

SA Water response

SA Water's water and sewerage revenues 2013/14 – 2015/16 *Draft determination*

Version: 1.0
Date: 19/03/2013
Status: FINAL

© 2012 SA Water Corporation. All rights reserved.
This document may contain confidential information of SA Water Corporation.
Disclosure or dissemination to unauthorised individuals is strictly prohibited.
Unauthorised printed copies are 'uncontrolled'.

Contents

1	Executive summary	5
1.1	Impacts of proposed efficiency targets, real cost escalation and electricity/carbon pricing	6
1.2	Pass-through mechanism	7
1.3	Impacts on compliance with Accounting Standards	8
1.4	Allowances for capital investment	8
1.5	Exclusion of Valuer General's fees	9
1.6	Revenue control, allowable revenue, pricing and demand	10
1.7	Issues to be resolved at officer level	11
1.8	Summary	11
2	Introduction	12
3	Efficiency targets, real cost escalation and electricity/carbon	14
3.1	Impacts of the proposed efficiency targets	14
3.1.1	ESCOSA's proposed efficiency targets	15
3.1.2	Catch up efficiency	16
3.1.3	Continuing efficiency	17
3.1.4	Investment required to deliver operating efficiencies	24
3.1.5	Recommendation	24
3.2	Impacts of proposed real cost increases	24
3.2.1	The use of cost escalators by regulators	26
3.2.2	Relationship between input costs and the CPI	27
3.2.3	Incentives for cost savings and cost risks	30
3.2.4	Double-counting/interactions with efficiency assumptions	30
3.2.5	Recommendation	30
3.3	Electricity/Carbon	31
3.3.1	Transmission network charges	31
3.3.2	Distribution network charges	31
3.3.3	Carbon pricing mechanism	32
3.3.4	Electricity	36
3.3.5	Direct carbon liability – Bolivar fugitive emissions	36
3.3.6	Recommendation	37
4	Pass throughs	38
4.1	Statutory Regime	38
4.2	Change in legal obligation	39
4.3	Specific pass-through events	39
4.4	Major projects events	40
4.5	The competitive market test	40
4.6	Recommendation	41
5	Impacts on compliance with Accounting Standards	42
5.1	Proposed capitalisation of proving costs	42
5.2	Proposed capitalisation of membrane costs	43
5.3	Recommendation	44
6	Allowances for capital investment	46
6.1	Murray Bridge WWTP Upgrade	46

6.2	Mechanical & Electrical Plant Renewal – Treatment Plants	47
6.3	Mechanical & Electrical Plant Renewal – Networks.....	47
6.4	Structures Renewal - Networks.....	48
6.5	Recommendation	49
7	Exclusion of Valuer General's fees.....	50
7.1.1	State Valuation Office (SVO) information.....	50
7.1.2	Ability to realise savings	51
7.1.3	Detachment from the equity principle.....	51
7.1.4	Legal complications	52
7.1.5	Billing options	52
7.1.6	Recommendation	52
8	Revenue control, allowable revenue, pricing and demand.....	53
8.1	Allowable Revenue.....	53
8.1.1	Implied allowable revenue calculation.....	53
8.2	Pricing.....	58
8.3	Form of revenue control	59
8.3.1	Restatement of demand and prices for water services	59
8.3.2	Demand risk	61
8.3.3	Investment.....	62
8.3.4	Higher usage charges	62
8.3.5	Minor additional revenue control issues.....	62
8.4	Revenue adjustment mechanism	63
8.5	Recommendations.....	63
9	Minor issues to be resolved	65
9.1	Customer service standards and targets	65
9.1.1	Costs and benefits of set service standards	65
9.1.2	RBP 2013 service standards.....	65
9.1.3	Recommendation	66
9.2	Environmental obligations	66
9.2.1	Recommendation	67
9.3	Office of the Technical Regulator (OTR).....	67
9.3.1	Recommendation	68

List of figures

Figure 1	Wage growth has been greater than CPI to December 2012	29
----------	--	----

List of tables

Table 1	Capital expenditure efficiency targets for SA Water	15
Table 2	Operating expenditure efficiency targets for SA Water	16
Table 3	Cardno's reported opex efficiency targets in other Australian jurisdictions	19
Table 4	Frontier comparison of efficiency targets applied in Australia	20
Table 5	Water Corporation (WA) elements of operating expenditure	23
Table 6	Forecast of real capex input cost escalation provided by Evans & Peck (annual % expressed in real terms).....	25

Table 7 Forecast of real opex input cost escalation provided by Evans & Peck (annual % expressed in real terms)	25
Table 8 Proposed opex adjustment for SAPN network charges	32
Table 9 Forecast of expenditure for the Murray Bridge WWTP project.....	47
Table 10 Mechanical & Electrical Plant Renewal – Treatment Plants.....	47
Table 11 Mechanical & Electrical Plant Renewal – Networks	48
Table 12 Structures Renewal – Networks	49
Table 13 Draft Determination base revenue cap calculation (Dec 2012 dollars)	54
Table 14 Draft Determination’s revenue adjustment/kL calculation (Dec 2012 dollars).....	54
Table 15 Implied Draft Determination’s unsmoothed allowable revenue calculation (Dec 2012 dollars).....	55
Table 16 Implied Draft Determination’s unsmoothed allowable revenue calculation (Dec 2012 dollars).....	55
Table 17 Implied Draft Determination’s smoothed allowable revenue calculation (Dec 2012 dollars).....	55
Table 18 Implied changes in allowable revenue (Dec 2012 dollars)	56
Table 19 Modified base revenue cap calculation (Dec 2012 dollars)	57
Table 20 Modified revenue Cap calculations (Dec 2012 dollars)	57
Table 21 Change in allowable Revenue Calculation (Dec 2012 dollars)	57
Table 22 Smoothing of modified allowable revenue (Dec 2012 dollars)	58
Table 23 Alternative allowable revenue calculations (Dec 2012 dollars)	58

List of attachments

- Attachment 1: KPMG, SA Water - Accounting Advice – Capitalisation of ADP Costs
Attachment 2: Frontier Economics, Response to ESCOSA’s draft decision: efficiency targets and cost indices

1 Executive summary

As part of the determination of SA Water's water and sewerage revenues for the regulatory period 2013/14 – 2015/16, SA Water prepared its Regulatory Business Proposal 2013 (RBP 2013) proposing its investment priorities over the three year regulatory period in line with the Essential Services Commission of South Australia's (ESCOSA) Guidance Paper¹.

Following public consultation and review of RBP 2013, ESCOSA released its Draft Determination on SA Water's maximum allowable revenue for water and sewerage services on 7 February 2013².

Ahead of developing the final determination, and aligned with its defined process, ESCOSA has sought public consultation on the Draft Determination.

This document constitutes SA Water's response to the Draft Determination as part of the public consultation process.

SA Water is supportive of the regulatory determination process and has fully supported ESCOSA in the development of its determination, as recognised by ESCOSA³. SA Water is committed to achieving affordability for its water and sewerage customers whilst maintaining the financial viability of SA Water as a business. SA Water is a state-owned business that is tasked with achieving the lowest bill possible within the context of social equity and returns to Government that benefit all South Australian taxpayers. With these objectives in mind SA Water framed its RBP 2013 to achieve the pricing objectives stated by the South Australian Government of price stability and containing price increases to CPI or less.

ESCOSA has, in general, supported the proposal contained within RBP 2013 and SA Water acknowledges this. SA Water is appreciative of the opportunity to provide input into the determination process at this point and of the considerable effort that has gone into both the underlying reasoning behind the Draft Determination and the formulation of the resultant Draft Decisions contained within it. However, given the complexity of the Draft Determination, SA Water considers that there may be areas of ESCOSA's Draft Determination where issues may not have been explored to the fullest extent or where the complex interrelations between different elements mean that some impacts are not fully anticipated.

SA Water's response addresses areas where ESCOSA has formed a different view to that submitted by SA Water in its RBP 2013, explores the arguments and offers an alternative point of view for ESCOSA's consideration.

SA Water believes that the Draft Determination would benefit from further investigation or review in a number of key areas:

1. The impacts of the proposed efficiency targets, real cost escalation and electricity/carbon pricing;
2. Pass-through mechanism;
3. Impacts on compliance with Accounting Standards;
4. Allowances for capital investment;

¹ ESCOSA, *Review of SA Water's Prices: 2013/14 – 2015/16, Guidance Paper*, February 2012

² ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013 (Note: ESCOSA's Draft Determination consisted of two parts, the Statement of Reasons and the Part 3 Determination. The document is referred to in whole throughout this response as the Draft Determination. Where specific reference has been made to Part 3 this distinction has been made in the relevant reference).

³ *Ibid*, p. 11

5. Exclusion of Valuer General's fees;
6. Revenue control and demand; and
7. A number of additional minor issues.

The more minor issues referred to at point 7 are detailed throughout SA Water's response. SA Water is confident that these can be resolved with ESCOSA through discussions at officer level.

For ESCOSA's consideration, the key issues are summarised briefly below and in more detail throughout the document.

1.1 Impacts of proposed efficiency targets, real cost escalation and electricity/carbon pricing

In accordance with standard regulatory practice, the Draft Determination proposed various efficiency targets to apply to both capital and operating expenditure incurred by SA Water to deliver water and sewerage services to its customers. SA Water recognises this general approach and has no concerns with its application and the positive outcomes this drives for customers.

In assessing SA Water's prudent and efficient expenditures, ESCOSA engaged the Centre for International Economics (the CIE) which confirmed that SA Water is at the forefront of efficiency amongst Australian water businesses. This was also supported by ESCOSA's capital and operating consultant, Cardno. Notwithstanding the outcome of the CIE and Cardno's assessments of SA Water, ESCOSA recommended efficiency targets in excess of what could be expected to be applied to an efficient business and is out of step with regulatory determinations in other jurisdictions.

To validate its view regarding efficiency targets SA Water engaged an expert economic consultant, Frontier Economics, to review the efficiency targets and provide advice on the applicability and size of the targets. By way of example some of the issues identified by Frontier Economics include:

- SA Water identified four areas of opportunity to improve capital efficiency which SA Water captured in RBP 2013. Cardno restated these opportunities as the basis of the "catch-up" efficiency to be applied to SA Water, amounting to double-counting of these efficiencies;
- The use of a continuing efficiency target for capital is not aligned with general regulatory practice of assessing capital efficiency based upon a "bottom up" approach only and not applying both measures;
- The magnitude of the continuing efficiency targets outlined by Cardno in relation to operating expenditure is not aligned with general regulatory practice and contradicts previous advice provided by Cardno to other regulators; and
- The operating efficiency target has been applied to SA Water's total cost, whereas general regulatory practice is to limit it to controllable costs only.

Further, the operating efficiency targets do not appear to have taken into account efficiencies already embedded in RBP 2013, or excluded from RBP 2013 as previously discussed with ESCOSA and Cardno.

In addition to these efficiency targets, ESCOSA has only allowed cost escalation in line with the Consumer Price Index (CPI). In RBP 2013 SA Water detailed its reasoning and calculations supporting real cost escalation in excess of CPI. ESCOSA did not fault SA Water's methodology in its Draft Determination but chose to reject any real cost escalation.

In addition to the limitations on real cost escalation, ESCOSA has not allowed for various electricity and carbon pricing costs in its Draft Determination. This is discussed in detail in chapter 3.

Finally, SA Water believes there is some cross-over in the various measures ESCOSA has applied which results in an approximate reduction of 10% in controllable operating expenditure in year 3 of the regulatory period. This would have significant impact on SA Water's ability to deliver services to customers at the same standard and quality they expect.

SA Water therefore recommends that, to address these and other interrelated operating efficiency issues, one single efficiency target of 1% be applied to controllable operating costs only and managed by SA Water.

In addition to this, and because the recommended approach above is to address all operating efficiencies sought by ESCOSA, SA Water seeks reinstatement of the allowances for both real cost escalation and electricity and carbon pricing submitted by SA Water in RBP 2013.

SA Water makes this recommendation on the basis that SA Water is already at the forefront of operating efficiency when compared to its peers and a 1% efficiency target for controllable operating costs is in line with current regulatory practice.

With regard to capital efficiency, SA Water recommends that no catch-up or continuing efficiency target be applied to capital expenditure on the basis that:

- both CIE and Cardno found SA Water to be relatively efficient when compared with other water utilities;
- SA Water has already addressed the four issues raised by Cardno within its regulatory submission; and
- A continuing efficiency target is not aligned with general regulatory practice based on a "bottom up" approach.

SA Water has provided additional information in chapter 3 for ESCOSA's consideration.

1.2 Pass-through mechanism

SA Water's proposed pass-through mechanism submitted to ESCOSA in RBP 2013 was based on previous decisions by ESCOSA in the energy sector. SA Water is surprised that the Draft Determination differs from the previous precedent set by ESCOSA in other industries.

Whilst SA Water understands the differing legislative environment ESCOSA is working under with regard to the water industry, SA Water does not believe this environment gives rise to the development of a different approach to pass-through.

As the preparation and consideration of pass-through applications incurs significant costs, SA Water seeks to resolve the following in order to aid this process:

1. The definition of a Change in legal obligation event;
2. Consideration of the true extent of events that could occur during a regulatory period that would give rise to costs that could not have been foreseen or quantified at the submission of the regulatory business proposal and the most efficient mechanism to address them, including the benefits to customers of not including costs that cannot be reasonably foreseen or quantified at the outset;
3. The criteria for the evaluation of the financial impacts on SA Water in the event that a pass-through must occur; and
4. The scope of an Extraordinary event.

ESCOSA's Draft Determination on the pass-through mechanism appears very limited, lacks critical definition and is not in line with its own previous precedent in other industries or other water regulators interstate.

In order to afford customers the full benefit of efficient process where a comprehensive pass-through mechanism is in place, SA Water proposed a pass-through mechanism in line with general regulatory practice in RBP 2013 which differs from that proposed by ESCOSA in its Draft Determination.

SA Water's proposal allowed it the opportunity to propose only prudent and efficient expenditures in RBP 2013 and not add "risk premium" expenditure at the outset of the regulatory period, thereby making way for the lowest possible prices for customers.

If the more limited mechanism of pass-through proposed by ESCOSA were to be retained SA Water would need to resubmit its capital, operating and WACC proposals taking into consideration the additional risk it would be carrying.

For this reason, SA Water believes the pass-through mechanism it proposed in RBP 2013 results in a better pricing outcome for customers and constitutes a more responsible manner for planning its expenditure.

SA Water's proposed pass-through mechanism also represents current regulatory practice in other states and a regard for SA Water's operating environment.

On these bases, SA Water recommends ESCOSA reconsider the proposed pass-through mechanism contained within RBP 2013.

SA Water provides additional information in chapter 4 of this document for ESCOSA's consideration.

1.3 Impacts on compliance with Accounting Standards

In section 7.6.2 and 7.6.3 of ESCOSA's Draft Determination it proposes that proving costs and membrane replacement costs associated with the Adelaide Desalination Plant should be capitalised, and not treated as operating expenditure. Advice from KPMG indicated that this is in conflict with the Australian Accounting Standards and advice from the Auditor General.

SA Water is unable to deviate from the Australian Accounting Standards.

Aside from the issues of compliance, this decision also results in a de facto efficiency gain, with similar impacts to customers as those outlined under section 1.1 above. As already stated above, SA Water believes all proposed efficiency gains should be addressed by ESCOSA through one single operating efficiency target.

For these reasons, SA Water recommends that ESCOSA reconsider its position on the accounting treatment of these costs and that any efficiency gains be addressed under section 1.1 and in line with the recommendation contained within that section.

SA Water seeks reconsideration of this issue and provides further detail in chapter 5 of this document.

1.4 Allowances for capital investment

SA Water commends ESCOSA on the relatively detailed and thorough assessment of the capital expenditures proposed by SA Water in RBP 2013 to deliver its water and sewerage services to its customers. SA Water notes that the intensive process that ESCOSA, its consultants and SA Water participated in after the submission of RBP 2013 in order to assess the prudent and efficient capital expenditures for the initial regulatory period has been effective. In general, Cardno found SA Water's capital program to be prudent and efficient suggesting changes in only a few limited areas.

Notwithstanding the above, SA Water believes there are a number of capital decisions which warrant reconsideration by ESCOSA as outlined below:

1. Insufficient funds allowed for the 2013/14 – 2015/16 regulatory period to commence the necessary preliminary works required to advance the Murray Bridge Wastewater Treatment Plant project in preparation for full project implementation in the second regulatory period; and
2. Reduction of funds in the *Mechanical and Electrical Plant Renewal – Treatment Plants*, *Mechanical and Electrical Plant Renewal – Networks* and *Structures Renewal - Networks* programs.

Further delay of the Murray Bridge Wastewater Treatment Plant project due to insufficient development funds will most likely:

- Increase the odour issues currently being experienced by Murray Bridge customers and local residents; and
- Increase the risk of unintended environmental incidents with potentially catastrophic outcomes for the Murray Bridge community.

One of the significant drivers of the project is the potential for bank collapses resulting in contamination of the River Murray. This will obviously have detrimental impacts far greater than the immediate Murray Bridge community.

Decreasing the allowed expenditure in the programs detailed above is a risk to the delivery of services to customers with a heightened likelihood of major failure potentially impacting large numbers of customers and for extended periods of time due to the nature of these assets.

For the reasons stated above, SA Water is compelled to recommend that ESCOSA reconsider its decisions within the Draft Determination and:

1. Reinstate the allowances proposed by SA Water in RBP 2013 for the programs detailed above; and
2. Allow the development funds proposed within chapter 6 of this document to avoid any further delays to the Murray Bridge Wastewater Treatment Plant project.

SA Water's reasoning for these recommendations are detailed further in chapter 6 of this document.

1.5 Exclusion of Valuer General's fees

The Draft Determination removed \$8.5 million of operating expenditure from SA Water's allowable operating expenditure due to the view that the cost of SA Water purchasing Valuer General data (used to determine capital values for the purposes of sewerage rates and commercial rates) should only be passed on to customers once in the regulatory period as opposed to annually as is the current process. While, if considering the striking of rates, this may have some validity it does not take into account the impact on the billing system and the nature of the charge from the Valuer General.

This will be detrimental to customers and to SA Water for the following reasons:

- By not updating capital values on an annual basis there would be a more significant step change in capital values at the end of the regulatory period. This would remove the customer's ability to receive a reduction in their rates until the end of the regulatory period;
- Customers are entitled to object to the capital value of their property. Currently SA Water accounts constitute a notice of valuation under the Valuation of Land Regulations 2005. Should the valuation not be updated the account would no longer constitute a notice of valuation and infringe on a person's right to object to the capital value of their property;

- It is unlikely that SA Water would be able to realise the proposed savings of \$8.5 million following the approach outlined by ESCOSA. The State Valuation Office (SVO) imposes these fees on SA Water on a cost-recovery basis and has indicated that it would continue to charge SA Water the same total fees for the three year period regardless of a change in the frequency of data required by SA Water;
- Legal complications:
 - The ability to use SVO data is time limited and the right to use the data must be reacquired. Use of SVO data beyond this time period leaves SA Water open to legal challenge;
 - SA Water would carry the burden of capital value disputes as referred to above including managing any court action and meeting the associated costs.
- Alternate options to SA Water's current process could not be implemented before or within the regulatory period and are likely to cost in the order of \$30 - \$65 million.

The consequence of removing this expenditure drives one of the below to occur:

1. SA Water's current system and processes are maintained but with less frequently updated SVO information used to determine rates and maintain customer accounts; or
2. Implementation of a new system and/or processes to provide for a better outcome to customers using less frequent SVO data.

Aside from the fact that RBP 2013 did not contemplate any expenditure to allow for such a change in system or process, SA Water believes both of the above options will result in price uncertainty for customers, significant additional expenditure and the increased propensity for billing error across SA Water's entire customer base.

For these reasons, SA Water recommends that ESCOSA reinstate the funds required to obtain valuable SVO data to maintain current billing processes and consider various other options, in consultation with SA Water and its customers, during its inquiry into pricing reform for the South Australian water industry, as requested by the Treasurer. SA Water believes this course of action will result in better outcomes for its customers.

These issues have been explored in further detail for ESCOSA's consideration in chapter [□](#).

1.6 Revenue control, allowable revenue, pricing and demand

SA Water has no comments in relation to the form of control for sewerage services as proposed in the Draft Determination and accepts this proposal.

With regard to water, SA Water's analysis of the form of revenue control proposed indicates that it has the potential to introduce price instability and uncertainty for customers. SA Water believes that the form of water revenue control should be revisited to ensure that there are no unintended consequences and that it meets the long term interests of customers.

SA Water notes that ESCOSA has not calculated the revenue control based on a building block approach in line with general regulatory practice and in calculating the average revenue has used a water demand of 190GL per annum. SA Water questions why the 190GL value has been used instead of the forecast ESCOSA has accepted from its expert, CIE's, which was a demand forecast of around 180GL per annum (i.e. 178GL in 2013-14).

As part of this response SA Water has suggested a modification to the methodology for setting the water revenue control. SA Water believes this modification will provide an outcome that is more consistent with the use of a building block approach.

SA Water notes that in order to apply a building block approach for setting revenue, ESCOSA will need confirmation of the initial Regulatory Asset Base (RAB), to be set by the Treasurer in May 2013. Until this key element is provided, ESCOSA is unable to confirm the revenue or the impact on customer prices.

SA Water also notes that while the final prices will take into account the allowable revenue (and the revenue cap) as determined by ESCOSA, there will also be a number of other factors that are required to be taken into account before prices can be set.

1.7 Issues to be resolved at officer level

In addition to the more complex issues outlined above, SA Water would like to resolve the following issues by further discussions with officers of ESCOSA including:

1. Base service standards;
2. Possible other reviews or material included in the final determination without public consultation;
3. Pricing references;
4. Demand variation mechanism;
5. Exclusion of costs associated with environmental flow trials;
6. Additional costs required to satisfy the fee payable to the Office of the Technical Regulator; and
7. Other minor technical issues.

These are discussed in more detail within the body of the document.

1.8 Summary

While SA Water has a number of concerns relating to the decisions and/or reasoning contained within the Draft Determination, for example, the application of inappropriate efficiency targets, SA Water is appreciative of the combined work ESCOSA and SA Water have done to date which is reflected within the Draft Determination.

SA Water is confident that both ESCOSA and SA Water can achieve desirable outcomes for South Australian water and sewerage customers whilst maintaining the financial viability of SA Water's business for the benefit of all South Australians.

2 Introduction

The Essential Services Commission of South Australia (ESCOSA) operates under the powers bestowed upon it by the *Water Industry Act 2012* and the *Essential Services Commission Act 2002*.

In line with the recently developed regulatory framework, ESCOSA initiated the regulatory review by way of its Statement of Approach released on 12 July 2012. Also on 12 July 2012 ESCOSA released its Guidance Paper on the review of SA Water's revenue for the 2013 – 2016 regulatory period.

SA Water prepared its Regulatory Business Proposal 2013 (RBP 2013) in line with ESCOSA's Guidance Paper proposing its investment priorities over the three year regulatory period from 1 July 2013 to 30 June 2016. RBP 2013 was submitted on 28 September 2012.

In line with the process set out in its Guidance Paper and as part of public consultation on SA Water's proposal, ESCOSA released its Issues Paper on the review of RBP 2013 (Issues Paper) on 12 October 2012.

With the release of the Issues Paper ESCOSA sought public consultation on RBP 2013 for consideration in developing its Draft Revenue Determination, with responses required by 9 November 2012.

ESCOSA received seven public responses to the Issues Paper which were published on its website on 21 November 2012. The responses received were from Woolworths Limited, Clare Region Winegrape Growers Association, Primary Industries and Regions SA (PIRSA), Environment Protection Authority (EPA), COTA, South Australian Council of Social Service (SACOSS) and from a private individual.

Additionally, eight further responses were received in confidence and will not be publicly released (seven from private individuals and one from a company).

As the next step in the regulatory determination process ESCOSA released its Draft Revenue Determination on 7 February 2013. Within the Draft Determination ESCOSA considered the following elements of SA Water's revenue proposal:

- Classification of services;
- Customer service standards and targets;
- Form of revenue control;
- Demand forecasts;
- Capital expenditure;
- Operating expenditure;
- Assessment of revenue cap;
- Rate of return;
- Regulated Asset Base;
- Pass through events; and
- Form of regulation for recycled water and excluded services.

In response, SA Water will address each of these areas in detail in the following pages.

Submissions on the Draft Determination are due on 19 March 2013. Once ESCOSA has had the opportunity to review all submissions it will make a final determination in mid-May 2013. SA Water and other interested parties are afforded no further opportunity to comment on the determination as part of the regulatory process. However, SA Water is requesting that if ESCOSA brings any new information to light in its Final Determination, SA Water and all other interested parties are given the opportunity to comment in the interests of transparency and procedural fairness.

SA Water has reviewed ESCOSA's assessment contained within the Draft Determination and offers further comment where required:

1. The impacts of the proposed efficiency targets, real cost escalation and electricity/carbon pricing;
2. Pass-through mechanism;
3. Impacts on compliance with Accounting Standards;
4. Allowances for capital investment;
5. Exclusion of Valuer General's fees;
6. Revenue control, allowable revenue, pricing and demand; and
7. A number of additional minor issues.

It should be noted that SA Water's public response to ESCOSA's Draft Determination does not necessarily represent its final or complete views on all aspects relating to the revenue determination. In particular, SA Water reserves the right to raise new matters not addressed or supplement or amend information or views contained in this submission where circumstances warrant.

This submission forms part of a regulatory review process and it follows that various information will come to light or circumstances may change which will lead SA Water to further consider and/or amend its views or positions.

3 Efficiency targets, real cost escalation and electricity/carbon

In accordance with standard regulatory practice, the Draft Determination proposed various efficiency targets to apply to both capital and operating expenditure incurred by SA Water to deliver water and sewerage services to its customers. SA Water recognises this general approach and has no concerns with its application and the positive outcomes this drives for customers.

However, in addition to these efficiency targets, ESCOSA has only allowed cost escalation in line with the Consumer Price Index (CPI). In RBP 2013 SA Water detailed its reasoning and calculations supporting real cost escalation in excess of CPI. ESCOSA did not fault SA Water's methodology in its Draft Determination but chose to reject any real cost escalation.

Further to the limitations on real cost escalation, ESCOSA has not allowed for various electricity and carbon pricing costs in its Draft Determination.

SA Water believes there is some cross-over in the various measures ESCOSA has applied which results in an approximate reduction of 10% in controllable operating expenditure in year 3 of the regulatory period. This would have significant impact on SA Water's ability to deliver services to customers at the same standard and quality they expect.

SA Water therefore recommends that, to address these and other interrelated operating efficiency issues, one single efficiency target of 1% be applied to controllable operating costs only and managed by SA Water.

In addition to this, and because the recommended approach above is to address all operating efficiencies sought by ESCOSA, SA Water seeks reinstatement of the allowances for both real cost escalation and electricity and carbon pricing submitted by SA Water in RBP 2013.

SA Water makes this recommendation on the basis that SA Water is already at the forefront of operating efficiency when compared to its peers and a 1% efficiency target for controllable operating costs is in line with current regulatory practice.

With regard to capital efficiency, SA Water recommends that no catch-up or continuing efficiency target be applied to capital expenditure on the basis that:

- both CIE and Cardno found SA Water to be relatively efficient when compared with other water utilities;
- SA Water has already addressed the four issues raised by Cardno, related to catch up efficiency, within its regulatory submission; and
- A continuing efficiency target is not aligned with the general regulatory practice of applying a "bottom up" approach for the setting of continuing efficiency targets and the Cardno proposal of applying both efficiency measures amounts to double counting of any gains.

3.1 Impacts of the proposed efficiency targets

The Draft Determination proposes onerous efficiency targets for SA Water which are out of context with ESCOSA's findings that SA Water is efficient relative to its peers. ESCOSA's approach in setting the targets, and therefore the targets themselves, are out of step with general regulatory practice.

For the development of its Issues Paper ESCOSA engaged the Centre for International Economics (CIE) to provide an assessment of SA Water's efficiency relative to its peers. This "top down" study found that:

- SA Water has amongst the lowest operating costs per property;

- SA Water has also had relatively low capital expenditure, until recent major water security investments;
- SA Water has high productivity when compared to most of the smaller water companies, and ranks about average against the major utilities. However, when this analysis is adjusted to remove water security investments (which is a more appropriate comparison as the water security projects are now complete), SA Water has the highest productivity of all utilities in the sample; and
- Whilst there is some scope for further efficiency gains, the magnitude of these gains is likely to be only moderate.

ESCOSA noted the CIE report will be an input into the revenue determination process.

The Draft Determination further notes that “Consistent with SA Water’s proposal, the National Water Commission’s National Performance Report (NPR) reporting, and other data, Cardno supports the view that SA Water’s current level of opex is relatively efficient, compared to other water utilities. It therefore recommended that no catch-up efficiency target be applied to opex.”⁴

It is therefore unclear how ESCOSA arrived at the conclusion that increased efficiency targets were required for operating expenditure.

In developing its response to the Draft Determination SA Water engaged Frontier Economics (Frontier) to provide independent expert advice on the approach to setting efficiency targets and the level of those targets. The details contained within this section of the response are based upon the advice provided by Frontier Economics as contained within their report contained within Attachment 2⁵.

3.1.1 ESCOSA’s proposed efficiency targets

Based upon advice from Cardno, ESCOSA has proposed ongoing efficiency targets for both operating and capital expenditure and has also proposed a catch up efficiency target for capital. These targets are detailed in tables 1 and 2 below.

Table 1 Capital expenditure efficiency targets for SA Water

	2013/14	2014-15	2015-16
Continuing efficiency target	-0.5%	-0.5%	-0.5%
Catch-up efficiency target	-0.6%	-0.6%	-0.6%
Cumulative target	-1.10%	-2.18%*	-3.26%

Note: *Cardno report this as -2.19%, however this appears to be a rounding error of -2.18198%

⁴ ESCOSA, *SA Water’s Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 73

⁵ Attachment 2 Frontier Economics, *Response to ESCOSA’s draft decision: efficiency targets and cost indices*, February 2013

Table 2 Operating expenditure efficiency targets for SA Water

	2013/14	2014-15	2015-16
Continuing efficiency target	-1.0%	-2.0%	-2.0%
Catch-up efficiency target	-0.0%	-0.0%	-0.0%
Cumulative target	-1.0%	-2.98%	-4.92%

Within its report Frontier note that:

Given the materiality of the proposed efficiency savings, it is vital that they are robust and realistic. Regulatory best practice would require that they represent 'reasonable' estimates of what is achievable, the underlying reasons are transparent, they are internally consistent, and are consistent with accepted regulatory practice.⁶

3.1.2 Catch up efficiency

The CIE study found that SA Water has relatively high productivity compared to most of the smaller firms and about the average of the major utilities included in the sample. However, a more useful comparison is attained by discounting the distortion created by various utility desalination expenditures, which shows that SA Water has the highest productivity in terms of outputs per unit of expenditure (over the last 12 years) of all utilities in the sample.

In proposing a catch up efficiency target for capital expenditure Cardno identified four opportunity areas where it believes that SA Water can improve its business practices and deliver the proposed capital expenditure more efficiently, despite being at the frontier of efficiency. The four areas identified were:

- *Under the new metropolitan Adelaide service delivery outsourcing arrangements, SA Water has taken back asset management functions for metropolitan assets, which will allow SA Water to better understand its assets, and their needs for renewal and replacement;*
- *Improving the depth of asset information held in Maximo (asset management software), to allow SA Water to undertake more quickly, and more fully, appraisal of needs identified for further investigation;*
- *More rigorous treatment of cost contingencies, including setting out specific guidelines for their incorporation in cost estimates, monitoring them at a program level, and moving to a risk-based approach to estimating contingencies; and*
- *Adopting a higher level, portfolio approach to managing and delivering the capital works program. This may identify opportunities to achieve the outcomes desired from the capital works program at a lower cost. Cardno noted that SA Water was already moving in this direction.⁷*

⁶ Frontier Economics, *Response to ESCOSA's draft decision: efficiency targets and cost indices*, February 2013, p. 4

⁷ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 63 - 64

Cardno noted that each of these elements represented a 0.15% reduction in efficiency and through addressing them SA Water could move to the efficiency frontier. In total they represent a 0.6% catch up efficiency.

In July 2011, new service delivery arrangements were introduced for the metropolitan Adelaide operations. At this time SA Water took the asset management functions for the metropolitan assets back in-house, implemented the upgraded work management system, Maximo 7, within the metropolitan operations and introduced new arrangements for the delivery of capital works within the metropolitan area incorporating a program based approach.

As such, the benefits that these changes delivered have already been incorporated into RBP 2013. For example, SA Water directly managing the metropolitan assets has enabled a clearer understanding of the condition of the metropolitan assets and a clearer prioritisation across the whole asset base, both metropolitan and regional leading to a more efficient allocation of capital.

SA Water already has specific guidelines for the preparation of estimates. These guidelines include the requirements for incorporation of contingencies in the estimates on a risk basis. As a result, this “opportunity area” has already been realised by SA Water and will not result in a further 0.15% increase in efficiency assumed by Cardno.

In view of the above, ESCOSA’s decision to apply a catch-up efficiency of 0.6% per annum across the three year regulatory period is without foundation given that the benefits from the areas of improvement that have been identified, have already been incorporated by SA Water in the RBP 2013.

Within the Draft Determination, ESCOSA proposed to accept Cardno’s advice that no catch-up efficiency factor should be applied to SA Water’s operating expenditure for the initial regulatory period⁸. This was supported by the findings that SA Water performs at the efficient frontier and included:

- The three benchmarking studies reported in RBP 2013;
- The National Water Commission’s National Performance Report 2010/11 for Urban Water Utilities; and
- A study commissioned by ESCOSA from CIE.

Frontier noted its support for ESCOSA’s conclusion that SA Water’s operating expenditure is efficient and should not be subject to a catch-up efficiency target.

3.1.3 Continuing efficiency

Continuing efficiency is the industry wide improvement in productivity over time and results in an adjustment to the benchmark. It therefore applies to all businesses even those already deemed to be at the efficient frontier.

3.1.3.1 Continuing efficiency - capital expenditure

Based upon advice from Cardno, ESCOSA has proposed that a 0.5% continuing efficiency target be applied to SA Water’s capital expenditure. This excludes capital works which are already contracted for during the period. In the Draft Determination ESCOSA states that:

⁸ ESCOSA, *SA Water’s Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 105

“On continuing efficiency, it is the Commission’s view that it is appropriate to set a target to reflect the continuing improvements that will undoubtedly be available over time in the areas of technology, innovation, productivity and procurement. The proposed target of 0.5% per annum, based on a detailed study carried out for Ofwat, and applied to comparable entities in the UK, is considered reasonable.”⁹

This position is reflective of the advice provided to it by Cardno. Cardno based its recommendation to apply a 0.5% annual continuing efficiency factor to SA Water’s capital costs entirely on a study of UK water businesses undertaken by Reckon LLP for Ofwat in 2008 (Reckon 2008).

Frontier expressed a number of serious concerns with ESCOSA’s acceptance of Cardno’s recommendation:

- *The Reckon LLP estimate (as acknowledged by Reckon) does not represent an estimate of the future frontier shift (continuing efficiency), rather it represents a forecast of the scope for efficiency improvements in capital costs at an industry level, based on historical trends. As a result it implicitly includes catch-up efficiency and -0.5% therefore overstates the possible level of ongoing efficiency.*
- *Ofwat (2009) itself did not adopt the -0.5% efficiency target in its 2009 determination. Rather, Ofwat applied a continuing efficiency target for all companies of -0.4% a year for all capital expenditure incurred during 2010-15; of -0.25% a year for the 2015-25 period; and 0% a year beyond 2020. It is also important to note that this -0.4% target for 2010-2015 is with respect to a middle ranking company, rather than a ‘frontier’ business. Therefore the target for a frontier company, of which SA Water is one, based on the studies outlined above, was more moderate.¹⁰*

Frontier also noted that this study is over 5 years old and relates to UK businesses and therefore not particularly relevant to SA Water.

Frontier, in its report, expressed surprise that Cardno did not reference more recent and relevant evidence of regulatory practice in Australia. Frontier also noted that such analysis would have revealed that in recent price determinations in the Australian water industry, including the Independent Pricing and Regulatory Tribunal’s (IPART) review of Sydney Water in 2012, the Essential Services Commission (ESC) review in 2012 and the Economic Regulation Authority’s (ERA) 2013 review of Water Corporation, none applied across-the-board capital expenditure efficiency targets.

Frontier noted that rather than relying on studies such as that conducted by Reckon, they all undertook a ‘bottom up’ review of proposed capital expenditure, with a number of capital projects being disallowed from the revenue requirement as they did not represent prudent and efficient expenditure. None applied an additional efficiency factor to this revised capital program as ESCOSA is proposing to do in the current Draft Determination for SA Water.

The Frontier report also notes that the only determination in which a continuing efficiency assumption was applied for capital expenditure was in IPART’s determinations for Sydney Water in 2008 and for Hunter Water in 2009. On both occasions IPART was acting on the advice of Cardno (again based on the 2008 Reckon LLP report). IPART has not adopted this approach in its more recent determinations.

SA Water finds that the ongoing efficiency target for capital expenditure is not consistent with the practice of Australian regulators and is based on an outdated UK report which is no longer relevant.

⁹ ESCOSA, *SA Water’s Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 64

¹⁰ Frontier Economics, *Response to ESCOSA’s draft decision: efficiency targets and cost indices*, February 2013, p. 8

3.1.3.2 Continuing efficiency - operating expenditure

In the Draft Determination, ESCOSA has accepted Cardno's advice to apply a continuing efficiency factor to SA Water's operating expenditure of 1% in 2013/14, rising to 2% p.a. for 2014/15 and 2015/16. Furthermore, ESCOSA is proposing to apply this efficiency factor to SA Water's entire operating expenditure, less any efficiencies identified in a 'bottom up' analysis.

As previously noted, these efficiency targets are material and will result in a substantial reduction to operating expenditures, making it vital that they are robust. Frontier did not consider the targets to be robust and raised concerns relating to:

- The magnitude of the proposed continuing efficiency target; and
- The base to which this target is applied.

3.1.3.3 The magnitude of the proposed continuing efficiency target

In proposing a continuing efficiency target of 2%, it seems that Cardno has based this approach solely on the precedent from the ERA determination for Water Corporation in 2012. As shown by the comparative table in the Cardno report, this efficiency target is clearly an outlier and much higher than those applied by other regulators in Australia.

Table 3 Cardno's reported opex efficiency targets in other Australian jurisdictions¹¹

Regulator	Regulated business	Year	Annual operating cost efficiency (average only)
IPART	Sydney Water	2008	0.7%*
IPART	Sydney Water	2011	0.91%*
ERA	Water Corporation	2012	2%^
ESC	All Victorian water businesses	2012	1%

Notes: * Cardno does not provide table notes for these items, however these efficiency targets relate to continuing and catch-up efficiency applied to only controllable operating expenditure.

^ Cardno provides a table note stating that the efficiency target is proposed to apply to all operating expenditure, however the final decision (ERA 2013) was to only apply it to base expenditure.

No evidence is provided by Cardno for setting such a high efficiency target. Frontier noted that Cardno has failed to identify a number of important factors that would suggest a much lower continuing efficiency target, if any, would be more appropriate.

The key factor for setting the 2% efficiency target for Water Corporation was the high growth rates in customer numbers:

¹¹ Cardno, *Review of Capital and Operating Expenditure Plans of SA Water – 2013/14 to 2015/16 Price Determination: Final Report*, January 2013, p.65

*In reviewing the Water Corporation's operating expenditure, Cardno concluded that the 2.0 per cent annual efficiency target on base operating expenditure is an appropriate efficiency target to implement over the 2013/14 to 2015/16 period. Specifically, Cardno noted "we consider that a 2% annual efficiency target on base operating costs is achievable in the short term without a significant stretch by the Corporation, **mainly due to the large impact of economies of scale while growth rates remain steady**".¹² [emphasis added]*

Frontier noted three issues with this approach if applied to SA Water:

1. SA Water's forecast annualised growth rate for residential customers of 1.4% is significantly lower than Water Corporation's expected metropolitan customer growth of 2.1% to 2.3% per annum in 2013/14 to 2015-16¹³. Therefore utilising this approach SA Water should have a lower continuing efficiency target.
2. The continuous annual efficiency targets proposed by Cardno is significantly higher than general regulatory practice as demonstrated in recent determinations for the water industry entities. Frontier provided a comparison of these targets which is provided in table 4. This table provides greater detail than the comparison provided in the Cardno report as it demonstrates that the reported figures are not all continuing annual efficiency targets. For example, the 0.91% reported value for IPART 2012 in fact comprises both the 'catch-up' and continuing efficiency factors — the relevant continuing efficiency target from IPART 2012 is actually -0.25%.

Table 4 Frontier comparison of efficiency targets applied in Australia

	CAPEX continuing efficiency (shift in frontier)			OPEX continuing efficiency (shift in frontier)		
	Controllable	Non-controllable	Account for identified efficiencies	Controllable	Non-controllable	Account for identified efficiencies
ESCOSA draft determination (SA Water)	-0.5%	0%	-	-1.0/-2.0/-2.0%	-1.0/-2.0/-2.0%	?
IPART 2012 (Sydney Water Corp)	0%*	0%*	-	-0.25%	0%	✓
ESC 2012 (all Victorian businesses)	0%#	0%#	-	-1.0%	0%##	✓
ERA 2013 (Water Corporation)	0%^	0%^	-	-2.0%	**	?
IPART 2009 (Hunter Water)	-0.5%	0%	-	-0.8%	0%	✓
IPART 2008 (Sydney Water Corp)	-0.5%	0%	-	-0.8%	0%	✓

Notes: * IPART 2012 appears to assess the efficiency of proposed investment directly, rather than applying efficiency target.

Our understanding is that ESC assess the efficiency of proposed investment directly, rather than applying efficiency target.

The ESC Guidance material presents the efficiency target on base operating expenditure in the context of only controllable costs.

^ The ERA does not recommend an efficiency target on the Water Corporation's capital expenditure. Rather, in each pricing inquiry the ERA reviews what is proposed by the Water Corporation and provides recommendation on an efficient level of capital expenditure for the next pricing period.

** The ERA only applies the -2% on base operating expenditure, and not "level of service" operating expenditure.

3. It should be noted that in 2012 Atkins-Cardno advised IPART that 0.25% was the appropriate target for continuing efficiency in operating expenditures for a water business:

¹² ERA, *Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board*, January 2013, p. 48

¹³ *Ibid*, p. 40

We agree that the opex efficiency targets are challenging. Our assessment is based on a continuing efficiency of 0.25% per annum, the same as applied by Ofwat in the 2009 Determination¹⁴.

IPART accepted this value. Frontier noted that the IPART acceptance of -0.25% as an appropriate opex continuing efficiency target for an Australian water business is not presented in the Cardno report to ESCOSA.

Frontier regarded this as particularly relevant because continuing efficiency targets should represent the efficiencies expected to be achieved of a firm on the frontier in that industry and therefore should be considered in the context of likely industry-wide achievements.

Based upon the points raised by Frontier, it is difficult to understand how Cardno arrived at its recommendation that SA Water should be able to achieve continuing efficiency targets of four (-1%) to eight times (-2%) that proposed in New South Wales in 2012.

More fundamentally, such a conclusion is completely at odds with both CIE's and Cardno's findings that SA Water performs relatively well when benchmarked against industry peers and thus is on or close to the efficiency frontier and that no catch-up efficiency target should be applied to SA Water's operating expenditure.

In recommending a continuing efficiency target that is orders of magnitude higher than that accepted as what can be achieved elsewhere in the industry, Cardno are at odds with their own findings, and those of CIE, that no catch-up efficiency is required.

The Cardno report also states its understanding that the SA Water submission (RBP 2013) did not assume any ongoing or catch-up efficiency factor in its proposed operating expenditure to 2015/16. However, it also notes that it does appear that many of the operational efficiencies referred to in RBP 2013 are already embedded within the base position and current year 2012/13. However Cardno did not recognise that SA Water has incorporated further efficiencies totalling \$27 million over the regulatory period. In addition to these efficiencies in comparison to the base year, SA Water also proposed significant efficiency savings for the operation of the ADP, both during the proving period and beyond.

3.1.3.4 The base to which the efficiency target is applied

Frontier noted that the second major issue with the proposed continuing efficiency targets for operating expenditure relates to the base to which they are applied and in particular:

- whether the target is applied to all operating expenditure or is confined only to 'controllable' or 'base' operating expenditure; and
- whether any specific efficiencies identified through a 'bottom up' analysis are netted off the base prior to the application of the efficiency factors.

Discussed below is reasoning that demonstrates that the application of an efficiency target of that magnitude to SA Water's entire operating expenditure proposal is inappropriate.

3.1.3.4.1 'Controllable' or 'base' expenditure

Good regulatory practice is to apply continuing efficiency targets only to defined components of expenditure. In contrast, the Draft Determination accepts Cardno's advice and applies the (very high) continuing efficiency targets to all of SA Water's operating expenditure.

¹⁴ IPART, *Review of prices for Sydney Water Corporation's water, sewerage, stormwater drainage and other services, From 1 July 2012 to 30 June 2016*, June 2012, p. 65

The approach adopted by a number of regulators is to apply efficiency targets only to “controllable” expenditure. For example, in IPART’s 2008 and 2012 determinations for Sydney Water, it limited efficiency targets to only “controllable” costs, which represented only about 38% of Sydney Water’s expenditure base.

For the 2012 determination, IPART accepted advice provided to it by Atkins Cardno¹⁵ for such an adjustment “to reflect that a significant proportion of Sydney Water’s costs are not controllable”.

Based upon this previous advice, Frontier regarded Cardno’s advice to ESCOSA as:

*somewhat perplexing as to why Cardno (2013) have not proposed that continuing efficiency savings should be applied only to SA Water’s controllable costs. Such an approach would also be consistent with its assessment that continuing efficiency targets for capex should exclude capital works which are already contracted for the period. It is also perplexing that in documenting operating expenditure efficiency targets in other Australian jurisdictions in table 7-17 of its report for ESCOSA that the fact that the IPART (2009 and 2011/2012) targets applied only to controllable expenditure is not reported, in contrast to the entries for the ERA and the ESC where the base to which the targets are to be applied is reported.*¹⁶

In its report, Cardno stated that the ESC guidance material provided for a 1% annual operating cost efficiency target and noted that this applied only to baseline operating expenditure¹⁷. Frontier noted that the more fulsome context of the ESC guidance material is that the ESC specifically attributes this efficiency target to controllable costs:

*Businesses should also be disciplined by a desire to improve efficiency and manage **controllable costs**. The Commission requires all businesses to achieve a minimum of 1 per cent per year productivity improvement on its baseline operating expenditure.*¹⁸ [emphasis added]

In the case of the ERA, Cardno noted that this has historically been a self-imposed target that the regulator has chosen not to exceed. It also noted that while it has previously applied only to ‘base’ expenditure, the ERA draft decision in 2012 proposed to apply it to all operating expenditure following a rise in non-base expenditure. Since Cardno’s report, the ERA has released its final decision. In it, the ERA recommended that:

...the Water Corporation’s tariffs be set in accordance with the assumption that it achieves an ongoing efficiency in real base operating costs per connection of 2.0 per cent per year.

*In addition to base operating expenditure, the Water Corporation incurs “level of service” operating expenditure. Level of service operating expenditure is loosely defined as expenditure undertaken to improve the Water Corporation’s service standards above a base level that existed in 2005 (the time of the first water pricing inquiry).*¹⁹ **There is no efficiency target applied to level of service operating expenditure.** [emphasis added]

Therefore it is important to note that the ERA target of 2% does not apply to all operating expenditure, but only to Water Corporation’s base operating expenditure, which is in the order of 65%-74% of total operating expenditure (refer to table 5).

¹⁵ Atkins Cardno, *Final Report Detailed Review of Sydney Water Corporation’s Operating and Capital Expenditure*, November 2011, p. 90

¹⁶ Frontier Economics, *Response to ESCOSA’s draft decision: efficiency targets and cost indices*, February 2013, p. 13

¹⁷ Cardno, *Review of capital and operating expenditure plans for SA Water – 2013/14 to 2015/16 price determination: Final report*, January 2013, p. 65

¹⁸ ESC, *2013 Water Price Review, Guidance on Water Plans*, October 2011, p. 33

¹⁹ ERA, *Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board*, January 2013, p. 23

Table 5 Water Corporation (WA) elements of operating expenditure²⁰

	2010-11	2011-12	2012/13	2013/14	2014-15	2015-16
Efficient Base Operating Expenditure	479.9	486.4	497.2	572.7	592.4	615.8
Efficient Level of Service Operating Expenditure	171.1	194.5	270.4	305.6	307.0	304.1
Total Efficient Operating Expenditure	651.0	680.8	767.6	878.3	899.4	919.9
Base proportion of total opex	73.7%	71.4%	64.8%	65.2%	65.9%	66.9%
Equivalent efficiency target over total opex (as 2% target over base opex)	1.5%	1.4%	1.3%	1.3%	1.3%	1.3%

Frontier noted that it was of the view that:

On the basis of the material presented above, in our view it would be inconsistent with regulatory precedent and Cardno's own previous analysis to apply a continuing efficiency factor to SA Water's entire operating expenditure, as proposed in ESCOSA's Draft Determination.²¹

3.1.3.5 Netting off identified efficiencies from 'bottom up' analysis

As discussed under section 3.1.3.3 above, SA Water identified \$27 million in operating efficiencies that were embedded within RBP 2013 and would be implemented by SA Water throughout the regulatory period. The approach taken by other regulators in having regard to additional efficiencies identified by utilities is to take into account the identified efficiencies from 'bottom up' analysis when applying efficiency targets on operational expenditure. This avoids a doubling up of efficiency obligations which would lead to lower than required operational expenditure being available for SA Water's operations.

For example, IPART has decided to make allowance for efficiencies already identified by Sydney Water.

Frontier considered that ESCOSA should adopt a similar approach under which identified efficiencies are netted out from efficiency targets and SA Water supports this approach on the basis that it is critical that these efficiencies are considered in order to avoid a doubling up of efficiency obligations and lower operating expenditure available to deliver its services to its customers and also in order not to penalise SA Water for continuing to seek and apply better ways in line with its corporate priorities which is what sees SA Water at the forefront of efficiency in its industry.

²⁰ Ibid, p. 51

²¹ Frontier Economics, *Response to ESCOSA's draft decision: efficiency targets and cost indices*, February 2013, p. 14

3.1.4 Investment required to deliver operating efficiencies

In development of the expenditure proposals for RBP 2013, SA Water deliberately excluded proposed capital expenditure aligned to the driver of business efficiency. This expenditure was excluded from RBP 2013 on the basis that the costs associated with the projects could be funded by the future efficiency gains and therefore were not required to be recovered through revenue and customer prices. Details of these projects have been separately provided to ESCOSA.

During the review of RBP 2013, SA Water explained to ESCOSA and Cardno that these projects had been excluded and the reasoning why. In setting the efficiency targets for operating expenditure, ESCOSA has failed to recognise the level of investment required to deliver the efficiencies.

SA Water considers that the efficiencies identified to be self funded should not be incorporated in the determination of the ongoing efficiency target. If they are to be incorporated, then the expenditure allowances must be increased to cover the associated costs.

3.1.5 Recommendation

Based upon the independent expert advice provided by Frontier, SA Water recommends that ESCOSA reconsider its adoption of Cardno's advice and amend the Draft Determination to:

- Remove the catch up efficiency target for capital expenditure based upon:
 - the finding of both CIE and Cardno that SA Water is already relatively efficient when compared with other water utilities; and
 - SA Water has already addressed the four issues raised by Cardno within its regulatory submission;
- Remove the continuing efficiency target for capital to align with general Australian regulatory practice of assessing capital efficiency based upon a "bottom up" approach only and not applying both measures;
- Include within the capital expenditure an allowance for any investment required to deliver future efficiency gains; and
- Adjust the continuing efficiency target for operating expenditure to one single target of 1% pa applied to controllable costs only and encapsulating all proposed operating efficiencies (as detailed in this chapter and throughout this document) based on general regulatory practice and recognition of the efficiencies already embedded in SA Water's regulatory proposal and external to the proposal and the relatively low growth in customer numbers.

3.2 Impacts of proposed real cost increases

Within RBP 2013 SA Water included real cost escalators for the proposed capital and operating expenditure based upon independent expert advice from Evans and Peck. The escalators were estimated for labour, materials and contracted labour, as detailed in tables 6 and 7 below.

Over the regulatory period this was a real forecast adjustment of approximately \$50 million for capital expenditure and \$20 million for operating expenditure.

Table 6 Forecast of real capex input cost escalation provided by Evans & Peck (annual % expressed in real terms)

	2012–13	2013–14	2014–15	2015–16
Labour	1.66	1.70	1.74	1.77
Materials	1.41	1.55	1.70	1.84
Contracted Services	1.37	1.46	1.56	1.64

Table 7 Forecast of real opex input cost escalation provided by Evans & Peck (annual % expressed in real terms)

	2012–13	2013–14	2014–15	2015–16
Labour	1.66	1.69	1.74	1.77
Materials	-2.22	-1.66	-1.1	-0.48
Contracted Services	0.18	0.27	0.38	0.48

The Draft Determination rejected SA Water's proposals for real cost increases on the basis of Cardno's advice that real cost pressures related to labour, materials and contracted services are:

- *... to a large extent, manageable by SA Water through its approach to procurement, hence, price movements above CPI are wholly business risks and those below are a reflection of sound management by the company;*
- *Price movements in labour, materials and contracted services will trend to CPI in the long-term; and*
- *Given the current growth rates of the South Australian economy, a forecast price movement of CPI over the forthcoming regulatory period is reasonable²².*

Cardno also advised ESCOSA that CPI increases were in line with standard regulatory practice both in the United Kingdom and interstate. In response to this issue SA Water engaged Frontier to provide independent expert advice and Frontier's report is provided as Attachment 2 to this report. SA Water explains its position in the following sections.

²² ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 78

3.2.1 The use of cost escalators by regulators

In its report for ESCOSA on SA Water's capital and operating expenditure Cardno rejected the use of specific escalators (with the exception of electricity cost increases) and proposed not to allow for any cost increases above CPI. In providing a basis for this position Cardno asserted the following as matters of opinion:

- The approach is consistent with regulatory practice in other jurisdictions;
- Although input prices are typically volatile, over the medium and long term they tend to follow the movement of general inflation;
- There is no evidence that the South Australian economy is in a strong state of growth;
- Allowing for real cost increases above CPI would weaken the incentive inherent in CPI-X regulation; and
- Allowing electricity cost increases above CPI reduces the risk of cost increases in other areas.

In its Draft Determination ESCOSA accepted Cardno's recommendation and real cost increases were not included.

Within its report Frontier noted that the adoption of Cardno's advice needs to be reconsidered on the basis that, in drawing its conclusion not to allow real cost escalators, Cardno cite IPART and the UK regulatory regime as authority. Frontier did not consider this to be an accurate representation of regulatory practice and noted that a number of other regulators do allow real cost escalators. Frontier provided the following examples to support its position:

3.2.1.1 Victoria

In its 2008 review of Victorian rural and regional water business the ESC adopted a real wage escalator of 1.25% on operating expenditure and a real wage escalator of 1.5% in the 2009 review of metropolitan water businesses. Recent ESC guidance material flagged the issue as relevant for the current price review as well:

For the 2008 and 2009 price reviews, most businesses allowed for nominal wage increases of 4 per cent per year. Based on information at the time, ESC adopted a real increase of 1.25 per cent per year and outlined that any growth forecasts above this level would be adjusted downward.

Businesses should use the latest information to forecast real wage and cost growth for the third regulatory period. Water Plans must include annual forecasts of wage cost growth. Assumptions regarding forecast wages growth should be made clear.

The Reserve Bank of Australia found that wages growth is reasonably stable, noting the Australian Bureau of Statistics Wage Price Index increased by 3.8 per cent in nominal terms over the year. ...

The [ESC] will assess businesses' proposals on wages growth using the best information on actual and projected wages growth and growth expectations available when we make our final decision (expected in May 2013).²³

²³ ESC, 2013 Water Price Review, Guidance on Water Plans, October 2011, p.39

3.2.1.2 Western Australia

Although the ERA did not adopt real price escalators in the recent decision for Water Corporation, the ERA acknowledged their relevance, stating that:

On consideration of this matter, the Authority accepts in principle the argument that the escalation of costs incurred by the Water Corporation may differ to the escalation of the CPI.²⁴

Further, the ERA acknowledged the potential negative consequences of imposing a CPI-based target which is a poor fit to business characteristics:

*Generally regulators are reluctant to alternate between the use of different cost indices as it can lead to instances of regulatory gaming. However, **the Authority acknowledges that the Water Corporation's claim that the prices that it pays for its operational inputs may have risen faster in recent years than the 8-cities CPI and may continue to do so in coming years. If this is the case, and assuming that it continues to be the case into the future, then at some point the imposition of a CPI-based target would impact on the Water Corporation's ability to deliver services.** However, it may not always be the case that the Water Corporation's OCI would grow at a faster rate than the 8-cities CPI²⁵ [emphasis added]*

Frontier notes another recent and very relevant example in the AER's regulation of South Australian electricity transmission business, ElectraNet. The AER's draft decision in November 2012 accepted a large range of real cost escalators (AER 2012, Table 1.1, p. 54).

It should be noted that SA Water proposed values that are more modest than those in the AER draft decision, with the exception of 2015-16. The AER/ElectraNet wage expectations are relevant to SA Water since they relate to employees in the Electricity, Water and Gas sector in South Australia.

Frontier also raises questions regarding the consistency of Cardno's advice:

Cardno's recommendation to reject the use of specific cost escalators is inconsistent with its own advice to ICRC regarding ACTEW (Cardno 2012), where it advised to revise real cost escalators proposed by ACTEW and include them in the forecast of operating expenditure.

3.2.2 Relationship between input costs and the CPI

In rejecting the use of real cost escalators, Cardno note that in the long run prices will follow general inflation, Cardno state that:

There is no evidence of the South Australian or Australian economy being in a state of high growth that could lead to the movement in the price of [opex] inputs significantly exceeding their long term trend to broadly follow general inflation.²⁶

Frontier consider that there is no theoretical basis for assuming that other long-term trends in other inputs must conform to CPI, let alone for the 2013/14 to 2015-16 determination period. The Evans and Peck report demonstrated that SA Water's input costs are derived from three specific input types; labour, materials and contracted services. Frontier noted that this is significantly different from the basket used to construct the CPI index. The ABS (6401.0 Dec 2012) describe the CPI, and its component elements, as:

²⁴ ERA, *Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board*, January 2013, p. 52

²⁵ ERA, *Inquiry into the Efficient Costs and Tariffs of the Water Corporation, Aqwest and the Busselton Water Board*, January 2013, p. 49

²⁶ Cardno, *Review of Capital and Operating Expenditure Plans of SA Water – 2013/14 to 2015/16 Price Determination: Final Report*, January 2013, p. 64

The simplest way of thinking about the CPI is to imagine a basket of goods and services comprising items bought by Australian households. Now imagine the basket is purchased each quarter. As prices change from one quarter to the next, so too will the total price of the basket. The CPI is simply a measure of the changes in the price of this fixed basket as the prices of items in it change.

The total basket is divided into 11 major groups, each representing a specific set of commodities:

- *Food and non-alcoholic beverages*
- *Alcohol and tobacco*
- *Clothing and footwear*
- *Housing*
- *Furnishings, household equipment and services*
- *Health*
- *Transport*
- *Communication*
- *Recreation and culture*
- *Education*
- *Insurance and financial services.*

In the case of the Australian CPI, this methodology involves devising a basket of goods and services representative of those acquired by metropolitan private households during the course of a full year.

Frontier noted that it is clear that all of the components of CPI are not relevant to SA Water's input costs. Frontier also noted that some important drivers are excluded from CPI. For example, labour is not a significant purchase by households, and therefore not included directly in the CPI basket however, for SA Water labour represents 30%²⁷ of its operating expenditure.

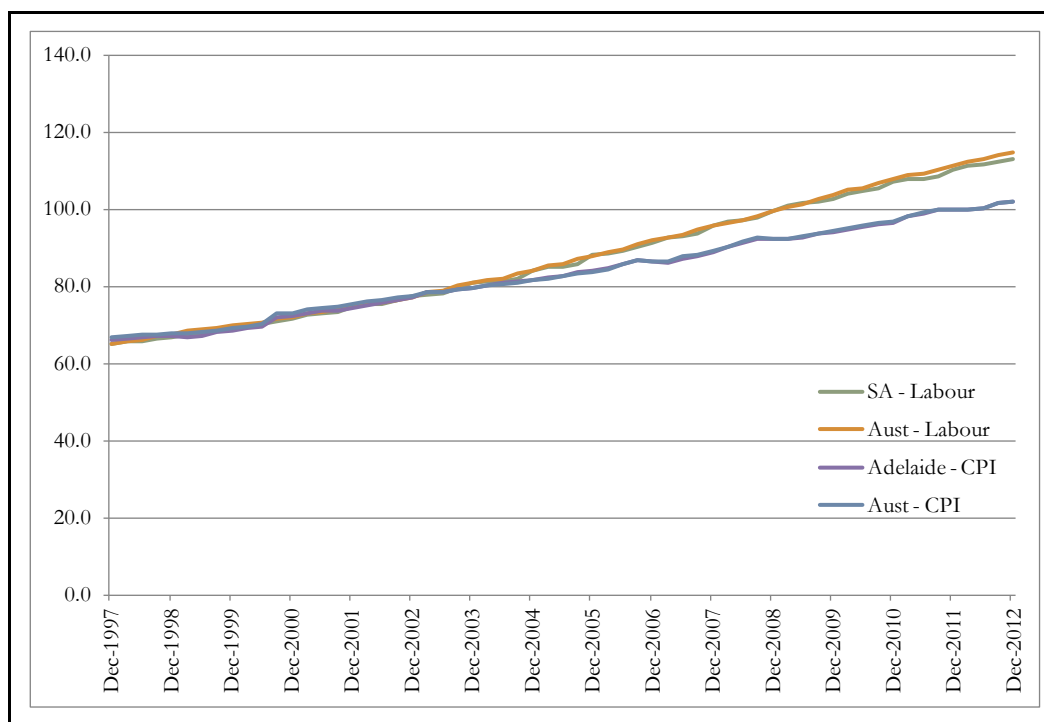
3.2.2.1 Labour costs

When considering the relevance of CPI for SA Water's cost escalation it should be noted that labour cost growth has been higher than CPI for the past 15 years.

The most recent information from the ABS (December 2012 quarter) identified that the wage price index rose by 3.4 per cent over the past year (ABS 6345.0), while CPI rose by 2.2 per cent (ABS 6401.0).

Frontier considered that Cardno's proposition that the cost of SA Water's labour inputs do not significantly exceed the long term trend of general inflation is not borne out by the evidence.

²⁷ Cardno, *Review of Capital and Operating Expenditure Plans of SA Water – 2013/14 to 2015/16 Price Determination: Final Report*, January 2013, p. 46

Figure 1 Wage growth has been greater than CPI to December 2012

Source: ABS 6401 and 6345.

3.2.2.2 Other input costs

Frontier considered that Cardno raise some legitimate concerns with the impact of developments since the preparation of the Evans and Peck escalators, namely the decision not to proceed with the Olympic Dam expansion:

We acknowledge that there is evidence to suggest that construction costs in South Australia in the period to 2015/16 will experience real cost increases comparable to that seen over the last 5 years. However, we believe that, on the balance of probability construction costs will respond to the highly significant deferral of the Olympic Dam expansion project; noting that this deferral has almost halved total construction demand in the state.²⁸

Furthermore Frontier took issue with Cardno's observation on page 64 of its report which stated:

Considering the escalation factors in Table 7-16, the factors for materials are negative, i.e. suggesting cost decreases in the regulatory period. The other two trends are positive and therefore lead to increased forecasts for real costs in the period. This shows that the CPI-x methodology, which allows for a flat escalation rate, can be beneficial to the business in the areas where real cost decreases are forecast.²⁹

Frontier considered that the identification that some of the estimated real cost escalators are positive and some are negative does not lend any weight to the argument that it is acceptable for the input cost issues to be ignored. Rather, it demonstrates the appropriateness of having real cost escalators that are representative of the cost structure of the regulated firm.

²⁸ Cardno, *Review of Capital and Operating Expenditure Plans of SA Water – 2013/14 to 2015/16 Price Determination: Final Report*, January 2013, p. 75

²⁹ *Ibid*, p. 64

3.2.3 Incentives for cost savings and cost risks

Within its advice Frontier stated that it took issue with Cardno's assertion that:

*Allowing real costs escalation above CPI would weaken the incentives inherent in CPI-x regulation to generate cost savings.*³⁰

It is Frontier's view, the marginal incentive for a regulated business to outperform the target is the same, regardless of what target is set.

Cardno also state:

*[Cardno] have agreed with SA Water's proposal to allow for cost increases relating to electricity over and above CPI. Electricity comprises one of SA Water's largest input costs risks so **mitigating this uncertainty will reduce any pressure faced by the business due to increased costs in other areas**" [emphasis added]*³¹

Frontier disagreed with Cardno's logic, which appears to be that allowing for the increase in electricity costs above CPI means increases in other costs above CPI can somehow also be managed. Frontier also stated that:

*This is simply wrong and highlights the benefit of using accurate cost escalators.*³²

3.2.4 Double-counting/interactions with efficiency assumptions

Frontier also found that Cardno's advice suffers from double-counting due to interactions between its advice on denying real input cost escalators and its advice on imposing efficiency targets.

Within its advice to ESCOSA, Cardno stated:

*We think that real cost pressures related to labour, materials and contracted services will reflect the effective and prudent management by SA Water of its approach to procurement.*³³

Frontier's interpretation of this is that Cardno expect that the real cost pressures related to labour, materials and contracted services can be managed through capturing efficiencies in SA Water's improved management of procurement. However, Cardno has already counted on these efficiencies being made through the imposition of continuing efficiency targets that apply directly to capital and operating expenditure. If this interpretation is correct, then Cardno has double-counted the benefits from future procurement efficiencies, and these should be netted out.

3.2.5 Recommendation

Independent expert Frontier Economics has found that the basis for Cardno to recommend the rejection of the use of real cost escalators and only allow for CPI escalation is flawed as:

- The application CPI escalation is not consistent with regulatory practice;
- The weight of evidence is that the input costs for SA Water would not revert to CPI;
- Allowance for real cost escalation would not weaken the incentives for SA Water to seek efficiencies; and

³⁰ Ibid, p. 64 and verbatim on p. 75

³¹ Ibid, p. 64

³² Frontier Economics, *Response to ESCOSA's draft decision: efficiency targets and cost indices*, February 2013, p. 24

³³ Cardno, *Review of Capital and Operating Expenditure Plans of SA Water – 2013/14 to 2015/16 Price Determination: Final Report*, January 2013, p. 68

- There is a double-counting due to the interactions between the Cardno's recommended efficiency targets and the rejection of real cost escalation.

Accordingly SA Water recommends that the real cost escalators incorporated in the RBP 2013 be reinstated.

3.3 Electricity/Carbon

3.3.1 Transmission network charges

Section 8.5.5.4 of the Draft Determination states that only one of SA Water's major pumping sites is not directly connected to ElectraNet's transmission network. It should be noted that three of SA Water's major pumping sites (those along the Swan Reach pipeline system) are not connected to ElectraNet's transmission network.

In addition, ESCOSA states that SA Water falls in to the category of "negotiated" customers in terms of the Australian Energy Regulator's (AER) determination of ElectraNet's required revenue. It should be noted that SA Water is classified as a "prescribed" customer as the National Electricity Rules (NER) contains grandfathering arrangements that deem SA Water's connections to be part of ElectraNet's regulatory asset base.

ElectraNet submitted its revenue proposal to the AER on 31 May 2012 for the period from 1 July 2013 to 30 June 2018. The AER published a draft decision on 30 November 2012. Subsequently, on 16 January 2013, ElectraNet submitted its revised revenue proposal to the AER which has not been considered by ESCOSA as it was not available at the time ESCOSA prepared its Draft Determination.

ElectraNet, in its revised revenue proposal, accepted some aspects of the AER's draft determination and rejected others.

SA Water proposes that it is prudent for ESCOSA to adopt the AER's final determination which will be available in April 2013 in time to be considered in ESCOSA's final determination.

3.3.2 Distribution network charges

In section 8.5.5.4 of the Draft Determination ESCOSA has applied 4.3% real annual escalation to SA Power Networks (SAPN) network charges for the remainder of SAPN's regulatory period with the exception of the Adelaide Desalination Plant (ADP) Additional Infrastructure Compensation Payment (AICP), as this is a contracted charge that will escalate in line with CPI.

SA Water believes that ESCOSA has not appropriately applied the details provided in table 28 of the 2012/13 SAPN Approved Pricing Proposal³⁴. It appears that ESCOSA has incorrectly combined both table 27 and table 28 where table 28 alone applies. SA Water has calculated a real annual escalation of 4.8% compared with ESCOSA's assessment of 4.3%.

In addition, SAPN has recently submitted a pass through event to the AER seeking approval for a material increase in costs as a result of uncontrollable and unexpected increase in vegetation growth rates due to above average rainfall requiring a significant increase in the frequency and extent of vegetation inspection and clearance³⁵. The increased cost is proposed to be recovered through the SAPN distribution tariffs for the 2013/14 and 2014/15 regulatory years and is expected to increase tariffs by a further 0.9%.

³⁴ ETSA Utilities (SAPN), *Approved Annual Pricing Proposal 2012/13*, May 2012, p. 46, Table 28

³⁵ SAPN, *Vegetation clearance pass through application, General nominated pass through event*, 28 February 2013, p. 5

SA Water agrees with ESCOSA's view that CPI escalation be applied to SAPN network charges for the last year of SA Water's regulatory period (2015/16) but proposes that it is prudent for ESCOSA to adopt SA Water's revised calculation of real annual escalation of SAPN network charges for the remainder of SAPN's regulatory period, that is, 4.8% plus the additional 0.9% pass-through if accepted, giving a total of 5.7%.

SA Water recommends that the operating expenditure allowance for SAPN network charges be adjusted as outlined in table 8 to appropriately allow for the full cost of network charges that SA Water will incur.

Table 8 Proposed opex adjustment for SAPN network charges

	2013/14	2014/15	2015/16
ESCOSA Assessment	15.5	15.9	16.2
SA Water Proposal	15.7	16.4	16.7
Proposed Adjustment	0.2	0.5	0.5
	Real, March 2012 \$M		

3.3.3 Carbon pricing mechanism

3.3.3.1 Estimating the future carbon price

ESCOSA has set out its position in regard to its estimate of the future carbon price in its discussion under section 8.5.6.3 *Electricity carbon price estimates*, and relies on that position in its discussion under 8.5.6.4 *Other Carbon Costs - Fugitives Bolivar*.

In its discussion ESCOSA states;

...The Commission notes that the carbon price (\$/t CO₂-e) is fixed under the Clean Energy Act 2011 for the first two years of the regulatory period. The price in the third year is variable and, at the time SA Water developed its RBP, was to be subject to a price floor. In July 2012, the Federal Government announced that it would remove the price floor from the beginning of 2015/16, and that the market would determine the price of carbon from then on. Based on European futures market data, in line with global prices, ESCOSA estimates that the real domestic price of carbon will fall to around \$8.07/t CO₂-e in 2015/16...³⁶

ESCOSA is correct in stating that the initial legislation included provision for a floor price in the third year. However the quantum of the floor price, originally legislated at \$15/tonne CO₂-e was the subject of considerable debate prior to it subsequently being removed. SA Water made no assumptions about what the floor price might be, rather it based its price estimate on Federal Treasury modelling and its consultants report, as this was the best available official estimate at the time. ESCOSA has provided no reason for choosing the European futures market data as its basis for making an estimate of the future carbon price to apply in Australia or how it has made its estimate from that data. It is assumed that ESCOSA has done so because the amending legislation that removed the floor price also provides that European carbon credits (European Union Allowances [to emit carbon dioxide] – EUAs) will be eligible for surrender against liabilities under the Australian Carbon Price Mechanism (CPM) from 2015/16 onwards.

³⁶ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 94 - 95

ESCOSA also made an estimate of the future price of carbon "...at around \$8.07/t CO₂-e in 2015/16..."³⁷, based on European futures market data at a point in time, and presumably based on an estimate of the Australian dollar exchange rate against the Euro dollar at the same point in time.

SA Water does not agree that arbitrarily choosing a future market price at a point in time is a reasonable basis for settling the position on the allowable carbon price to apply in 2015/16. Futures markets, be they carbon futures or exchange rate futures, are derivative markets that are subject to speculative investment, high volatility and risk. Had ESCOSA chosen a different point in time the carbon futures price may well have been very different. Validating this point is the fact that European carbon futures prices have varied between 35 Euro dollars and less than 5 Euro dollars between July 2006 and the end of January 2013.

SA Water accepts that, subsequent to the Federal Treasury estimate being made, several issues and events have arisen that lead to considerable uncertainty regarding future carbon prices, and potentially the future of a carbon price at all in Australia and in Europe. These circumstances are detailed below and go beyond simple "market risk".

In SA Water's view, special consideration must be given to the uncertainty created by this unique set of circumstances and agreement reached on an appropriate mechanism to deal with the uncertainty in a way that neither advantages, nor disadvantages SA Water or its customers.

SA Water proposes the following mechanism:

- An agreed carbon price be set at \$18.69/t CO₂-e for the purposes of ESCOSA's current determination (in the absence of any robust reasonable predictor of the future carbon price, being the midpoint between ESCOSA's estimate and the estimate used by SA Water in its RBP); and
- A retrospective adjustment mechanism be agreed to apply in the first year of the second regulatory period to correct for any difference between the agreed carbon price for 2015/16, and the actual carbon price applicable to SA Water in that year.

The circumstances that create significant uncertainty around a carbon price to apply in 2015/16 include the following:

- Australia will have a federal election in September 2013. The stated position of the current opposition is that it will abolish the CPM, whereas the current government will retain the current arrangements. Depending on the election outcome, the respective policy positions would mean that there will be a carbon price, but of uncertain value, or there will no carbon price impacts on SA Water at all in 2015/16.
- The amending legislation that removed the floor price provides that EUAs will become eligible for surrender against Australian CPM liabilities from 2015 is based on an initial 3 year trial period. During this period the Australian and European markets will not be directly linked and there will be a transition arrangement whereby Australian liable entities may use UEAs under the Clean Energy Regulator (CER), however Australian carbon units will not be able to be traded into the European market during this period.
- Further, linking between the Australian and European markets is dependent on the completion of certain significant transition arrangements including negotiation of bilateral agreements between the Australian and European governments to implement trade and transfer of the respective carbon credit units to fully link the Australian and European carbon markets.
- The amending legislation also provides that liable Australian entities under the CER may only surrender a maximum of 50% of their liability as EUAs.

³⁷ Ibid.

- The removal of the floor price does not mean that there may not be a minimum price applied under the CPM in future. Under the amending legislation that removed the floor price, the Minister retains the power to determine a “reserve charge amount” for a specific auction, which will work in the same manner as a floor price. It remains to be seen whether the government of the day will choose to exercise such a power.
- The price of carbon in the European market has declined from a high of around 35 Euro dollars in early 2008 to current lows. The decline has been attributed to several causes including; low levels of economic/industrial output in European economies following the Global Financial Crisis (GFC) leading to reductions on carbon dioxide emissions and thus depressed demand for offsetting EUAs, and oversupply of EUAs as a result of European Union policies relating to the quantities and timing of release of EUAs.
- In response, the European Union has recently announced structural reforms to address the persistent low price of European Union carbon in the European Union emissions trading scheme. Several proposals have been put forward in this regard, the most immediate decision involves so-called “backloading” of the release of 900 million carbon allowances by postponing their auction from 2013-15 until 2019-20. It is noted that the Environmental Committee of the Parliament (ENVI) voted in favour of a “backloading” proposal that constrains the release and trade of carbon credits to tighten the market and force price up. The ENVI meeting is about to decide on allowing the Environmental Committee chairman to immediately begin drafting legislation with ministers to fast-track the implementation process for the “backloading” plan.
- The European Union has put forward a range of other proposals to address the long term oversupply, including; increasing the European Union’s greenhouse gas emissions reductions target, cancelling some “allowances” (EUAs) permanently and/or establishing a discretionary price management mechanism. Any of these proposals would have a significant impact on European carbon prices and would flow directly to the carbon price in Australia.

All of these factors reinforce the view of SA Water that there is, and will remain for some time, considerable uncertainty around the future carbon price to the extent it is not possible to reliably estimate the likely carbon price from 2015/16 onwards. Also this range of factors, some of which could combine in unpredictable ways, means that it would be difficult to define an event that could be considered as a pass-through event, even though the cost implications could be material.

3.3.3.2 Chemicals

SA Water proposed an increase in the cost of chemicals above Consumer Price Index (CPI), due to the carbon dioxide (CO₂) equivalent factors of production associated with the supply of several chemicals used in water and sewerage treatment processes. SA Water determined these costs based on a report by the University of New South Wales³⁸, which studied the CO₂-equivalencies (CO₂-e) of all chemicals associated with the ADP; the report being commissioned in response to the desire for carbon neutrality of the ADP. The chemicals used in all other operations were matched against the reported list of chemicals used by the ADP, and their relative carbon intensities were inferred. SA Water assumed a 90% carbon price pass-through for chemical purchases. The proposed impact of the CPM on chemical purchases totals \$2.7 million over the three-year period.

However, ESCOSA considers that the cost of chemicals should not increase by more than CPI during the initial regulatory period for the following reasons:

- Despite the relatively emissions-intensive nature of chemical manufacturing, the Australian chemical industry is subject to competition from imports;
- SA Water can therefore choose to purchase chemicals from suppliers that do not pass on a carbon price.

³⁸ The report is confidential and has been provided to ESCOSA, it has not been published.

As a result, ESCOSA considers that SA Water's proposed carbon price pass-through for chemical purchases is not prudent and efficient.

SA Water does not accept ESCOSA's view that its proposed carbon pass-through for chemical purchases is not prudent and efficient because it could choose to purchase from suppliers that do not pass on a carbon price. ESCOSA supports its assertion solely on the basis that SA Water could import chemicals and thereby avoid any carbon price impact presumably because no carbon price would be charged to overseas chemical producers, and would need to have been based on an assumption that overseas producers would meet the technical standards required by SA Water.

The importation of chemicals for use in the water industry is more complex than simply substituting the same chemical from one chemical supplier for that of another given the nature and application of the chemicals used in the treatment process. All chemicals are required to be food grade (highest quality) and compliant with Australian Drinking Water Guidelines (ADWG) requirements for impurity levels.

SA Water recently completed a public tender (in late 2012) for all chemicals used in its treatment processes. Responses demonstrated that the product quality and quality procedures consistent with the foreign market suppliers did not meet the ADWG guidelines. The tender submissions showed major shortcomings in quality control and highlighted significant risks to security of supply given the additional links in the supply chain.

In order to meet the ADWG guidelines SA Water must put quality ahead of price. Quality issues are the key drivers in sourcing a chemical provider as failure to supply or meet quality standards would result in SA Water being unable to comply with standards applying to the provision of safe water and sewerage services throughout South Australia.

Further to this, recent tender submissions on another related supply revealed import price bids were 15%-35% more expensive than the Australian made product. This was due to dramatically increasing transport costs over previous years and, based on volumes consumed by an individual water company, means this is unlikely to be a viable option for SA Water.

Further, where an overseas supplier could meet the technical standards required and offered imported chemicals that did not attract a carbon price and the carbon price was the only cost differential between imports and locally produced chemicals (which it would not be as noted above in relation to freight costs) it does not automatically follow that the price offered would be discounted by the full carbon cost differential. It is more likely that such a supplier would only reduce its price sufficient to be lower than the local product.

Therefore, ESCOSA's view that "...the Australian chemical industry is subject to competition from imports. SA Water can therefore choose to purchase chemicals from suppliers that do not pass on a carbon price. Therefore, ESCOSA considers that SA Water's proposed carbon price pass-through for chemical purchases is not prudent and efficient."³⁹ is incorrect and is an unsupportable basis for its decision in the Draft Determination.

Further, it is evident that ESCOSA assumes that SA Water can source chemicals from imports. Implicit in this assumption is that the level of chemical importation has or will increase as a direct result of the CPM. ESCOSA has not provided evidence or data to support its position.

A review of Australian Bureau of Statistics (ABS) data by SA Water indicates there has been no discernible trend change in the level of import of a basket of chemicals that includes those used by SA Water.

ESCOSA further states that:

³⁹ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 93

Many of the chemical suppliers contracted by SA Water are not listed by the Clean Energy Regulator as liable entities and, therefore, are not liable to directly pay the carbon price. In addition, the chemicals supplied by the suppliers that are directly liable for the carbon price do not fall under the National Greenhouse and Energy Reporting Scheme list of greenhouse gas emitting chemicals and therefore do not attract a direct carbon price.

Any increase in the cost of chemicals used by SA Water as a result of the CPM comes from the cost attached to scope 2 emissions.⁴⁰

SA Water does not accept this view. SA Water's most significant supplier of chemicals is Orica. Orica is listed by the CER as a liable entity on the LEPID (Liable Entities Public Information Database).

While ESCOSA is not incorrect in its statement that the chemicals sourced from suppliers with a direct liability are not listed chemicals, it does not acknowledge that by-products of the production of chemicals that are supplied to SA Water are listed chemicals. Orica, in its Sustainability Report for 2012 states "...In 2012, emissions of nitrous oxide comprised 61 percent of Orica's scope 1 and 2 emissions...The majority of scope 1 CO2 emissions evolve from the production of ammonia at Kooragang Island..."⁴¹.

SA Water considers that ESCOSA's views are either unsupported or not correct and accordingly recommends that the real escalation of chemical costs associated with the CPM be reinstated in accordance with the position as outlined in RBP 2013.

3.3.4 Electricity

As noted above in the discussion under 3.3.3.1, the uncertainties surrounding a future carbon price apply most significantly to the carbon price pass-through to SA Water from electricity providers. SA Water considers that the adjustment mechanism proposed under 3.3.3.1 is an appropriate mechanism to ensure the current carbon price uncertainties neither advantage, nor disadvantage SA Water or its customers in relation to electricity costs from 2015/16.

Accordingly, SA Water recommends that the adjustment mechanism proposed under 3.3.3.1 is an appropriate mechanism to apply in relation to electricity costs from 2015/16.

3.3.5 Direct carbon liability – Bolivar fugitive emissions

As noted above in the discussion under 3.3.3.1, the uncertainties surrounding a future carbon price apply equally to the carbon price that SA Water will pay on fugitive emissions from its sewerage facilities, currently only applicable to the Bolivar sewerage facility. Also, there are additional uncertainties regarding the possible carbon costs associated with SA Water's fugitive emissions liabilities.

SA Water has, to date, reported its fugitive emissions and has budgeted on the basis that each of its metropolitan sewerage catchment areas are a separate facility under the relevant legislation and regulations. This position is supported by independent review and legal advice. Under this interpretation, SA Water expects that its future liability will continue to arise solely for emissions from the Bolivar sewerage facility.

Notwithstanding SA Water's interpretation, the CER has the discretion to make a determination on the question of facility definition, and could determine that all of SA Water's sewerage activities constitute a single facility. In that event, SA Water's liability and costs would be approximately double the current liability.

⁴⁰ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 93

⁴¹ Orica, *Sustainability Report for 2012*, 2012, p. 13

SA Water recommends that the adjustment mechanism proposed under 3.3.3.1 should also account for specific uncertainty associated with SA Water's fugitive emissions liability in relation to the discretion of the CER to make a determination on the extent of SA Water's liability.

3.3.6 Recommendation

For the reasons outlined above SA Water recommends:

- ESCOSA adopt the AER's final determination which will be available in April 2013 in time to be considered in ESCOSA's final determination;
- That the operating expenditure allowance for SAPN network charges be adjusted as outlined in table 28 to appropriately allow for the full cost of network charges that SA Water will incur;
- An agreed carbon price be set at \$18.69/t CO₂-e for the purposes of ESCOSA's current determination (in the absence of any robust reasonable predictor of the future carbon price, being the midpoint between ESCOSA's estimate and the estimate used by SA Water in its RBP);
- A retrospective adjustment mechanism be agreed to apply in the first year of the second regulatory period to correct for any difference between the agreed carbon price for 2015/16, and the actual carbon price applicable to SA Water;
- That the real escalation of chemical costs associated with the CPM be reinstated in accordance with the position as outlined in RBP 2013; and
- That the adjustment mechanism proposed under 3.3.3.1 should also account for specific uncertainty associated with SA Water's fugitive emissions liability in relation to the discretion of the CER to make a determination on the extent of SA Water's liability.

4 Pass throughs

SA Water considers that the Draft Determination's pass-through regime is deficient in that:

- The definition of what is a change in legal obligation event lacks clarity;
- ESCOSA has not adequately taken into account the fact that the allowable revenues have been determined on the basis of efficient and prudent expenditures for circumstances which are foreseeable and the timing and costs can be forecast; and
- The criteria to evaluate the financial impact on SA Water are inappropriate.

In addition, SA Water finds that the discussion in 12.3.1 *Statutory regime*⁴² is confusing and provides uncertainty as to what would be assessed as an "Extraordinary event".

As the preparation and consideration of pass-through applications incurs significant costs, SA Water seeks to resolve any possible confusion as to how a pass-through application will be assessed and proposes some changes to definitions. SA Water notes that ESCOSA also recognises that "the consideration of pass-throughs involves significant costs"⁴³.

4.1 Statutory Regime

In its Draft Determination of the pass-through mechanism, ESCOSA states that its revenue determination is governed by the regulatory regime established by the Initial Pricing Order, the *Water Industry Act 2012* and the *Essential Services Commission Act 2002* (ESC Act). However, in its assessment that "the statutory regime for this revenue determination does permit a very limited form of pass-through mechanism" ESCOSA appears to have limited its considerations to only the Initial Pricing Order and the ESC Act. SA Water contends that all three regulatory instruments must be read together.

Specifically, section 35(3) of the *Water Industry Act 2012* requires ESCOSA to comply with the requirements of any pricing order issued by the Treasurer "In addition to the requirements of section 25(4) of the *Essential Services Commission Act 2002*". In respect to regulatory regime relevant to determining the pass-through regime, section 25(4) of the ESC Act requires ESCOSA to have regard to:

(a) the particular circumstances of the regulated industry and the goods and services for which the determination is being made;

...

(c) the costs of complying with laws or regulatory requirements;

...

(f) the financial implications of the determination;

...

(h) any other factors that ESCOSA considers relevant.

⁴² ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16 Draft Determination*, February 2013, p. 138

⁴³ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16 Draft Determination*, February 2013, p. 136

SA Water considers that these specific requirements in section 25(4) of the ESC Act must be taken into account in determining the pass-through regime and the pass-through regime is not required to be of a “very limited form” as concluded by ESCOSA.

4.2 Change in legal obligation

As outlined above, SA Water considers that the pass-through regime should be unambiguous otherwise it is likely to lead to additional costs arising from non-conforming applications, which would be borne by SA Water, ESCOSA and ultimately by customers. SA Water understands that ESCOSA’s intent is to have definitions which are not as specific as those proposed by SA Water and in that way able to cater for unforeseen circumstances. However, SA Water considers that this intent should be balanced against the level of guidance needed for effective and efficient operation of the pass-through regime. Accordingly, SA Water believes that the Draft Determination’s definition of a “Change in legal obligation event”⁴⁴ needs to be changed to reduce its current level of ambiguity.

SA Water proposes that the definition be altered to:

Change in legal obligation event means the occurrence of an event under which a new legal obligation, or a change to an existing legal obligation, is placed on SA Water which has a material impact on the cost of provision of a drinking water retail service or a sewerage retail service. A change in legal obligation whilst not being limited to, will include changes:

- *in taxes;*
- *in regulatory standards;*
- *imposed by Ministerial direction under the Water Industry Act 2012 and the Initial Pricing Order;*
- *in regulatory codes, licences, guidelines and associated instruments; and*
- *In industry standards.*

4.3 Specific pass-through events

In RBP 2013⁴⁵, SA Water proposed two specific pass-through events being:

- Operation of the Adelaide Desalination Plant; and
- Management of water licences.

SA Water considers that these types of pass-through events are consistent with the approach adopted by ESCOSA in determining revenue allowances for forecast prudent and efficient capital and operating expenditures. This approach to determining revenue allowances does not take into account possible expenditures which may arise from events that cannot be foreseen or more relevantly, in respect to the proposed specific pass-through events, the timing and impacts of which cannot be quantified. Customers will benefit from this approach as they do not have to pay for expenditures that may or may not be incurred nor pay for expenditures which cannot be evaluated as efficient and prudent at the time of submission.

⁴⁴ ESCOSA, *SA Water’s Water and Sewerage Revenues 2013/14 – 2015/16 Draft Determination, Essential Services Commission Act 2002 – Part 3*, February 2013, p.3

⁴⁵ SA Water, *Regulatory Business Proposal 2013*, September 2012, p.155-157

SA Water considers that the above two specific events proposed in RBP 2013 would qualify as an Extraordinary Event as defined in the Draft Determination. However ESCOSA in its discussion⁴⁶ in respect to the statutory regime, states that the proposed Adelaide Desalination Plant event would not qualify as a pass-through event. SA Water is concerned with this apparent inconsistency in the Draft Determination's definition of an Extraordinary Event and the views expressed in the Draft Determination in respect to an Adelaide Desalination Plant event. More importantly, SA Water believes that its proposed specific pass-through events are the most effective way for customers to only have to pay for efficient and prudent expenditures.

SA Water proposes that the final determination incorporate both of SA Water's proposed specific pass-through events. If ESCOSA believes that such events would qualify as Extraordinary Events, this should be clearly stated in the final determination.

4.4 Major projects events

As outlined above in section 4.3 *Specific pass-through events*, the approach adopted by ESCOSA has been to determine allowable revenues based on forecast prudent and efficient capital and operating expenditures. That is, no allowance has been made for possible expenditures which may arise from events that cannot be foreseen nor for projects that may be required to proceed but the timing and impacts of which cannot be quantified at the time of a revenue determination.

As stated above, SA Water supports that approach to assessing forecast expenditures but believes that an effective pass through regime must be applied in tandem. SA Water's RBP 2013 proposed Major Projects Events which enable SA Water to recover its efficient and prudent costs of the delivery of major projects where the costs have not been included in the revenue determination. SA Water requests that the Major Projects Events be incorporated in the final determination.

4.5 The competitive market test

In the Draft Determination, ESCOSA defines three conditions, all of which must be satisfied otherwise it would proceed to reject a pass-through application. The conditions to determine if an event is accepted or rejected are whether or not the financial impacts of the pass-through event:

1. Are material
2. Could not otherwise have been controlled by SA Water (acting prudently and efficiently); and
3. Would be passed through in a competitive market.

SA Water accepts the first two conditions, subject to a reasonable definition of materiality, and submits that these two tests alone ensure that customers do not pay more than the increase in costs imposed on SA Water which are efficient and prudent.

In addition to the third condition not being needed, SA Water does not consider that it is appropriate as:

- Section 25(4) of the ESC Act requires ESCOSA to have regard to the particular circumstances of the regulated industry and the goods and services for which the determination is being made.
- A "competitive market" covers a large range of markets in which the competitive forces can vary substantially and thus responses to changes in costs can be responded to differently.

⁴⁶ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16 Draft Determination*, February 2013, p. 138

- A possible response in a competitive market to an increase in costs could be to withdraw from the market. However, SA Water provides essential services and cannot respond to an increase in costs by withdrawing its services or the availability of those services.
- It is too broad and vague to be applied effectively.

4.6 Recommendation

In light of the reasoning outlined above, SA Water recommends that the pass-through mechanism set out in RBP 2013 be adopted in its entirety due to its alignment with standard regulatory practice and the appropriate regard for SA Water's operating environment.

5 Impacts on compliance with Accounting Standards

In section 7.6.2 and 7.6.3 of ESCOSA's Draft Determination it proposes that proving costs and membrane replacement costs associated with the Adelaide Desalination Plant (ADP) should be capitalised, and not treated as operating expenditure. Advice from KPMG indicated that this is in conflict with the Australian Accounting Standards and advice from the Auditor General.

SA Water is unable to deviate from the Australian Accounting Standards.

Aside from the issues of compliance, this decision also results in a de facto efficiency gain, with similar impacts to customers as those previously outlined under section 1.1 of this document and discussed in more detail in chapter 3. As stated within that chapter, SA Water believes all proposed efficiency gains should be addressed by ESCOSA through one single operating efficiency target.

For these reasons, SA Water recommends that ESCOSA reconsider its position on the accounting treatment of these costs and that any efficiency gains be addressed under chapter 3 and in line with the recommendation contained within that section.

5.1 Proposed capitalisation of proving costs

In its Draft Determination ESCOSA states that:

The marginal cost of producing desalinated water over utilising River Murray water is therefore the true cost to consumers of running the desalination plant over the proving period, and should appropriately be capitalised, to match the benefit of avoided major repairs in later years.⁴⁷

The Draft Determination therefore classified \$35.8 million of operating expenditure related to the proving period of the ADP to capital expenditure. SA Water does not support this classification as it is inconsistent with Australian Accounting Standards, upon which all other classifications in the Draft Determination are based. The classification is also inconsistent with SA Water's Regulatory Asset Base as the operational proving periods for SA Water's existing assets have been expensed and are therefore not included in the Regulatory Asset Base.

SA Water plans to operate the ADP over a 24 month operational proving period, in accordance with the Design, Build, Operate and Maintain (DBOM) Contract and approvals from Cabinet. The operational proving period commenced on 12 December 2012 and will continue up to 12 December 2014 and is crucial to test the plant at various production levels, carry out required operational tests in the Operating and Maintenance Contract to assure long term plant reliability.

SA Water has sought independent expert advice from KPMG on the most appropriate classification of these costs under Australian Accounting Standards.

Based on KPMG's detailed analysis⁴⁸ KPMG has concluded that the capitalisation of costs to be incurred during the 2 year proving period from project handover on 12 December 2012 to 12 December 2014 would not be in accordance with Australian Accounting Standard (AASB) 116 Property Plant and Equipment, or the "concept of the accrual basis of accounting".

The basis for these conclusions, as set out in section 4.3 of Attachment 1 is summarised as follows: In accordance with AASB 116, the capitalisation of costs to the carrying amount of an item of property, plant and equipment (PP&E) ceases when the asset is in a condition and location ready for use as intended by management.

⁴⁷ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 62

⁴⁸ Attachment 1 SA Water - Accounting Advice – Capitalisation of ADP Costs

The ADP was fully commissioned and handed over to the Operator on 12 December 2012, at which point the plant continued to operate and produce water for sale. The proving costs which relate to the operating costs of the plant during the warranty/proving period of 2 years, are incurred subsequent to this date and as such would not be capitalised to the item of PP&E as initial costs.

SA Water would not recognise, in the carrying amount of the plant, any costs incurred subsequent to the date upon which the asset is in a condition and location ready for use as intended by management, unless they were to meet the recognition principles of AASB 116 paragraph 7, which are:

1. That it could be demonstrated that it was probable that future economic benefits would flow to SA Water; and
2. That the costs could be measured reliably.

Whilst it may be possible that future economic benefits in the form of savings on repair and maintenance costs could flow to SA Water, as a result of running the plant during the proving period and having these costs covered by the warranty, it is not necessarily probable.

ESCOSA has assessed the marginal cost of producing water from the ADP over the cost of sourcing water from the River Murray (the marginal cost) as being the cost to be capitalised. This marginal cost is entirely co-incidental to the value of any savings that may be secured. The savings (if any) would be repair and maintenance in nature. It is submitted that both the marginal cost and the potential value of any savings that may be secured would be difficult to measure reliably.

Furthermore this marginal cost is an operating cost and from an AASB116 perspective any decision to treat the cost as capital would likely result in the cost being considered abnormal from a capital perspective and therefore not eligible for capitalisation.

Based on independent expert advice from KPMG on the most appropriate classification of the proving costs under Australian Accounting Standards, SA Water recommends that the \$35.8 million of operating expenditure over the proving period be classified as operating expenditure.

5.2 Proposed capitalisation of membrane costs

In its Draft Determination ESCOSA states that:

Based on the above projected asset lives, ESCOSA believes that it is appropriate to treat membrane replacement costs as capex for regulatory purposes, rather than as opex. ESCOSA has therefore transferred the projected costs from opex to capex.⁴⁹

The Draft Determination therefore classified \$3.8 million of operating expenditure related to the replacement of reverse osmosis membranes to capital expenditure based on the lives of the membranes being long term. SA Water disagrees with this classification as it is inconsistent with Australian Accounting Standards, upon which all other classifications in the Draft Determination are based.

The ADP contains approximately 35,500 reverse osmosis membranes. The original purchase of these membranes is included as part of the capital fixed price construction contract. The average cost of an individual membrane is less than \$1,000.00.

These membranes are replaced over an indefinite period ranging from 5-7 years and are invoiced to SA Water via the monthly Operating and Maintenance Contract and are expensed as incurred.

⁴⁹ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 61

SA Water has informed ESCOSA that the exact life of the membranes cannot be accurately predicted and will depend on a number of factors including:

1. The level of pre-filtration of the raw seawater;
2. The level of membrane use (i.e. desalination plant usage levels);
3. Whether membranes are used for first or second pass within the plant; and
4. How the membranes are preserved during any extended shut down period.

SA Water has sought independent expert advice from KPMG on the most appropriate classification of these costs under Australian Accounting Standards.

Based on KPMG's detailed analysis⁵⁰ KPMG has concluded that the capitalisation of the cost of replacing reverse osmosis membranes would not be in accordance with Australian Accounting Standard (AASB) 116 Property Plant and Equipment, or the "concept of the accrual basis of accounting".

The basis for these conclusions, as set out in section 4.4 of Attachment 1 is summarised as follows:

In accordance with AASB 116, the day-to-day servicing costs of an item of Property Plant and Equipment should not be capitalised and should be expensed as incurred.

Given the relative insignificance of the costs of replacing all the membranes in relation to the overall plant cost (1.8% or \$33.2 million compared to the total ADP cost of \$1,824 million) and the relative insignificant cost of each individual membrane (less than \$1,000.00 per membrane), it is reasonable to conclude that the replacement of the membranes are representative of the day to day costs of servicing and whilst necessary for the effective operation of the plant, would not act to extend the overall life of the asset.

The timing of replacement of the membranes is impacted by a variety of factors and does not necessarily occur on a linear basis or in accordance with a set schedule. The membrane replacements are in the nature of day-to-day servicing consumable costs of an item of Property Plant and Equipment and should not be capitalised but rather be expensed as incurred.

Based on the insignificant cost of the individual membranes and the membranes in total (materiality), relative to the cost of the entire plant and the fact that the membranes will be replaced as required (by the operator) in order to maintain and service the plant as a whole, the replacement costs of the membranes are considered to be in the nature of ongoing repair and maintenance costs and would not be capitalised.

SA Water's approach to the treatment of these costs as operating expenditure and KPMG's confirmation of the above position is consistent with its approach as audited and verified by the Auditor General's Department over the last 5 years of auditing of the ADP accounts and transactions.

Based on this independent expert advice, SA Water recommends that the \$3.8 million of operating expenditure related to the replacement of reverse osmosis membranes be classified as operating expenditure.

5.3 Recommendation

Based on independent expert advice from KPMG on the most appropriate classification of the proving costs under Australian Accounting Standards, SA Water recommends that:

⁵⁰ Attachment 2 SA Water - Accounting Advice – Capitalisation of ADP Costs

- The \$35.8 million of operating expenditure over the proving period be classified as operating expenditure in line with Australian Accounting Standards; and
- The \$3.8 million of operating expenditure related to the replacement of reverse osmosis membranes be classified as operating expenditure in line with Australian Accounting Standards.

6 Allowances for capital investment

In preparing its draft determination ESCOSA engaged consultants, Cardno supported by WS Atkins, to provide expert advice on the prudence and efficiency of SA Water's capital (and operating) expenditure proposals. A sample of 15 projects and programs were examined in detail in undertaking this analysis. The sample examined covered over 50% of the proposed capital expenditure for the regulatory period.

Based upon the advice of Cardno, ESCOSA has determined that the vast majority of SA Water's proposed capital expenditure is both prudent and efficient, proposing that adjustments should only be made to 6 of the projects and programs. Two of the 6 proposed adjustments were identified by SA Water during the review process. SA Water recommends that 4 of the proposed adjustments proposed by ESCOSA be reversed or reviewed further due to the impact that the proposed reductions will have on SA Water's services to its customers.

ESCOSA's proposed adjustments are discussed in detail in the following sections.

6.1 Murray Bridge WWTP Upgrade

ESCOSA has determined that the upgrade of the Murray Bridge Wastewater Treatment Plant (WWTP) should be deferred to beyond the forthcoming regulatory period. This decision essentially defers the completion and commissioning of a new plant for up to a further 3 years from the December 2017 completion date as proposed by SA Water. This decision increases the risks for SA Water of odour complaints, of exceeding the plant's operating capacity and of flood damage that will need to be managed. ESCOSA has also not allowed a sufficient level of funding to continue development of the project, allowing only an amount in line with the Aldinga WWTP Capacity Upgrade Stage 2 which is a significantly smaller project with no land acquisition requirement.

SA Water considers that continued operation of the treatment plant on the existing site is not an efficient solution to address capacity pressures posed on the plant as a result of the amended development plan extending the township boundary and ultimate planned population numbers. The existing site's proximity to residential development, the physical layout constraints and its location within the River Murray floodplain are the significant factors in SA Water's proposal to relocate the plant to a new site.

In an independent submission to ESCOSA on 9 November 2012 the Environment Protection Authority (EPA) supported the "decommissioning of the current plant and construction of a new WWTP in a suitable location". The EPA's support for the project was based on the environmental risks including odour complaints due to the short separation distance to residents, lagoon collapse due to river bank slumping, consequences from failure of a lagoon only 8m from the river and potential failure of the disposal pipeline under the river.

In deferring major expenditure for this project, ESCOSA has allowed expenditure of only \$1.75 million to continue investigations leading to the development of alternative options to address the issues at the plant.

SA Water proposes to continue development of this upgrade project to enable the construction of the new plant to commence at the start of the 2016-2020 regulatory period to avoid further delays to the project. To achieve this outcome, key issues such as the identification and acquisition of a suitable site, stakeholder consultation and obtaining the necessary approvals for the new plant will need to be completed during the 2013-2016 regulatory period.

SA Water has continued to investigate this project subsequent to the submission of the regulatory proposal. To complete the proposed outcomes and obtain all project approvals during the 2013-2016 regulatory period, SA Water estimates that expenditure of approximately \$5.7 million will be required.

The land acquisition costs are estimated at \$1.4 million.

The deferral of the project to the 2016-2020 regulatory period will necessitate an additional \$1 million expenditure to mitigate operational risks experienced by the existing plant. This expenditure will provide short term odour management infrastructure, manage operational reliability of the recycled water pumps and mains and provide additional treatment capacity to accommodate township growth until the new plant is fully operational at the end of 2020. The short operating life of these additional works (written off when the plant is decommissioned) will impose further pressures on future sewerage charges.

The revised funding requirements to enable the prudent and efficient upgrade of the Murray Bridge WWTP are summarised in Table 9 below.

Table 9 Forecast of expenditure for the Murray Bridge WWTP project

\$m (\$Mar 12)	2013/14	2014/15	2015/16	Total
Investigation and project development	0.7	2.0	3.0	5.7
Land acquisition	0.1	0.2	1.1	1.4
Works at current plant	0.2	0.5	0.3	1.0
Total	1.0	2.7	4.4	8.1
Draft ESCOSA Allowance	0.3	0.3	1.3	1.8
Increase required	0.7	2.4	3.1	6.3

6.2 Mechanical & Electrical Plant Renewal – Treatment Plants

The reductions proposed by ESCOSA for this program in chapter 7 of its Draft Determination will increase the risk of interruptions to water and wastewater services.

The program for renewal of mechanical and electrical plant within the treatment plants is required to maintain equipment, in both water and sewage treatment plants, such as chlorinators, chemical dosing systems (associated with treatment plants), switchboards, flow meters, pumps and aeration systems. The performance of this equipment is critical to the overall performance of the treatment plants and hence to SA Water's obligations to meeting the health requirements for potable water and the environmental requirements for the sewage treatment plants.

ESCOSA notes that SA Water's proposed investment levels equate to implied average asset lives which are reasonable for assets of this type. As stated within RBP 2013, SA Water proposed significant increases in expenditure for this program compared with prior years. These increases are necessary to address a backlog of expenditure due to the focus on water security projects in recent years and to provide a rate of renewal which is sustainable for these assets in the longer term.

ESCOSA's decision to reduce the proposed level of expenditure for this program has the potential to expose customers to a higher risk of service interruptions and incidents. Therefore, SA Water recommends that this reduction be reversed, as indicated in table 10, in order to allow SA Water to prudently manage the risk of interruptions to water and sewerage services.

Table 10 Mechanical & Electrical Plant Renewal – Treatment Plants

\$m (\$Mar 12)	2013/14	2014/15	2015/16	Total
ESCOSA adjustment	-1.3	-1.8	-2.2	-5.3
Increase required	1.3	1.8	2.2	5.3

6.3 Mechanical & Electrical Plant Renewal – Networks

The 20% reduction in expenditure for this program proposed by Cardno and accepted by ESCOSA is likely to result in an increase in the frequency of incidents with significant customer impact.

This asset program principally provides for the renewal of water pump stations, sewage pump stations, chemical dosing stations (associated with pipe networks) and similar mechanical and electrical equipment in the water and sewerage networks. Failures and breakdowns of this equipment can significantly and directly impact on services to SA Water's customers. For example, failures of sewage pumping stations will result in environmental overflows.

SA Water provided evidence that supported the level of expenditure that was proposed in RBP 2013. ESCOSA's consultant Cardno notes in its report "that the proposals are (in numerical terms) not excessive" and that "it is probable that current and historic levels (of expenditure) are unsustainable". Despite this recognition in support of the proposed program, ESCOSA imposed a 20% reduction without justification.

SA Water recommends that this reduction be reversed, as indicated in table 11, in order to allow SA Water to prudently manage the risk of failures and breakdowns of mechanical and electrical plant within the water and sewerage networks.

Table 11 Mechanical & Electrical Plant Renewal – Networks

\$m (\$Mar 12)	2013/14	2014/15	2015/16	Total
ESCOSA adjustment	-3.2	-3.6	-2.3	-9.0
Increase required	3.2	3.6	2.3	9.0

6.4 Structures Renewal - Networks

The structures renewal program for networks provides for renewal of structures such as pumping stations (over 1,000 in total), storage tanks (more than 700), dosing stations, bores and other associated structures in both the water and sewerage networks.

One of the principal objectives of this program is to avoid major failures with these structures. Major failures of structures have the potential to be extremely disruptive to services to customers, often requiring the structure to be taken out of service for long periods to enable repairs to be carried out effectively.

The capital reductions applied by ESCOSA to this program impose significant risks to SA Water and is likely to lead to failure incidents with the potential to impact significantly on customer services. In the Draft Determination, ESCOSA notes that the expenditure proposed by SA Water is an increase on that demonstrated across the previous seven years and that there is no evidence of significant failure incidents as a consequence of the lower levels of investment. ESCOSA engaged technical experts to assess the appropriate level of expenditure for this program. Unfortunately no evidence has been provided by ESCOSA or its consultants as to the appropriate level of expenditure and a simple comparison with previous expenditure without reference to criticality and asset condition was provided as the only means of justification for reducing the expenditure to this critical program of works.

This reduction in expenditure amounts to a "run to failure" approach whereby SA Water will be required to run assets to failure instead of replacing them on a strategic, incremental schedule in order to avoid catastrophic failures which can cause long and costly disruptions to customers' services.

Industry best practice confirms that this "run to failure approach" suggested by ESCOSA is not a prudent strategy for the management of structures due to the impact on services and the higher costs of this strategy.

SA Water recommends that this reduction be reversed as indicated in table 12 to enable SA Water to prudently renew structures based on their condition.

Table 12 Structures Renewal – Networks

\$m (\$Mar 12)	2013/14	2014/15	2015/16	Total
ESCOSA adjustment	-1.0	-0.9	-0.9	-2.8
Increase required	1.0	0.9	0.9	2.8

6.5 Recommendation

SA Water recommends that ESCOSA reconsider its approach for allowable capital expenditure and amend the Draft Determination to:

- Increase the development funding for the upgrade of the Murray Bridge WWTP by \$6.3 million to enable the prudent and efficient development of the project in time for delivery in the next regulatory period; and
- Increase the expenditure allowed for the Mechanical and Electrical Plant Renewal – Treatment Plants program by \$5.3 million to allow SA Water to prudently manage the risk of interruptions to water and sewerage services; and
- Increase the expenditure allowed for the Mechanical and Electrical Plant Renewal – Networks program by \$9.0 million to allow SA Water to prudently manage the risk of failures and breakdowns of mechanical and electrical plant within the water and sewerage networks; and
- Increase the expenditure allowed for the Structures Renewal – Networks program by \$2.8 million to enable SA Water to prudently renew structures based on their condition.

7 Exclusion of Valuer General's fees

In its Draft Determination ESCOSA states that:

SA Water purchases property valuation data from the Valuer General. These data provide SA Water with the capital value and land use of properties, which are then used to determine water charges (commercial only) and sewerage charges. Although the data are purchased annually, SA Water receives a 'data feed' on a daily basis.

.....

ESCOSA has decided that the costs of the Valuer General fees should only be allowed to be passed on to customers once during the initial regulatory period. This decision is consistent with Australian Standard AASB 116 (Property, Plant and Equipment)¹²³ and with practice in other jurisdictions (e.g. 3-5 years is the standard for infrastructure in Queensland and land valuations are only carried out every two and three years in Victoria and the Northern Territory respectively).⁵¹

The Draft Determination therefore removed \$8.5 million of operating expenditure from SA Water's allowable operating expenditure due to ESCOSA's view that general property price increases/decreases in any one year would not significantly affect the distribution of sewerage charges or the distribution of commercial water charges and that SA Water should investigate purchasing less costly services from the Valuer General.

SA Water disagrees with the removal of these costs as the information provided by the State Valuation Office (SVO) is of critical importance to SA Water's billing processes and to realise the cost savings suggested by ESCOSA would require SA Water to move away from current billing practices and to make changes to its billing systems and processes. Changes to SA Water's billing systems would take significant time and could not be achieved within the first regulatory period. No costs associated with these required changes have been included in RBP 2013 or ESCOSA's Draft Determination.

7.1.1 State Valuation Office (SVO) information

SA Water's billing system is property based. Information provided by the SVO is at the core of SA Water's billing system and critical to the integrity of SA Water's billing data. SA Water creates billing accounts based on property information provided by the SVO. The capital value information is only one element of the data provided by SVO. More importantly the SVO provides data on:

- Newly created property assessments – SA Water's billing system is reliant on this information to create accounts and commence billing for these new properties. There are about 13,000 newly created properties a year generating around \$6.5 million in revenue. Further, whilst SA Water's continues to rate on abuttal, the SVO information is the only source of property information available to identify billable properties;
- Cancelled properties – cancelled properties typically occur as a result of subdivisions. Without this information SA Water would continue to rate non existing properties. There are around 5,000 cancelled properties annually; and
- Changes in property data (i.e. land use codes) – SA Water does not have its own system for inspecting properties to determine whether they are used for residential, commercial or other purposes. SA Water is reliant on the SVO for this information.

⁵¹ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 102 - 103

SVO information is provided on a daily basis ensuring SA Water has an up to date list of accounts to bill and the information relating to billable properties is accurate.

The capital value information as recognised by ESCOSA is used by SA Water to calculate sewerage charges for all properties and water supply charges for commercial properties. Currently property capital values are updated on an annual basis. Updating the value on a less frequent basis could disadvantage customers:

- During years when capital values are decreasing (customers would be aware of the decrease in capital value due to the value being displayed on council rate notices).
- By not updating capital values on an annual basis there would be a more significant step change in capital values for individual customers.
- Customers are entitled to object to the capital value of their property. Currently SA Water accounts constitute a notice of valuation under the Valuation of Land Regulations 2005. Should SA Water choose not to update the capital values it would follow that the account would no longer constitute a notice of valuation and infringe on a person's right to object to the capital value of their property.

7.1.2 Ability to realise savings

ESCOSA has stated that utilising capital value data less frequently would enable savings of \$8.5 million over the regulatory period⁵².

The SVO sets charges for the provision of capital value information in accordance with the Valuation of Land Regulations 2005, on a cost recovery basis.

As indicated above SA Water would continue to rely on information provided by the SVO for a wide range of purposes to enable it to continue to bill accurately, even if it chose not to obtain capital value information. The SVO has indicated that it would continue to charge SA Water for the provision of this information, which under the cost recovery concept could be the same charge as applied for the provision of capital values.

SA Water is not aware of any other provider of property based information that could be used to substitute SVO information.

For these reasons it is not expected that SA Water would be able to realise the \$8.5 million saving put forward by ESCOSA in its Draft Determination.

7.1.3 Detachment from the equity principle

By using less frequent valuations, there is a detachment from the equity principles supported by the Government (which is acknowledged in ESCOSA's Draft Determination). Current and proposed sewerage rate methodology is based on the property tax principle that capital values are a reasonable indicator of ability to pay (with concessions available where this is not the case) and/or of the contribution to the value of the property by the service provided.

By updating capital values less frequently ESCOSA's proposal transfers the burden of the above principle to other ratepayers. For example, when capital improvements and changes of land use are not captured, stable lower valued properties are disadvantaged, subsidising properties that are being improved and enhanced in the periods between valuations being purchased.

⁵² ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 103

7.1.4 Legal complications

SA Water sought advice from the Valuer General's Office on the proposal contained within ESCOSA's Draft Determination. The Valuer General's Office advised SA Water that ESCOSA's proposal will give rise to significant legal issues for SA Water which will prevent the realisation of the savings quoted by ESCOSA and furthermore, create additional legal issues as detailed below.

7.1.4.1 Use of proprietary information without recompense

Consideration should be given to the continual use of the 2012 valuation data in the future without payment to the State Valuation Office as the proprietary interest is being ignored and continued use of this information would be open to challenge.

7.1.4.2 Carrying the risk of disputes

As indicated above at 7.1.1 customers are entitled to dispute their capital land value. Under ESCOSA's proposed approach SA Water would be required to take on the responsibility for these grievances, manage any court action and meet the associated costs. In addition, the State Ombudsman may raise concerns should SA Water customers lose legal rights as a result of this proposal.

7.1.5 Billing options

SA Water has not considered or investigated alternative billing options. Changes to SA Water billing practices would almost certainly require significant changes or replacement of its current billing system. Based on the experience of interstate water utilities such changes to billing systems could take up to 5 years to implement and cost between \$30 million and \$65 million. This is not achievable within the first regulatory period and no associated costs have been included in RBP 2013 or ESCOSA's Draft Determination.

7.1.6 Recommendation

Based on evaluating the total impact of a change to only updating land valuations once over the regulatory period, SA Water confirms its view that it is prudent and efficient to continue the current practice of purchasing land valuation data services from the Valuer General and recommends that the removal of the associated \$8.5 million of operating expenditure from SA Water's allowable operating expenditure be reversed.

SA Water further recommends that the contemplation of billing reforms such as this occur as part of the Treasurer's Inquiry with close consultation and input from SA Water in order to properly and fully understand all practical issues and cost impacts.

8 Revenue control, allowable revenue, pricing and demand

SA Water has a small number of significant concerns with the form of revenue control, allowable revenue, pricing references and demand figures used throughout the Draft Determination as well as a number of minor concerns which it believes can be resolved through discussions with ESCOSA.

SA Water details these issues throughout this chapter and makes relevant recommendations at 8.5.

8.1 Allowable Revenue

SA Water is seeking clarification from ESCOSA as to the approach taken for the calculation of allowable revenue. The Draft Determination has not followed standard regulatory practice⁵³, or ESCOSA's own stated methodology, as outlined in its Statement of Approach, for the calculation of the allowable revenue based on the building block approach⁵⁴. In particular, for calculation of the average revenue ESCOSA has used a water demand of 190GL per annum rather than the forecast figure accepted by ESCOSA based on expert opinion from the CIE. The CIE recommended a demand forecast of around 180GL per annum (i.e. 178GL in 2013-14).

The Draft Determination notably lacks detailed discussion on the total allowable revenue and an associated initial regulatory asset value. These details are necessary for SA Water to perform an informed analysis of ESCOSA's proposal. For this reason, SA Water has been unable to assess the suitability of ESCOSA's proposal with regard to the Treasurer's pricing order⁵⁵.

Further comments on ESCOSA's approach to setting the revenue control and the revenue control impacts on SA Water's allowable revenue are detailed below for ESCOSA's consideration and further discussions.

8.1.1 Implied allowable revenue calculation

SA Water has attempted to analyse the proposal put forward by ESCOSA in its Draft Determination on the basis of the information provided. From this information SA Water has summarised ESCOSA's calculations in table 13 to table 15 below.

Table 13 outlines the calculation for the base revenue cap as detailed in table 9-1 of the Draft Determination. The base revenue cap appears to have been calculated in line with the 190GL demand forecast used for the 2012-13 pricing decision, not the CIE recommended forecast of demand of around 180GL per annum (i.e. 178GL in 2013-14).

⁵³ NWI refers to the building blocks as upper bound pricing. "**upper bound pricing** –the level at which, to avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or tax equivalent regimes (TERs), provision for the cost of asset consumption and cost of capital, the latter being calculated using a weighted average cost of capital WACC." Intergovernmental Agreement on a National Water Initiative, Schedule B(i): Glossary of Terms.

⁵⁴ ESCOSA, *Economic Regulation of SA Water's Revenues, Statement of Approach*, July 2012

⁵⁵ "*The Determination must **only determine the revenue** which may be derived from the provisions of such services.*" Treasurer, Pricing Order, September 2012, p. 2

Table 13 Draft Determination base revenue cap calculation (Dec 2012 dollars)

	2013-14	2014-15	2015-16
Demand (GL), as per 2012/13 pricing decision	190.0GL	190.0GL	190.0GL
Revenue as per 2012/13 pricing decision (\$M)	\$826.1	\$827.6	\$829.0
Base revenue cap - average revenue per kL (as per table 9-1)⁵⁶	\$4.348/kL	\$4.356/kL	\$4.363/kL

Under the methodology applied by ESCOSA, the base revenue cap is the opening reference point for the Draft Determination's calculation of the water revenue cap. As outlined in table 13 and table 14, the adjustments due to changes in operating and capital expenditure as cited by ESCOSA are applied against the base revenue cap to determinate the draft revenue cap, and ultimately the maximum allowable revenue.

This is in contrast to general regulatory practice, where adjustments to capital and operating expenditure are applied to the asset roll forward and then the building block calculation. The outcome of the building block calculation is the allowable revenue. The price control would then be derived from the allowable revenue and forecast demand.

Table 14 illustrates that the Draft Determination's total operating and capital expenditure adjustments (adjustments) as outlined in table 9-4 of the Draft Determination has been divided by the revised demand forecast to calculate an "adjustment" per kL (as per table 9-5 of the Draft Determination).

Table 14 Draft Determination's revenue adjustment/kL calculation (Dec 2012 dollars)

	2013-14	2014-15	2015-16
Demand (GL), as per Draft Determination	178.1GL	180.6GL	183.1GL
Adjustment (as per table 9.4)⁵⁷	-\$43.9/kL	-\$45.4/kL	-\$46.6/kL
Revenue adjustment per kL⁵⁸	-\$0.246/kL	-\$0.251/kL	-\$0.255/kL

Table 15 below outlines the resulting revenue cap, which is the difference between the base revenue cap and the revenue adjustment per kL.

⁵⁶ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 109

⁵⁷ *Ibid*, p. 113

⁵⁸ *Ibid*, p. 114

Table 15 Implied Draft Determination's unsmoothed allowable revenue calculation (Dec 2012 dollars)

	2013-14	2014-15	2015-16
Base revenue cap - average revenue per kL (as per Table 9-1)⁵⁹	\$4.348/kL	\$4.356/kL	\$4.363/kL
Revenue adjustment per kL⁶⁰	-\$0.246/kL	-\$0.251/kL	-\$0.255/kL
Revenue cap⁶¹ - average revenue per kL	\$4.102/kL	\$4.104/kL	\$4.109/kL

Following the logic of the Draft Determination to its conclusion, SA Water believes that the Draft Determination is seeking for allowable revenue to be the average revenue cap at \$4.10 (in Dec 2012 dollars) multiplied by the revised demand, i.e. 178GL⁶² in 2013/14.

On this basis, table 16 calculates an unsmoothed allowable revenue outcome.

Table 16 Implied Draft Determination's unsmoothed allowable revenue calculation (Dec 2012 dollars)

	2013-14	2014-15	2015-16
Revenue Cap⁶³ - average revenue per kL	\$4.102/kL	\$4.104/kL	\$4.109/kL
Demand, as per Draft Determination (as per table 6-5)⁶⁴	178.1GL	180.6GL	183.1GL
Unsmoothed allowable revenue (\$M)	\$730.5	\$741.1	\$752.4

As per normal regulatory practice the Draft Determination quoted a smoothed average revenue cap.

Table 17 outlines that the unsmoothed allowable revenue sums to \$2 billion across the three years. After smoothing, the allowable revenue will also sum to \$2 billion across the three years.

Table 17 Implied Draft Determination's smoothed allowable revenue calculation (Dec 2012 dollars)

	2013-14	2014-15	2015-16
NPV* of unsmoothed allowable Revenue (\$M)	\$2,002		
Smoothed average revenue cap	\$4.105/kL	\$4.105/kL	\$4.105/kL
Smoothed allowable revenue (\$M)	\$731.10	\$741.21	\$751.63
Smoothed NPV (\$M)	\$2,002		

* Where NPV is the net present value of the allowable revenue, and has been discounted at 5.42%

Based on the smoothed allowable revenue outcomes, as calculated above, this section outlines what SA Water assumes to be the outcome from the Draft Determination.

⁵⁹ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 109

⁶⁰ *Ibid*, p. 114

⁶¹ *Ibid*.

⁶² *Ibid*, p. 44

⁶³ *Ibid*, p. 114

⁶⁴ *Ibid*, p. 44

Table 18 below shows the difference in the revenue forecast at the time of the 2012/13 pricing decision compared to the smoothed allowable revenue. It also shows the “adjustment” in operating and capital.

Table 18 also calculates the additional losses in revenue, over and above the loss in revenue that is associated with ESCOSA’s “adjustment”. These additional losses in revenue are not disclosed or explained in the Draft Determination however, SA Water has discussed the possible causes in the sections below.

Table 18 Implied changes in allowable revenue (Dec 2012 dollars)

	2013-14	2014-15	2015-16
Change in Revenue from 2012/13 Pricing Decision (\$M)	-\$95.6	-\$86.4	-\$76.7
Adjustment (\$M)	-\$43.9	-\$45.4	-\$46.6
Additional loss in revenue (\$M)	-\$51.7	-\$41.1	-\$30.1

It is unclear why the Draft Determination has not disclosed or discussed this additional reduction in revenue particularly given ESCOSA has stated in its Statement of Approach that only changes in capital and operating expenditure would impact revenue:

*The Commission’s revenue determination will therefore only affect the amount of revenue to be earned by SA Water to the extent that SA Water’s proposed capital and operating expenditure is adjusted by the Commission.*⁶⁵

The additional losses in revenue over and above that disclosed in the Draft Determination appear to stem from two interrelated issues which are discussed below.

8.1.1.1 Building block

It is general regulatory practice for allowable revenue to be based on costs faced by the entity, as per the building block approach. ESCOSA stated in its Statement of Approach:

*...the Commission will use a building block methodology to determine the level of revenue that SA Water will require to efficiently deliver drinking water and sewerage services to customers. This methodology is commonly used by economic regulators, both in other Australian jurisdictions and internationally, to determine revenues.*⁶⁶

Using this approach, once the revenue requirement is set in absolute terms, an average revenue per kL (if required) and prices are then calculated based on the forecast level of demand. Demand is always reset for a new determination based on the best available information. ESCOSA has specifically requested updated demand forecasts as prices would be set on these forecasts:

*It is important that SA Water provides the Commission with accurate forecasts of future demand, as this will establish the level at which prices must be set to recover the required revenue to fund the business.*⁶⁷

SA Water considers that if ESCOSA had followed the building block approach as it stated in its Statement of Approach and estimated an initial RAB, then this additional loss in revenue would not have occurred.

⁶⁵ ESCOSA, *Economic Regulation of SA Water’s Revenues, Statement of Approach*, July 2012, p. 24

⁶⁶ Ibid, p. 21

⁶⁷ Ibid, p. 22

8.1.1.2 Inconsistent application of demand (dominators)

In addition to the above, the Draft Determination appears to have applied an inconsistent application of demand by using 190GL to calculate the base revenue cap but then using the revised level of demand for the remaining calculations.

SA Water suggests a more consistent approach would be to apply only the revised demand outcomes. Tables 19 to 21 illustrate the impact of this modification in approach on the allowable revenue.

Table 19 calculates a modified base revenue cap, using the updated demand forecast.

Table 19 Modified base revenue cap calculation (Dec 2012 dollars)

	2013-14	2014-15	2015-16
Demand (GL)	178.1GL	180.6GL	183.1GL
Revenue as per 2012/13 pricing decision (\$M)	\$826.1	\$827.6	\$829.0
Modified base revenue cap - average Revenue per kL	\$4.638/kL	\$4.583/kL	\$4.528/kL

Table 20 calculates the modified revenue cap based on the adjustment as per table 15 above and the modified base revenue cap in table 19.

Table 20 Modified revenue Cap calculations (Dec 2012 dollars)

	2013-14	2014-15	2015-16
Modified base revenue cap - average revenue per kL	\$4.638/kL	\$4.583/kL	\$4.528/kL
Revenue adjustment per kL⁶⁸	-\$0.246/kL	-\$0.251/kL	-\$0.255/kL
Modified revenue cap	\$4.392/kL	\$4.332/kL	\$4.273/kL

Table 21 applies the modified outcomes to the new forecast demand to calculate modified unsmoothed allowable revenues.

Table 21 Change in allowable Revenue Calculation (Dec 2012 dollars)

	2013-14	2014-15	2015-16
Modified unsmoothed allowable revenue (\$M)	\$782.2	\$782.2	\$782.4
Change in revenue (from 2012-13 pricing decision) (\$M)	-\$43.9	-\$45.4	-\$46.6

Table 21 shows that the change in the allowable revenue is the same as the adjustments outlined in table 14 following ESCOSA's initial approach.

As a result, this consistent approach means the allowable revenue only changes because of changes in operating and capital expenditure, which appear to be closer to the desired outcome as set out in ESCOSA's Statement of Approach.

For completeness, table 22 smooths the outcomes of table 20.

⁶⁸ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p. 114

Table 22 Smoothing of modified allowable revenue (Dec 2012 dollars)

	2013-14	2014-15	2015-16
NPV* of allowable revenue (\$M)	\$2,114		
Smoothed average revenue cap	\$4.334/kL	\$4.334/kL	\$4.334/kL
Smoothed allowable revenue (\$M)	\$771.9	\$782.6	\$793.6
Smoothed NPV (\$M)	\$2,114		

* Where NPV is the net present value of the allowable revenue, and has been discounted at 5.42%

An alternative method is illustrated in table 23. This method is more akin to a building block approach and standard regulatory practice in that it sets allowable revenue first, and the control second. The adjustment is applied to the base revenue (in absolute dollars) to calculate the unsmoothed allowable revenue. This outcome is consistent with table 21. The updated demand forecast is then applied to calculate the revenue cap, which is consistent with table 20.

Table 23 Alternative allowable revenue calculations (Dec 2012 dollars)

	2013-14	2014-15	2015-16
Revenue as per 2012/13 pricing decision (\$M)	\$826.1	\$827.6	\$829.0
"Adjustment" as per table 9.4 (\$M)	-\$43.9	-\$45.4	-\$46.6
Modified allowable revenue (\$M)	\$782.2	\$782.2	\$782.4
Demand (GL)	178.1GL	180.6GL	183.1GL
Modified unsmoothed revenue cap	\$4.392/kL	\$4.332/kL	\$4.273/kL

8.2 Pricing

Under the Treasurer's pricing order, ESCOSA was asked to set allowable revenue only with SA Water to set prices based on the final allowable revenue.

SA Water did not propose a change in price in RBP 2013 as the Treasurer was yet to determine an initial regulatory asset base (RAB), which is a vital input into a building block calculation of allowable revenue and prices.

However, ESCOSA, in its Draft Determination, performed calculations without knowledge of the initial RAB and stated that "overall real water and sewerage prices fall by around 3.3% under this Draft Revenue Determination"⁶⁹.

In line with its inability to reference pricing impacts in RBP 2013, SA Water is also unable to confirm the changes in prices as outlined in the Draft Determination as the Treasurer is yet to set the initial RAB.

SA Water also notes that while the final prices will take into account the allowable revenue (and the revenue cap) as determined by ESCOSA, there will also be a number of other factors that are required to be taken into account before prices can be set.

⁶⁹ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination, Statement of Reasons*, February 2013, p. 2

The Draft Determination indicates that an additional review of interstate pricing could be undertaken to inform the final determination⁷⁰. Conduct of further review which influences, or has the potential to influence, the final determination without application of the transparent, public consultation process amounts to procedural unfairness and is not in line with good regulatory practice. Relevant stakeholders should be afforded the opportunity to review the approach, results, outcome and provide relevant comments prior to a regulator taking these results into consideration when making a determination.

SA Water recommends that ESCOSA:

1. Apply the building block approach originally indicated by it in its Statement of Approach or the alternative approach set out above;
2. Maintain consistent use of the independently confirmed demand forecasts; and
3. Provide relevant stakeholders the opportunity to comment on any material influencing the outcome of the final determination that has not been available for review at public consultation of the Draft Determination.

8.3 Form of revenue control

The Draft Determination proposes an average revenue control for water and sewerage services broadly consisting of:

1. Maximum allowable revenue for the provision of sewerage retail services divided by the forecast number of customers; and
2. Maximum allowable revenue for the provision of drinking water retail services divided by the forecast volume of drinking water sales.

This is in contrast to SA Water's proposal which had an allowable revenue control for water services, with an adjustment mechanism that allowed variation in revenue greater than 1% to be "banked". This approach was proposed in order to provide price stability for customers. Where the bank is greater than 1% of the allowable revenue over the period, the allowable revenue in the next determination would be adjusted to account for the balance remaining in the bank, meaning SA Water neither benefited nor was disadvantaged by any variations from the demand forecasts which equated to a greater than 1% variation from the maximum allowable revenue.

With regard to sewerage it was simply proposed that a revenue cap form of control be applied as this service is not susceptible to changes in weather and demand and the risks that resided with SA Water are in line with industry practice.

Whilst the Draft Determination's proposed average revenue control for sewerage services is different to the control proposed by SA Water, SA Water accepts this form of control for sewerage services.

However, SA Water has some concern about the average revenue control proposed for water retail services as outlined in the following sections.

8.3.1 Restatement of demand and prices for water services

Integral to the form of control proposed in the Draft Determination is that in determining tariffs for an upcoming year SA Water is required to update demand and customer forecasts and associated prices to achieve the average revenue per kilolitre target, as outlined in the Draft Determination:

⁷⁰ Section 11.3.1.4, page 132 of the Statement of Reasons states: "For example, the Commission has previously noted that South Australian water and sewerage prices are high relative to those of other Australian jurisdictions."

- SA Water will be required to include in the statement its forecasts of drinking water sales (by pricing tier), and forecast drinking water and sewerage customer/connection numbers, to enable a forecast revenue amount for drinking water and sewerage services to be calculated from tariffs. **Those forecasts must be based on the best evidence available at the time of preparing the statement.**
- The statement must demonstrate that the average revenue that results from the proposed tariffs and forecasts is no greater than the average revenue cap established under the Commission's Revenue Determination.⁷¹

Although little detail on methodology and application has been provided within the Draft Determination, ESCOSA has outlined three key objectives for its selection of the form of control, which are:

- SA Water to bear demand risk⁷²;
- Price stability⁷³; and
- Stop over investment⁷⁴.

SA Water requested further information from ESCOSA on how this control will work in practice in order to make its assessments contained within this response. The examples provided illustrate that in determining prices for each year:

1. If there is a change in the forecast for customer numbers, but no change in demand, then the allowable revenue remains stable, and prices will need to adjust – i.e. increases in customer numbers result in reductions in prices (as the revenues from the increased fixed charge is required to be offset by a reduction in prices);
2. If there is a change in demand, but no change in customer numbers, then allowable revenue will change and price will also need to change – i.e. increases in demand per customer results in increases in prices (as increased prices will be required to allow total revenues to reach that required by the average revenue control);
3. If there is a change in customer numbers and demand changes in proportion (i.e. no change to the demand per customer), then the allowable revenue will change but the changes in customer numbers offsets the change in demand resulting in no changes in price.

While to a certain extent changes in customer numbers will flow through to changes in demand, implying little impact on prices over the determination period, in practice changes in customer numbers have been a very minor driver of changes in demand over the last 10 years.

Fluctuations in customer numbers are generally small and it is unlikely that there would be a significant variation in customer numbers (i.e. likely to be within 0.2% of forecast, with a maximum change of 0.5%).

Based on ESCOSA's demand model, and as per example 3 above, any changes in customer numbers will most likely be offset by changes in demand limiting impacts on prices, providing there are no other factors impacting demand in tandem.

⁷¹ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination, Statement of Reasons*, February 2013, p. 115

⁷² Ibid, p. 24

⁷³ Ibid, p. 28

⁷⁴ Ibid.

In contrast, water demand is currently very unstable due to the impacts from significant changes in prices, restrictions and changes in customer behaviour over the last 10 years. ESCOSA has acknowledged this instability⁷⁵. It is therefore conceivable that forecasts for demand could fluctuate by over 4% (approximately 6GL).

SA Water notes that even minor changes in assumptions and inputs used to calculate demand can result in significant changes in pricing impacts for customers.

Therefore, under ESCOSA's chosen revenue control the most likely outcome during the regulatory period is that, as per example 2 above, demand (per customer) forecasts will fluctuate leading to changes in prices.

The average revenue per kilolitre under the current pricing structure is about \$3.10. That is, when demand decreases (without any changes in customer numbers) SA Water is subjected to a reduction in revenue of about \$3.10/kL. However, the average revenue per kilolitre control would require SA Water to reduce revenue by \$4.10/kL.

To reduce revenue by this additional \$1.00 per kilolitre requires the price for water services to decrease. This outcome would result in additional reductions in revenue to SA Water, over and above the reductions in revenue that would occur naturally due to decreases in sales (as referred previously). The control appears to have a significant amplification effect.

Conversely, when demand increases SA Water could increase prices to ensure achievement of the \$4.10 per kilolitre target.

The result being that the control seems to exaggerate the cost to customers due to changes in demand rather than reducing them, resulting in unnecessary price instability for customers and perplexing pricing outcomes.

8.3.2 Demand risk

The Draft Determination has stated that SA Water should bear demand risk, however it has not clarified whether SA Water should bear short term fluctuations in demand risk or permanent variations in demand.

SA Water agrees that short term fluctuations in demand due to weather and like factors are risks that SA Water should manage or incur, and has in fact always handled this short term demand risk. This is why SA Water proposed a banking mechanism as part of its proposed revenue control. The banking mechanism implicitly assumes that SA Water will deal with the short term cash flow issues that arise when demand fluctuates from one year to the next.

However, with regard to long term demand risk it is important to note a number of issues:

1. It is a reality, as acknowledged by ESCOSA⁷⁶, that SA Water is capital intensive, resulting in very high fixed costs and very low avoidable costs. Therefore, as demand increases the average cost per kilolitre decreases. This is because the very large fixed costs can be spread over greater demand.
2. Additionally SA Water's services and assets are designed to meet peak flows and ensure the security of the supply of drinking water. Changes in average consumption do not necessarily result in equivalent changes in peak flows nor impact the security of supply. This means that, by the very nature of its business, it is difficult for SA Water to save significant levels of operating expenditure, even when demand changes.

⁷⁵ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination, Statement of Reasons*, February 2013, p. 30

⁷⁶ *Ibid*, p. 45

3. SA Water has long life assets which provide the capacity to meet peaks in demand and the security of supply. As is normal for such a business with long life assets, when demand decreases the average cost will increase. If prices do not increase during this period then the entity's ability to fund service standards and investments will deteriorate.

The proposed average revenue control results in an outcome that is inconsistent to the costs faced by SA Water. Accordingly, it is considered that in selecting this form of control, there has not been regard for the requirements of the ESC Act pertaining to, "the particular circumstances of the regulated industry and the goods and services for which the determination is being made".⁷⁷

8.3.3 Investment

Further to the practical issues with this control mechanism, the Draft Determination also indicates that this form of control will drive SA Water's investment decisions. It is not immediately clear how the revenue control will provide additional incentives when SA Water has been found by this determination process to already be undertaking an appropriate and prudent level of investment, based on appropriate and prudent asset management planning.

The revenue control influences demand risk for the determination period, which will be for the next three years. In contrast to a three to four year view SA Water's investment decisions are based on a very long term horizon, such as major water and sewerage augmentation decisions where investment decisions are often made 10 to 20 years out from full take-up.

SA Water does not consider that a short term revenue control will influence SA Water's decisions on future investment. Investment decisions are undertaken with a long term view of customer requirements.

8.3.4 Higher usage charges

A further issue with the form of control proposed by the Draft Determination is that SA Water would be required to remove fixed charges and only have a single usage charge if it were to achieve price stability for its customers. The usage charge would have to match the average revenue control (i.e. \$4.19 in 2013/14), as mathematically this is the only time prices would remain stable when demand per customer is revised.

This does not appear to be in line with ESCOSA's expectation on page 30 of the Draft Determination where ESCOSA states that any reduction in prices should be based on reductions in the usage charges⁷⁸, or with the stated objectives in section 5.3 of the Draft Determination, of having lower usage charges, not higher.

8.3.5 Minor additional revenue control issues

Further to the major issues outlined above SA Water was confused by the pricing references associated with the average revenue control for water in the Draft Determination. At clause 5.1.1 of the Part 3 document the average revenue control for water is stated as \$4.10/kL in 2013/14 yet the Statement of Reasons contained within the Draft Determination document quotes \$4.10/kL as a 2012/13 dollar value. Likewise the sewerage control also quotes the 2013/14 value as \$610.63 per account within Part 3 (clause 5.2.1) but the Statement of Reasons quotes \$610.63 per account as a 2012/13 dollar value.

SA Water seeks clarification from ESCOSA on the average revenue control values.

⁷⁷ *Essential Services Act 2002* (SA) section 25(3)(a)

⁷⁸ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination, Statement of Reasons*, February 2013, p. 30

SA Water also notes that ESCOSA has rounded to the closest cent for the water revenue control, i.e. from \$4.105/kL to \$4.10/kL. SA Water estimates that this may have an impact of nearly \$1 million per annum and as such considers that the average revenue per kL should be quoted at three decimal places to provide a higher level of exactness.

8.4 Revenue adjustment mechanism

Linked very closely to the average revenue cap is the revenue adjustment mechanism. With regard to revenue adjustment, SA Water proposed the following mechanisms in Appendix J of RBP 2013:

1. An allowable revenue control for water services, with an adjustment mechanism that allowed variation in revenue greater than 1% to be banked. Where the bank is greater than 1% of the allowable revenue over the period the allowable revenue in the next determination would be adjusted for the balance remaining in the bank at the end of the period.
2. A simple allowable revenue control set for sewerage services.

These were recommended on the bases set out at 8.3 above.

In contrast, the Draft Determination sets out an adjustment mechanism to apply to both water and sewerage based on 70% of the variation in revenue being borne by SA Water, and the remainder by customers (in the next determination period), but only once a materiality threshold is achieved.

While the Draft Determination states that the adjustment mechanism is similar to SA Water's, ESCOSA has not detailed the level of materiality to be applied. The level of this materiality test remains under consideration by ESCOSA.

The level of risk under this model is unknown and cannot be determined until the full details of the materiality test are known.

A high materiality test would actually result in SA Water bearing 100% of the risk. A low materiality test would ensure that this mechanism is always triggered adding additional pricing instability to customers (at each regulatory reset).

SA Water acknowledges that its proposal has a significantly higher impact on customers compared to the adjustment mechanism proposed within the Draft Determination, when demand is consistently different to forecasts.

However, it represents a more balanced and practical solution as the impact will be minimal to customers, when actual demand is similar to that forecasted.

SA Water's original revenue cap and adjustment mechanism ensured:

- Price stability during the regulatory period (except for revisions for inflation);
- That SA Water bears a reasonable level of demand risk; and
- A reasonable level of revenue stability for the Government (and hence taxpayers).

SA Water recommends that ESCOSA reconsider SA Water's original revenue cap and adjustment mechanism.

8.5 Recommendations

SA Water recommends that, in light of further information and greater understanding, ESCOSA:

1. Apply a building block approach or the alternative approach detailed at section 8.1 above to setting allowable revenue and the revenue control;

2. Maintain consistent use of the independently confirmed demand forecasts;
3. Provide relevant stakeholders the opportunity to comment on any material influencing the outcome of the final determination that has not been available for review at public consultation of the Draft Determination;
4. Reconsider the merits of SA Water's original water revenue control and adjustment mechanism proposal, as this proposal ensures pricing stability for customers and SA Water bears a reasonable level of demand risk. If this is not acceptable demand forecasts should not be updated during the regulatory period to ensure price stability; and
5. Quote the average revenues to three decimal places for greater exactness.

9 Minor issues to be resolved

9.1 Customer service standards and targets

Chapter 4 of the Draft Determination presents two issues from SA Water's perspective:

1. ESCOSA advises on page 16 that service standards for the forthcoming regulatory control period were set at levels "that achieve an appropriate balance of benefits and costs (including costs of reporting by SA Water)"⁷⁹; and
2. ESCOSA advises on page 17 that SA Water's regulatory business proposal was based on the draft Water Retail Code released by ESCOSA in July 2012 with respect to operational costs related to meeting the service standards⁸⁰.

SA Water does not support these statements and they are explored in more detail below.

9.1.1 Costs and benefits of set service standards

SA Water is not in a position to comment on the appropriateness of the balance of benefits and costs represented by the service standards set by ESCOSA in chapter 4 of its Draft Determination (Set Service Standards) for the following reasons:

1. SA Water did not propose, and has not had sufficient time, to adequately consult with its customers on the balance of service standards they value as a consumer group (Willingness to Pay Studies and other like consultation) in the limited time it had to prepare RBP 2013. SA Water notes that on page 18, ESCOSA acknowledges that also due to the lack of time, it has not undertaken studies and research to test the "value that consumers would place on service standard charges.";
2. SA Water has not yet undertaken a full cost analysis of meeting the service standards which were in draft form at the time RBP 2013 was prepared; and
3. SA Water has not costed various levels of reporting associated with the service standards or undertaken a cost-benefit analysis of various forms of reporting.

SA Water supports these activities being undertaken in order to properly inform consumers, ESCOSA and SA Water of the appropriate balance of benefits and costs associated with varying levels of service, service standards and service standards reporting. Until such time as this occurs SA Water considers the Set Service Standards to be interim target measures that SA Water will seek to achieve without incurring unreasonable costs on the basis of good faith and in the best interests of its customers.

9.1.2 RBP 2013 service standards

SA Water confirms that RBP 2013 was not based on the draft service standards referred to by ESCOSA on page 17 of its Draft Determination and reminds ESCOSA that this was agreed and outlined by SA Water in RBP 2013⁸¹ on the following bases:

1. The draft service standards were still the subject of preliminary discussions at the time that SA Water was preparing RBP 2013; and

⁷⁹ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p.16

⁸⁰ ESCOSA, *SA Water's Water and Sewerage Revenues 2013/14 – 2015/16, Draft Determination*, February 2013, p.17

⁸¹ SA Water, *Regulatory Business Proposal 2013*, September 2012, p.33

2. SA Water had strong aversion to the proposed service standards as they stood at that time because preliminary investigations had indicated the level of service required to achieve the proposed service standards would not represent an appropriate balance between costs and benefits to customers.

As a result, RBP 2013 was prepared on the basis of continuing to deliver the same level of service to customers that it had delivered in previous years taking into consideration the change in metropolitan contract model and service provider with the data available to it at the time and achieving the draft service standard levels where possible using “best endeavours with available resources”⁸².

As set out at 9.1.1 above, SA Water has not had an opportunity to fully cost the level of service required to achieve the Set Service Standards, only performing preliminary costing activities to inform discussions with ESCOSA. These discussions lead to the reduction of 100% targets to 99% by ESCOSA in November of 2012⁸³ with the release of Water Industry Guideline 2 for public consultation. Unfortunately, these developments occurred post-submission of RBP 2013 confirming SA Water’s position that there was not a sufficiently concrete set of service standards available during preparation of RBP 2013 on which to base an adequate and accurate expenditure proposal.

Although SA Water is appreciative of the progress its discussions with ESCOSA has made to date, SA Water is still not entirely convinced that the Set Service Standards represent an appropriate balance between costs and benefits to SA Water’s customers. SA Water is supportive of further work being undertaken in this area to determine the levels of service customers expect for the prices they are willing to pay and in the interim, will use its best endeavours to meet the Set Service Standards as expected by ESCOSA without incurring additional costs to the detriment of its customers.

Once ESCOSA has determined the levels of service customers are willing to pay for SA Water will accurately cost the requirements to meet those service standards (whether they be reductions or increases in current service levels) and the expenditure implications will be included in the next regulatory business proposal or by way of a pass through event (subject to the outcome of ESCOSA’s final decision with respect to chapter 12 of its Draft Determination) should ESCOSA wish to implement the changes in advance of the next regulatory period.

SA Water appreciates the collaborative approach ESCOSA has afforded it thus far and looks forward to continuing to work with ESCOSA in the future to determine truly efficient levels of service that reflect the needs of its customers.

9.1.3 Recommendation

SA Water recommends that ESCOSA note that no allowance has been made in RBP 2013 to meet its proposed service standards other than to proceed on a “business as usual” approach using best endeavours to meet the standards with the resources available.

9.2 Environmental obligations

In its Draft Determination (Part 8.5.4), ESCOSA states that:

SA Water’s RBP included \$1.71m opex for a trial to provide up to 16.5 GL of ‘environmental flows’ in the Western Mount Lofty Ranges (MLR), each year over the regulatory period. SA Water has stated that it is undertaking this trial, in partnership with DEWNR, to gain the information required to ensure that an appropriate level of environmental flows is stipulated in its water extraction licence.

⁸² Ibid.

⁸³ ESCOSA, *Water Industry Guideline 2 – Draft WG2/01 – Explanatory Memorandum*, November 2012, p.43

The Commission does not dispute that such a trial may yield a benefit to the state. However, SA Water is not currently required to provide these environmental flows. Therefore, the Commission believes that this trial should be funded by a direct government subsidy (rather than by consumers through prices), as the provision of environmental flows relates to a Government function rather than a drinking water or sewerage service. Accordingly, the Commission has disallowed the trial cost.

The Draft Determination therefore removed \$1.7 million of operating expenditure from SA Water's allowable operating expenditure, as they are not a current obligation. SA Water disagrees with the removal of these costs as SA Water anticipates that its water licence for the Western Mount Lofty Ranges will include a requirement to provide environmental flows at approximately the level of the proposed trial.

Due to the prescription of the water resources of the Western Mount Lofty Ranges, SA Water requires a licence to legally extract water and this licence will include a condition that environmental flows must be delivered. Delivery of environmental flows is thus an integral part of SA Water's activities relating to the legally compliant supply of drinking water to customers.

Prescription of the Western Mt Lofty Ranges water resources under the *Natural Resources Management Act 2004* has been undertaken by the South Australian Government to ensure that water extractions are sustainable in the long term. This is achieved by the issue of water licences to all existing users of the resource and the development of a Water Allocation Plan which establishes the rules around allocation of available water once the water requirements of existing users and the environment have been met. Given the size and location of SA Water's storages and weirs the release of water to the environment is a pre-condition for an allocation to be made and a water licence to be issued to SA Water.

SA Water anticipates receiving its Water Licence for extractions from the Western Mt Lofty Ranges before 30 June 2013. A condition of this licence will be that SA Water releases environmental flows of up to 16.5 GL annually from its reservoirs and weirs according to an agreed program. This volume aligns with the trial currently underway to establish the achievable pattern of environmental flows that will most efficiently deliver the required environmental outcomes. The licence condition will allow the environmental flows program to be varied from time to time in recognition that environmental flow provisions may change over time.

9.2.1 Recommendation

Based on the fact that the delivery of environmental flows is integral to SA Water being legally compliant in its activities relating to supply of drinking water to customers, SA Water recommends that the operating expenditure of \$1.71 million for each year of the regulatory period be included in the allowable operating expenditure.

9.3 Office of the Technical Regulator (OTR)

The *Water Industry Act 2012* became operational on 1 January 2013, replacing the *Sewerage Act 1929*, the *Water Conservation Act 1936* and the *Waterworks Act 1932*.

As an outcome the *Water Industry Act 2012*, the provision of a Technical Regulator for plumbing standards and practices was appointed by the South Australian Government. Previously this function was performed by SA Water for plumbing associated with its infrastructure and (under delegation) by local councils for plumbing in areas not serviced by SA Water.

RBP 2013 included a reduction in expected operating expenditure over the regulatory period, associated with its cessation of these activities.

Subsequent to the development of RBP 2013, the South Australian Government has determined that the newly established Technical Regulator will be funded by revenue from annual licence fees paid by water industry entities. The Technical Regulator licence fee revenue will come into effect from 1 July 2013 and SA Water is currently the only water industry provider and will incur the full licence fee.

SA Water is currently in the process of transferring these functions to the new Technical Regulator. As part of that process, the Technical Regulator has determined its expected costs and the licence fee required to be paid by SA Water.

The cost to SA Water is \$9.5 million (nominal dollars) over the regulatory period and these costs are not included in ESCOSA's Draft Determination. The licence fee is higher than the cost previously incurred by SA Water, due to differences in resource requirements such as information systems and the existence of scale efficiencies derived by SA Water.

9.3.1 Recommendation

As SA Water is required under legislation to incur the cost of its Water Industry Licence fee and it relates directly to the provision of water and sewerage services, SA Water recommends that the Final Determination's operating expenditure allowance for the Water Industry Licence fee incorporate the recently announced increase (\$9.5 million (nominal dollars over three years)).