in prices resulting Melbourne Water, City West Water, South East Water, Yarra Valley Water and Western Water (“Retailers”), in 2011-12, collecting more payments than required from customers to cover costs relating to the desalination plant.

The implementation of a price freeze from 1 July 2012 started to return unrequired payments to customers. From early 2013, water businesses began rebating customer bills to speed the return of funds to customers (both individual customers and large water users). Payments to customers also took the form of special payments to customers who have moved out of the affected districts and deceased estates.

3.0 Scope

BDO’s review, as per engagement letter dated 16 August 2013 was to:

A. Confirm the total amount (unrequired desalination payments) that should have been returned to customers.

BDO would confirm the amount to be returned by customers by reviewing Melbourne Water’s (“MW”) estimate of the total over-recovered amount. Given 2012-13 prices, the estimate of the amount to return to customers was dependent on (i) 2012-13 demand estimates, (ii) desalination costs up to June 2013, and (iii) the interest to be paid by water businesses to customers. BDO was to verify items (i) and (ii) with Melbourne Water (with the assistance of the Commission). Note that the cost of the Desalination plant were to be audited by reference to DEPI’s invoices to MW only. Item (iii) is estimated by the Commission and did not require verification.

B. Confirm that the amount that should have been returned to customers had been returned to customers.

BDO would confirm that water retailers including City West Water, South East Water, Yarra Valley Water and Western Water (“Retailers”) have, individually and in aggregate, returned the amount confirmed in the above to customers. BDO would verify, with each business, their estimate of the amount returned to customers, and confirm that the estimate had been calculated in a robust way (which will require a review of the process used to estimate the amount returned to customers). No validation of the P naught figures (a downward adjustment made to prices that otherwise would have applied from 1 July 2013) was required. ESC calculated this amount in its recent price 2013 price review decision (\$7.76 million as at 9 September 2013).

C. Quantify any amount yet to be returned and assess the robustness of how the remainder will be returned and BDO would provide a clear statement on whether it is confident that, the retailer has appropriate documented strategies, plans and processes to ensure funds will be returned (based on the information at hand).

4.0 Approach

The following procedures were performed:

- Assessed the calculation of total unrequired desalination payments by:
 - Reviewing the process used to calculate the revenue associated with the desalination. BDO confirmed the demand used by MW to calculate the revenue associated with the desalination payments with each Retailer actual demand;
 - Reviewing invoices issued by DEPI to validate annual desalination payments for 2012-13;
 - Validating the appropriateness of the calculation of total returns through comparing estimated revenue associated with the desalination plant (without price freeze) against actual costs as per invoices issued by DEPI.
- Assessed the total amounts returned by the water retailers, through the 2012/13 price freeze, rebates and special circumstance payments. (It is important to note that this assessment allowed for a reasonable degree of error (materiality) that is commensurate with a review of this nature). BDO:
 - Reviewed the process utilised by the water retailers to return overpayments to customers through the 2012/13 price freeze, rebates and special circumstance payments;
 - Reperformed, based on a sample of Retailer customer statements, the calculation of prices freeze amounts, rebates and special circumstance payments;
 - Reviewed the total amounts returned by the Retailers against the amounts recorded within their financial records, for the different methods of returns (including rebates and special circumstance payments);
 - Assessed the total amounts returned, by the price freeze, through comparing the total consumption (volumes) at the ESC Tariff Rates to that calculated by Retailers as having been returned.
- Enquired whether the Retailers have appropriate documented strategies, plans and processes to ensure the return of outstanding funds. This was validated by confirming the reasonableness of processes to be undertaken in returning payments to customers through holding enquires with retail water management as to what methodologies and processes are being implemented to return outstanding amounts.

The work completed by BDO is subject to the limitations set out at Appendix 3.

5.0 Matters for Noting

Note 1: Significant amount of revenue associated with desalination returned

BDO's review noted that approximately 97.5% (\$295,141,569) of the unrequired desalination payments had been returned by the Retailers as at 9 September 2013.

Note 2: Different assumptions regarding annual desalination payments for 2012-13

An over accrual of project expenses occurred in 2012-13. This resulted in the estimated cost of the plant being overstated by \$3,070,861 compared to the amounts invoiced by DEPI. This has been adjusted within the Costs associated with Desalination detailed within this report.

Note 3: Methodology to ensure any remaining funds are returned by retailers has not been formalised

All retailers' have verbally confirmed that they are working with ESC to determine an appropriate method to return any outstanding funds to customers. No additional work or testing was performed by BDO.

Note 4: Incorrect calculation of Special Circumstance Payments

BDO noted instances at Yarra Valley Water, City West Water and Western Water where special circumstance returns were not calculated correctly, resulting in either an overpayment or underpayment to customers. The following errors were identified:

- Invoice data entry errors in the 'Return on Customer Desalination Payment Spreadsheet'; and
- The Return on Customer Desalination Payment Spreadsheet' does not account for pension discounts received. This results in over-returns for pensioners who have applied for the special consideration payout.

BDO notes the over/under special circumstance payments were of an immaterial value.

6.0 Results

The status of repayments is detailed and the amounts still requiring to be remitted.

Status of Overall Repayments to Customers

(as at 9 September 2013)

	Total Amount (\$) ⁺
Revenue associated with Desalination (without price freeze and with actual demands) (for 2011-12 and 2012-13)	686,923,609
Costs associated with the desalination (2012-13)	408,154,667
Total amount to be returned (pre interest)	278,768,942
Plus interest (at 31 August 2013)	23,712,519
Total amount to be returned across retailers	302,481,461
Total Amounts returned across all Retailers	295,141,569
Outstanding Amounts still to be returned	7,339,892

⁺ Nominal Terms

7.0 Conclusion

Based on our work performed, as specified in our engagement letter dated 16 August 2013, and except for matters noted at Section 5 of this report, we conclude that nothing has come to our attention that causes us to believe that at the 9 September 2013 the:

- Total amount of unrequired desalination payments, excluding interest, to be returned to customers, of \$278,768,942⁺ (nominal) is materially misstated.
- Total amount returned to customers of \$295,141,569 is materially misstated.

⁺ As detailed in the table above the total amount to be returned, including interest is \$302,481,461. No review procedures were performed to assess the appropriateness of the interest calculation.

8.0 Acknowledgement

We would like to take this opportunity to thank ESC, MW, DEPI and the water retailers management and staff for their co-operation and assistance during the course of our work.

Appendix 1: BDO Procedures / Assumptions

A. Confirm the total amount that should have been returned to customers

Unrequired Desalination Payment

With the delay in the commissioning of the plant, it was established that consumers had contributed an amount in excess of that required to cover the desalination payments (Table 1). In June 2012, the Victorian Government and water business announced a price freeze and promised to return to customers any additional unrequired desalination payments.

Table 1: Unrequired Desalination Payment

Elements of the total early recovery	Amount (\$)⁺
Revenue associated with Desalination (without price freeze and with actual demands) (2011-12 and 2012-13)	686,923,609
Less costs associated with Desalination (2012-13)	408,154,667
Total Amount to be returned	278,768,942
Plus interest	23,712,519
Overall amount to be returned	302,481,461

⁺Nominal Terms

Revenue associated with Desalination (without price freeze and with actual demands)

BDO reviewed the appropriateness of the methodology to calculate the revenue associated with desalination (\$686,923,609), including the actual demands and actual prices applied. BDO agreed actual demand from retailers to that used to calculate the revenue associated with desalination. BDO also compared prices utilised to that detailed within the ESC Tariff schedule.

Costs associated with Desalination

BDO determined the annual desalination payment for 2012-13 through a review of all invoices issued by DEPI for the cost associated with the Desalination to arrive at the invoiced cost of the Plant. A difference of \$3,070,861 (Nominal terms) existed between amounts invoiced by DEPI and that identified by MW as a Plant cost. The difference relates to an accrual, raised by MW, for costs MW expected to be incurred on the desalination plant. DEPI have indicated that for the 2012/13 year no further costs are chargeable to MW regarding the Plant. Based on this representation, and in agreement with MW, the costs associated with Desalination has been adjusted to \$408,154,667. This has resulted in the amount to be returned increasing to \$302,481,461.

B. Confirm that the amount that should have been returned to customers has been returned to customers

The total over contribution of funds was to be returned through each Retailer to their customers. To this end the total amount to be returned was allocated between each Retailer based on various factors including water demand and the values of MW's sunk assets at different points in the system.

Methods utilised by Retailers to return funds to customers.

The methods⁺ used to return the total funds to consumers included:

- *Price freeze on tariffs for 2012/13 financial year, which resulted in tariffs remaining at the 2011/12 financial year rate.*
BDO reviewed:
 - Sample of each Retailer's customer statements to ensure that prices charged agreed to ESC Tariff schedules, for each retailer, and that the price freeze amounts were correctly calculated based on the consumption on the customers statement;
 - Overall volume figures, provided by each Retailer, and compared these to the volumes reviewed during ESC performance audit of volumes; and
 - Overall return figures, for each Retailer, through application of volumes to ESC Tariff Schedules (prices pre and post price freeze).
- *Rebates being applied to cycle three invoices for quarterly billed customers and in August /September 2013 for monthly billed customers;*
BDO:
 - Reviewed a sample of each Retailers customer statements to ensure that rebates applied, to customer statements, were calculated in a reasonable manner and applied consistently
 - Agreed overall rebate amounts to Retailer financial and operational records
- *Special circumstances payments for customers who have moved out of the metro area, who are no longer financially responsible and deceased estates.*
BDO:
 - Reviewed and reperformed a sample of each Retailers special payment calculations
 - Agreed overall special payment amounts to Retailer financial and operational records

⁺ *Detailed Retailer specific approach to return overpayments is detailed in Appendix 2.*

Amounts Returned to Customers

The following tables detail repayments for each Retailer affected by the Project. Information in these tables was provided by MW and Retailers. Note that amounts to be returned calculated below are materially in line with MWs calculation of amounts, as adjusted by accrual amount, to be returned per Retailer.

Summary of Overall Returns by Retailers⁺ (as at 9 September 2013)

Retailer	Summary of Amounts Returned (\$)
Yarra Valley Water	110,458,567
South East Water	104,910,262
Western Water	7,931,534
City West Water	71,841,206
Total outstanding amounts returned	295,141,569

*Overall Returns by Retailers consists of amounts returned through price freeze, Rebates, Targeted Reconciliations, Special Circumstance payments and entire P naught amounts (as adjusted by CPI (2013/14)).

Appendix 2: Specific Retailer Methodology to Return Overpayments

Yarra Valley Water (“YVW”)

Scope	Findings
<p>Background</p>	<p>YVW utilises the ‘Customer Care and Billing System’ as its customer billing system. YVW customers are billed on a quarterly basis (with the exception of large water users which are billed monthly).</p> <p>The following service prices were affected by the Project:</p> <ul style="list-style-type: none"> • Water related usage and services; • Sewerage related services; • Trade waste water services; and • Recycled water services.
<p>Confirmed amounts returned via the 2012/13 FY price freeze.</p>	<p>As a result of the customer overpayment, a price freeze was implemented in FY 2012/13 to freeze tariffs for the services noted above at the FY 2011/12 rates.</p> <p>BDO confirmed the appropriateness of the price freeze process via:</p> <ul style="list-style-type: none"> • Selecting a sample of twenty customer invoices and re-performing the amounts to be returned as a result of the price freeze. This was performed by comparing the 2012/13 prices without the price freeze to the prices with the price freeze to obtain the saving benefit; • Performing a review of the appropriateness of the price freeze methodology in 2012 ‘<i>Review Desalination Implementation by Water Business</i>’ (September 2012); • Comparing overall volume figures, provided by YVW, to those validated during ESC performance audit of volumes; • Reviewing overall return figures, for YVW, through application of volumes to ESC Tariff Schedules (prices pre and post price freeze); <p>No material exceptions were identified</p>
<p>Validated the appropriateness of the methodology applied to return overpayments via rebates.</p> <p>Confirmed amounts returned via rebates.</p>	<p>The methodology applied by YVW to return overpayments via rebates, in quarter three and quarter four, included :</p> <ul style="list-style-type: none"> • Establishing historical usage and revenue trends through determining the amount of revenue earned and usage volumes for the period 1 July 2011 - 31 December 2012. Revenue was analysed in terms of revenue earned from water, sewer and recycled water and that earned from trade waste services; • Determining the portion of revenue as a percentage of total revenue for revenue earned from water, sewer and recycled water and revenue earned from trade waste services and compared this to the total amounts to be returned (which was approximately \$108million as at 7 February 2013); • Determining the amounts already returned via the price freeze and special circumstances and deducted this amount from the amount to be returned to obtain net additional return dollars (which was the amount

Scope	Findings														
	<p>to be returned via rebates); and</p> <ul style="list-style-type: none"> Determined the percentage to be applied as the rebate via determining the net additional return dollars as a portion of total revenue for water, sewer and recycled water and trade waste services. <p>The annual rebate percentages applied to each services calculated by applying the above methodology are presented below:</p> <table border="1"> <thead> <tr> <th>Service</th> <th>Annual Rebate Percentage</th> </tr> </thead> <tbody> <tr> <td>Trade Waste</td> <td>2.60%</td> </tr> <tr> <td>Water, Sewer and Recycled Water</td> <td>5.10%</td> </tr> </tbody> </table> <p>BDO reviewed YVW’s ‘Calculation of rebate percentage’ spreadsheet (which presents how YVW has derived at the annual rebate rates applied), to validate the following:</p> <ul style="list-style-type: none"> Confirmed that the total amount used in the spreadsheet as a target to be returned to customers via the rebate process was consistent with MW data; and Confirmed that customer consumption (usage / volumes /service charges) over the desalination affected period were taken into consideration to arrive at the annualised rebate rate. <p>No exceptions were noted.</p> <p>The above methodology was applied to individual customer bills by using the below formula:</p> <p>For Variable Usage Services</p> $\left(\frac{Usage}{Days}\right) \times 365 \times annual\ rebate\ rate\% = return$ <p>Where:</p> <table border="1"> <tbody> <tr> <td>Usage :</td> <td>Total volume in dollars, used 1 July 2011 - 31 December 2012.</td> </tr> <tr> <td>Days:</td> <td>The number of days affected by the Plant.</td> </tr> <tr> <td>Annual Rebate rate:</td> <td>Trade waste (2.60%); or Water, sewer and recycled water (5.10%).</td> </tr> </tbody> </table> <p>For Fixed Services</p> $annual\ service\ charge \times annual\ rebate\ rate = return$ <p>Where:</p> <table border="1"> <tbody> <tr> <td>Annual Rebate rate:</td> <td>Trade waste (2.60%); or Water, sewer and recycled water (5.10%).</td> </tr> </tbody> </table> <p>Quarterly billed customers received rebates in both quarter three and quarter four 2012/13 FY invoices. Monthly billed customers (large water users) received the rebates in their August 2013 invoices.</p> <p>The above methodology was embedded into the ‘Customer Care and Billing System’ as an automated calculation.</p> <p>Customer invoices present the aggregate rebate as an ‘Additional Desalination Rebate’.</p>	Service	Annual Rebate Percentage	Trade Waste	2.60%	Water, Sewer and Recycled Water	5.10%	Usage :	Total volume in dollars, used 1 July 2011 - 31 December 2012.	Days:	The number of days affected by the Plant.	Annual Rebate rate:	Trade waste (2.60%); or Water, sewer and recycled water (5.10%).	Annual Rebate rate:	Trade waste (2.60%); or Water, sewer and recycled water (5.10%).
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Scope	Findings
	<p>BDO validated the application of the above methodology by:</p> <ul style="list-style-type: none"> • Sample testing twenty invoices for quarter three FY 2012/13 to confirm returns from price freeze were applied correctly (in line with YVW methodology); • Confirmed the amounts returned by YVW (as at the time of our review) via the rebate process in line with MW data targets. Please refer to <i>Appendix 1</i> for detailed rebate return amounts; and • Confirming the amounts returned by CWW via the price freeze process compared to MW data targeted amounts. <p>No material exceptions were identified.</p>
<p>Validated the appropriateness of the methodology applied to return desalination overpayments as special circumstance payments.</p>	<p>Applications for special circumstance payments were able to be made online via YVW website or via email. Eligible customers were required to meet the following categories:</p> <ul style="list-style-type: none"> • Customers that paid water bills after 1 July 2011 but have since moved out of Melbourne or Western Water’s area and are no longer billed by either City West Water, South East Water, Western Water, or Yarra Valley Water; • Customers that paid water bills after 1 July 2011 but whose circumstances have changed so that they no longer receive a bill (e.g. having sold an investment property); • Customers that paid water bills after 1 July 2011/12 but have since passed away (e.g. return via deceased estate) and the property ownership/tenancy has changed names; and • Customers whose water use decreased significantly between 2011/12 and 2012/13. <p>Special circumstance returns were calculated manually via a formula driven spreadsheet (‘Return on Customer Desalination Payment Spreadsheet’). Invoices paid by the customer from 1 July 2011 until June 2013 were manually input into the spreadsheet.</p> <p>Once the invoices are input into the spreadsheet, the return amount was automatically calculated by taking into account the interest rates, inflation rates, entitlements, price freeze entitlements and rebate entitlements.</p> <p>BDO validated the above methodology by:</p> <ul style="list-style-type: none"> • Re-performing spreadsheet calculations and comparing certain data within spreadsheets e.g. interest rates to supporting documentation; • Re-performing return calculations for five sampled special circumstance payments; and • Confirming the amounts returned by YVW (as at the time of our review) for special payments agreed with targets from MW data. <p>BDO noted instances where special payment returns were incorrectly calculated resulting in either an over-return or under-return amount to the customer. BDO notes these amounts were immaterial.</p>

South East Water (“SEW”)

Scope	Findings
<p>Background</p>	<p>SEW utilises ‘HiAffinity’ as its customer billing system. SEW customers are billed on a quarterly basis (with the exception of large water users which are billed monthly).</p> <p>The following service prices were affected by the Project</p> <ul style="list-style-type: none"> • Water related usage and services; • Sewerage related services; and • Trade waste water services; and Recycled water services.
<p>Confirmed amounts returned via the 2012/13 FY price freeze.</p>	<p>As a result of the customer overpayment, a price freeze was implemented in FY 2012/13 to freeze tariffs for the services noted above at the FY 2011/12 rates.</p> <p>BDO confirmed the appropriateness of the price freeze process via:</p> <ul style="list-style-type: none"> • Selecting a sample of twenty customer invoices and re-performing the amounts to be returned as a result of the price freeze. This was performed by comparing the 2012/13 prices without the price freeze to the prices with the price freeze to obtain the saving benefit; • Performing a review of the appropriateness of the price freeze methodology in 2012 ‘<i>Review Desalination Implementation by Water Business</i>’ (September 2012); • Comparing overall volume figures, provided by SEW, to those validated during ESC performance audit of volumes; • Reviewing overall return figures, for SEW, through application of volumes to ESC Tariff Schedules (prices pre and post price freeze). <p>No material exceptions were identified.</p>
<p>Validated the appropriateness of the methodology applied to return overpayments via rebates.</p> <p>Confirmed amounts returned via rebates.</p>	<p>The methodology applied by SEW to return overpayments via quarter three and quarter four rebates included the following:</p> <ul style="list-style-type: none"> • Determined the amounts of revenue earned and usage volumes for the period 1 July 2011 - 31 December 2012 for each customer to obtain historical data on usage trends; and • Based on the historical usage and revenue trends, different rebate rates were applied for each customer to arrive at the rebate rate which would closely arrive at the nearest total return amount to the targeted amount (which was approximately \$44million). <p>Based on this methodology a quarterly rebate rate of 27.56% was applied to quarter three bills and quarter four bills (for large water users).</p> <p>BDO validated the appropriateness of the above percentages applied as the rebate via obtaining all customer usage and days and applying the percentage to obtain a rebate return on quarter three invoices per customer (based on the formulas represented below for variable and fixed services). Subsequently, BDO calculated the total amounts to be returned to validate the total amount is consistent with the targeted amount to be returned (which was approximately</p>

Scope	Findings										
	<p>\$44million). No material exceptions were identified.</p> <p>The above methodology was applied to individual customer bills by using the below formula:</p> <p>For Variable Usage Services</p> $\left(\frac{Usage}{Days}\right) \times 91 \times \text{quarterly rebate rate}\% = \text{return}$ <p>Where:</p> <table border="1"> <tr> <td>Usage :</td> <td>Total volume in dollars used 1 July 2011 - 31 December 2013.</td> </tr> <tr> <td>Days:</td> <td>The number of days affected by the Project.</td> </tr> <tr> <td>91:</td> <td>Days in quarter three 2012/13 FY</td> </tr> <tr> <td>Quarterly Rebate rate:</td> <td>27.56%</td> </tr> </table> <p>For Fixed Services</p> $\text{quarterly service charge} \times \text{quarterly rebate rate} = \text{return}$ <p>Where:</p> <table border="1"> <tr> <td>Quarterly Rebate rate:</td> <td>27.56%</td> </tr> </table> <p>Individual customers received their rebates in both quarter three and quarter four 2012/13 FY invoices. Large water users received the rebates in their August 2013 invoices.</p> <p>The above methodology was embedded into ‘HiAffinity’ as an automated calculation. Customer invoices present the aggregate rebate as an ‘Additional Desalination Rebate’.</p> <p>BDO validated the above methodology by:</p> <ul style="list-style-type: none"> • Sample testing twenty invoices to confirm that rebates have been returned as per the correct rebate rates and in line with the methodology; and • Confirming the amounts returned by SEW via the rebate process in line with MW data targets. <p>No material exceptions were identified.</p>	Usage :	Total volume in dollars used 1 July 2011 - 31 December 2013.	Days:	The number of days affected by the Project.	91:	Days in quarter three 2012/13 FY	Quarterly Rebate rate:	27.56%	Quarterly Rebate rate:	27.56%
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<p>Validated the appropriateness of the methodology applied to return desalination overpayments as special circumstance payments.</p>	<p>Applications for special circumstance payments were able to be made via completing an application form. Eligible customers were required to meet the following categories:</p> <ul style="list-style-type: none"> • Customers that paid water bills after 1 July 2011 but have since moved out of Melbourne or Western Water’s area and are no longer billed by either City West Water, South East Water, Western Water, or Yarra Valley Water; • Customers that paid water bills after 1 July 2011 but whose circumstances have changed so that they no longer receive a bill (e.g. having sold an investment property); • Customers that paid water bills after 1 July 2011/12 but have since passed away (e.g. return via deceased estate) and the property ownership/tenancy has changed names; and 										

Scope	Findings
	<ul style="list-style-type: none"> Customers whose water use decreased significantly between 2011/12 and 2012/13. <p>Special circumstance returns are calculated automatically by the 'HiAffinity' billing system taking into account interest rates, inflation rates, entitlements, price freeze entitlements and rebate entitlements.</p> <p>BDO validated the application of the above methodology by:</p> <ul style="list-style-type: none"> Re-performing spreadsheets calculations and comparing certain data within spreadsheets e.g. interest rates to supporting documentation; and Re-performing return calculations for five sampled special circumstance payments; and by confirming the amounts returned by SEW (as at the time of our review) for special payments are in line with targets from MW data. <p>No material exceptions were identified.</p>

Western Water (“WW”)

Scope	Findings
<p>Background</p>	<p>WW utilises the ‘AquaRate Thinking Windows’ system as its customer billing facility.</p> <p>WW customers are billed every trimester, including:</p> <ul style="list-style-type: none"> • 1 July - 31 October; • 1 November - 28 February; and • 1 March - 30 June. <p>A contribution to the desalination project was incurred by customers via water usage services.</p> <p>Discussions with WW management revealed that although only water usage services was affected by the Project, the following services benefited from the 2012/13 price freeze and the rebates:</p> <ul style="list-style-type: none"> • Water related usage and services; • Sewerage related services; • Trade waste water services; and • Recycled water services. <p>Discussions with ESC indicated this allocation would not have a material effect.</p>
<p>Confirmed amounts returned via the 2012/13 FY price freeze.</p>	<p>As a result of overpayment, a price freeze was implemented in the 2012/13 FY to freeze tariffs for the above affected services at the 2011/12 FY rates.</p> <p>BDO confirmed the appropriateness of the price freeze process via:</p> <ul style="list-style-type: none"> • Selecting a sample of twenty customer invoices and re-performing the amounts to be returned as a result of the price freeze. This was performed by comparing the 2012/13 prices without the price freeze to the prices with the price freeze to obtain the saving benefit; • Performing a review of the appropriateness of the price freeze methodology in 2012 ‘<i>Review Desalination Implementation by Water Business</i>’ (September 2012); and • Confirmed the amounts returned by WW via the price freeze process compared to MW data targeted amounts. <p>In the third trimester FY 2012/13, WW accrued price freeze amounts to estimate amounts of usage to determine any shortfalls due to timing of readings, therefore paying customers an estimated portion for some of the invoiced period. At the first trimester FY 2013/14, any additional benefits will be paid to the customer.</p> <p>No material exceptions were identified.</p>
<p>Validated the appropriateness of the methodology applied to return overpayments via rebates.</p> <p>Confirmed amounts returned via rebates.</p>	<p>The methodology applied by WW to return overpayments via trimester three FY 2012/13 and trimester one 2013/14 FY rebates included the following:</p> <ul style="list-style-type: none"> • Determined the entitlements for each service (broken down to water products, sewer, recycled water and trade water general); • Deducting the entitlement amounts per service with the price freeze benefit received and any special consideration payouts

Scope	Findings																
	<p>for each service. This resulted in a balance to be paid in the form of the rebate;</p> <ul style="list-style-type: none"> • Determined the amounts of revenue earned within the 2012/13 FY for each of the services (broken down to water products, sewer, recycled water and trade water general); and • Applied a rebate to be returned as a portion of revenue for each service as follows: $\left(\frac{\text{rebate to be returned per service}}{\text{annual revenue per service}} \right) = \text{annual rebate rate \%}$ <p>Based on the above methodology the following annual rebate has been formulated for each service:</p> <table border="1"> <thead> <tr> <th></th> <th>Annual Rebate Rate %</th> </tr> </thead> <tbody> <tr> <td>Water</td> <td>4.2%</td> </tr> <tr> <td>Recycled Water</td> <td>6.6%</td> </tr> <tr> <td>Sewerage</td> <td>9.1%</td> </tr> <tr> <td>Major Trade Waste</td> <td>4.6%</td> </tr> </tbody> </table> <p>BDO reviewed WW’s ‘Desal Bulk return’ spreadsheet (which presents how WW has derived at the annual rebate rates applied), to validate the following:</p> <ul style="list-style-type: none"> • Confirmed that the total amount used in the spreadsheet as a target to be returned to customers via the rebate process was consistent with MW data; and • Confirmed that customer consumption (usage / volumes /service charges) over the desalination affected period were taken into consideration to arrive at the annualised rebate rate. <p>No material exceptions were identified.</p> <p>The above methodology was applied to individual customer bills by using the below formula:</p> <p>For Variable Usage Services</p> $\text{Usage} \times \text{annual rebate rate\%} = \text{return}$ <p>Where:</p> <table border="1"> <tbody> <tr> <td>Usage :</td> <td>Total historical usage volumes in dollars for trimester one and two for FY 2012/13 plus accrual for trimester three FY 2012/13 (based on historical volumes for trimester three FY 2011/12 and estimated volume increases).</td> </tr> <tr> <td rowspan="3">Annual Rebate rate:</td> <td>Water 4.2%</td> </tr> <tr> <td>Recycled Water 6.6%</td> </tr> <tr> <td>Sewerage 9.1%</td> </tr> </tbody> </table>		Annual Rebate Rate %	Water	4.2%	Recycled Water	6.6%	Sewerage	9.1%	Major Trade Waste	4.6%	Usage :	Total historical usage volumes in dollars for trimester one and two for FY 2012/13 plus accrual for trimester three FY 2012/13 (based on historical volumes for trimester three FY 2011/12 and estimated volume increases).	Annual Rebate rate:	Water 4.2%	Recycled Water 6.6%	Sewerage 9.1%
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Scope	Findings												
	<table border="1"> <tr> <td></td> <td>Major Trade Water 4.6%</td> </tr> </table> <p>BDO noted the usage calculated by WW to arrive at annual volumes includes the following:</p> <ul style="list-style-type: none"> • Determining the total amount of usage per customer based on historical volumes for the first and second trimester of FY 2012/13; and • Applied an accrual to determine usage volumes for the third trimester of FY 2012/13 by using historical volumes for trimester three FY 2011/12 and estimated volume increases, to arrive at an annualised rate. <p>This method is inconsistent with the approach taken by the other water retailers, however, the difference of which would be immaterial.</p> <p>For Fixed Services</p> $\text{annual service charge} \times \text{annual rebate rate} = \text{return}$ <p>Where:</p> <table border="1"> <thead> <tr> <th></th> <th>Annual Rebate Rate %</th> </tr> </thead> <tbody> <tr> <td>Water</td> <td>4.2%</td> </tr> <tr> <td>Recycled Water</td> <td>6.6%</td> </tr> <tr> <td>Sewerage</td> <td>9.1%</td> </tr> <tr> <td>Major Trade Waste</td> <td>4.6%</td> </tr> </tbody> </table> <p>Individual customers received their rebates in trimester three FY 2012/13 invoices. Large water users received the rebates in trimester one FY 2013/14 invoices.</p> <p>The above methodology was embedded into the ‘AquaRate’ system as an automated calculation.</p> <p>Customer invoices present the aggregate rebate as an ‘Additional Desalination Rebate’.</p> <p>BDO validated the application of the above methodology by:</p> <ul style="list-style-type: none"> • Re-performing spreadsheets calculations and comparing certain data within spreadsheets e.g. interest rates to supporting documentation; • Sample testing twenty-one invoices for quarter three 2012/13 FY to confirm returns from price freeze and rebates were applied correctly (in line with WW’s methodology); and • Confirming the amounts returned by WW (as at the time of our review) via the above process. Please refer to <i>Appendix 1</i> for detailed rebate return amounts. <p>No material exceptions were identified.</p>		Major Trade Water 4.6%		Annual Rebate Rate %	Water	4.2%	Recycled Water	6.6%	Sewerage	9.1%	Major Trade Waste	4.6%
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<p>Validated the appropriateness of the methodology applied to return desalination overpayments as special circumstance payments.</p>	<p>Applications for special circumstance payments can be made via the completion of an application form. Eligible customers had to meet the following categories:</p> <ul style="list-style-type: none"> • Customers that paid water bills after 1 July 2011 but have since moved out of Melbourne or Western Water’s area and are no 												

Scope	Findings
	<p>longer billed by either City West Water, South East Water, Western Water, or Yarra Valley Water;</p> <ul style="list-style-type: none"> • Customers that paid water bills after 1 July 2011 but whose circumstances have changed so that they no longer receive a bill (for example, having sold an investment property); • Customers that paid water bills after 1 July 2011/12 but have since passed away (return via deceased estate) and the property ownership/tenancy has changed names; and • Customers whose water use decreased significantly between 2011/12 and 2012/13. <p>Special circumstance returns were calculated manually via a formula driven spreadsheet ('Return on Customer Desalination Payment Spreadsheet'). Invoices paid by the customer from 1 July 2011 until June 2013 is inputted into the spreadsheet.</p> <p>Once the invoices were inputted into the spreadsheet, the return amount was automatically calculated by taking into account the interest rates, inflation rates, entitlements, price freeze entitlements and rebate entitlements.</p> <p>BDO validated the above methodology by:</p> <ul style="list-style-type: none"> • Re-performed return calculations for four sampled special circumstance payments; and • Confirmed the amounts returned by WW (as at the time of our review) for special payments are in line with targets from MW data. Please refer to <i>Appendix 1</i> for detailed special payment returns. <p>BDO noted two out of four instances where special payment returns were incorrectly calculated resulting in either an over-return or under-return amount to the customer. BDO notes these amounts are immaterial.</p>

City West Water ('CWW')

Scope	Findings
<p>Background</p>	<p>CWW utilises the 'Gentrack System' as its customer billing system. CWW's customers are billed on a quarterly basis. The price freeze was applied to both residential (including concession customers) and business customers.</p> <p>As a result of the price freeze, the following services were not subject to the 2012/13 price:</p> <ul style="list-style-type: none"> • Water related usage and services; • Sewerage related services; • Trade waste water services; and • Recycled water services.
<p>Confirmed amounts returned via the 2012/13 FY price freeze.</p>	<p>As a result of overpayment, a price freeze was implemented in the 2012/13 FY to freeze tariffs for the above affected services at the 2011/12 FY rates.</p> <p>BDO confirmed the appropriateness of the price freeze process via:</p> <ul style="list-style-type: none"> • Selecting a sample of twenty customer invoices and re-performing the amounts to be returned as a result of the price freeze. This was performed by comparing the 2012/13 prices without the price freeze to the prices with the price freeze to obtain the saving benefit; • Performing a review of the appropriateness of the price freeze methodology in 2012 'Review Desalination Implementation by Water Business' (September 2012); • Comparing overall volume figures, provided by CWW, to those validated during ESC performance audit of volumes; • Reviewing overall return figures, for CWW, through application of volumes to ESC Tariff Schedules (prices pre and post price freeze); and • Confirming the amounts returned by CWW via the price freeze process compared to MW data targeted amounts. <p>No material exceptions were identified.</p>
<p>Validated the appropriateness of the methodology applied to return overpayments via rebates.</p> <p>Confirmed amounts returned via rebates.</p>	<p>The methodology applied by CWW to return overpayments includes the following:</p> <p>For quarterly billed customers:</p> <ul style="list-style-type: none"> • Determined the projected operating revenue for the services affected for the 2012/13 FY; and • Determined the amount to be returned as a portion of the operating revenue calculated, as follows: $\left(\frac{\text{return}}{\text{projected operating revenue}} \right) = \text{annual rebate \%}$ <p>For monthly billed customers (predominantly large water users):</p> <ul style="list-style-type: none"> • Determined the actual amount of revenue earned from large water users for the period 1 July 2011 until 30 June 2013 and

Scope	Findings												
	<p>applied the amount to be returned as a portion of revenue to obtain the annual rebate rate, as follows:</p> $\left(\frac{\text{return}}{\text{actual revenue}} \right) = \text{annual rebate \%}$ <p>Based on the above methodology the following annual rebate has been formulated for each service:</p> <table border="1"> <thead> <tr> <th></th> <th>Annual Rebate Rate %</th> </tr> </thead> <tbody> <tr> <td>Quarterly billed customers:</td> <td>5.62%</td> </tr> <tr> <td>Monthly billed customers:</td> <td>5.30%</td> </tr> </tbody> </table> <p>BDO reviewed the following:</p> <ul style="list-style-type: none"> • ‘Q3 Return Percentage’ spreadsheet (which presents how CWW derived at the annual rebate rates applied to quarterly customer bills); and • ‘Final rebate by GBIB Consumer for bulk load’ spreadsheet (which presents how CWW derived the annual rebate rates applied to monthly customer bills). <p>To confirm the following:</p> <ul style="list-style-type: none"> • The total amount used in the spreadsheet as a target to be returned to customers via the rebate process was consistent with MW data; and • Customer consumption (usage / volumes / service charges) over the desalination affected period were taken into consideration to arrive at the annualised rebate rate. <p>No exceptions were noted.</p> <p>The above methodology was applied to individual customer bills by using the below formula:</p> <p>For Variable Usage Services</p> $\left(\frac{\text{Usage}}{\text{Days}} \right) \times 365 \times \text{annual rebate rate\%} = \text{return}$ <p>Where:</p> <table border="1"> <tbody> <tr> <td>Usage :</td> <td>Total volume in dollars used 1 July 2011 - 31 December 2012.</td> </tr> <tr> <td>Days:</td> <td>The number of days affected by the desalination plant.</td> </tr> <tr> <td>Annual Rebate rate:</td> <td>Quarterly billed customers (5.62%) Monthly billed customers (5.30%)</td> </tr> </tbody> </table> <p>For Fixed Services</p> $\text{annual service charge} \times \text{annual rebate rate} = \text{return}$ <p>Where:</p>		Annual Rebate Rate %	Quarterly billed customers:	5.62%	Monthly billed customers:	5.30%	Usage :	Total volume in dollars used 1 July 2011 - 31 December 2012.	Days:	The number of days affected by the desalination plant.	Annual Rebate rate:	Quarterly billed customers (5.62%) Monthly billed customers (5.30%)
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Scope	Findings	
	Annual Rebate rate:	Quarterly billed customers (5.62%) Monthly billed customers (5.30%)
<p>Validated the appropriateness of the methodology applied to return desalination overpayments as special circumstance payments.</p>	<p>Quarterly billed customers received their rebates in either quarter three or quarter four 2012/13 FY invoices. Large water users received the rebates in their August 2013 invoices.</p> <p>The methodology for quarterly billed customers was embedded into the Gentrack system as an automated calculation. The methodology for monthly billed customers was performed outside Gentrack System and input as bulk data load.</p> <p>Customer invoices present the aggregate rebate as an ‘Additional Desalination Rebate’.</p> <p>BDO validated the application of the above methodology by:</p> <ul style="list-style-type: none"> • Sample testing twenty-one invoices to confirm that rebates have been returned as per the correct rebate rates and in line with the methodology; and • Confirmed the amounts returned by CWW (as at the time of our review) via the rebate process in line with MW data targets. <p>Applications for special circumstance payments can be made online via submitting a form.</p> <p>Eligible customers must meet the following categories:</p> <ul style="list-style-type: none"> • Customers that paid water bills after 1 July 2011 but have since moved out of Melbourne or Western Water’s area and are no longer billed by either CWW, South East Water, Western Water, or Yarra Valley Water; • Customers that paid water bills after 1 July 2011 but whose circumstances have changed so that they no longer receive a bill (for example, having sold an investment property); • Customers that paid water bills after 1 July 2011/12 but have since passed away (return via deceased estate) and the property ownership/tenancy has changed names; and • Customers whose water use decreased significantly between 2011/12 and 2012/13. <p>Special circumstance returns are calculated manually via a formula driven spreadsheet (‘Return on Customer Desalination Payment Spreadsheet’). Invoices paid by the customer from 1 July 2011 until June 2013 is inputted into the spreadsheet.</p> <p>Once the invoices are inputted into the spreadsheet, the return amount will automatically be calculated by taking into account the interest rates, inflation rates, entitlements, price freeze entitlements and rebate entitlements.</p> <p>BDO validated the application of the above methodology by:</p> <ul style="list-style-type: none"> • Re-performing spreadsheets calculations and comparing certain data within spreadsheets e.g. interest rates to supporting documentation; • Re-performed return calculations for five sampled special circumstance payments; and 	

Scope	Findings
	<ul style="list-style-type: none">Confirmed the amounts returned by CWW (as at the time of our review) for special payments are in line with targets from MW data. Please refer to <i>Appendix 1</i> for detailed special payment returns. <p>BDO noted four out of the five sampled special circumstances returns was incorrectly calculated, resulting in an over-return to the customer. BDO notes these amounts to be of an immaterial value.</p>

Appendix 3: Limitations of Internal Audit Project

The procedures BDO have performed does not constitute an audit or review in accordance with Australian Auditing Standards and consequently no audit opinion or conclusions will be expressed by BDO.

BDO has agreed to perform the procedures set out in the Engagement Letter and to report to ESC the factual findings arising from our work.

The matters raised in this report will only be those that come to our attention during the course of performing our procedures and may not necessarily be a comprehensive statement of all the weaknesses that may exist or improvements that might be made.

We cannot, in practice, examine every activity and procedure, nor can we be a substitute for management's responsibility to maintain adequate controls over all levels of operations and its responsibility to prevent and detect irregularities, comply with laws and regulations and avoid fraud. Accordingly, management should not rely on our report to identify all weaknesses that may exist in the systems and procedures reviewed, or potential instances of fraud that may exist.

Our report has been prepared solely for the internal use of the ESC. No responsibility to any third party shall be accepted, as our report has not been prepared, and is not intended, for any other purpose. The responsibility for determining the adequacy or otherwise of the procedures performed by BDO is that of the ESC's management and the procedures performed are solely to assist you in assessing the processes reviewed by BDO.

ESC should assess management actions for their full commercial impact before they are implemented. This review has been conducted in accordance with the terms and conditions as defined in the agreed Engagement Letter.