

7 November 2013

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Dear Dr Kerin

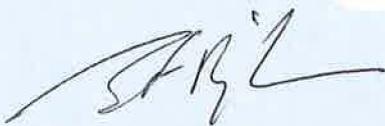
**RE: Response to ESCOSA's pricing inquiry issues papers**

Please find enclosed SA Water's submission to the issues papers associated with reforms of SA Water's drinking water and sewerage prices, released by the Essential Services Commission of South Australia.

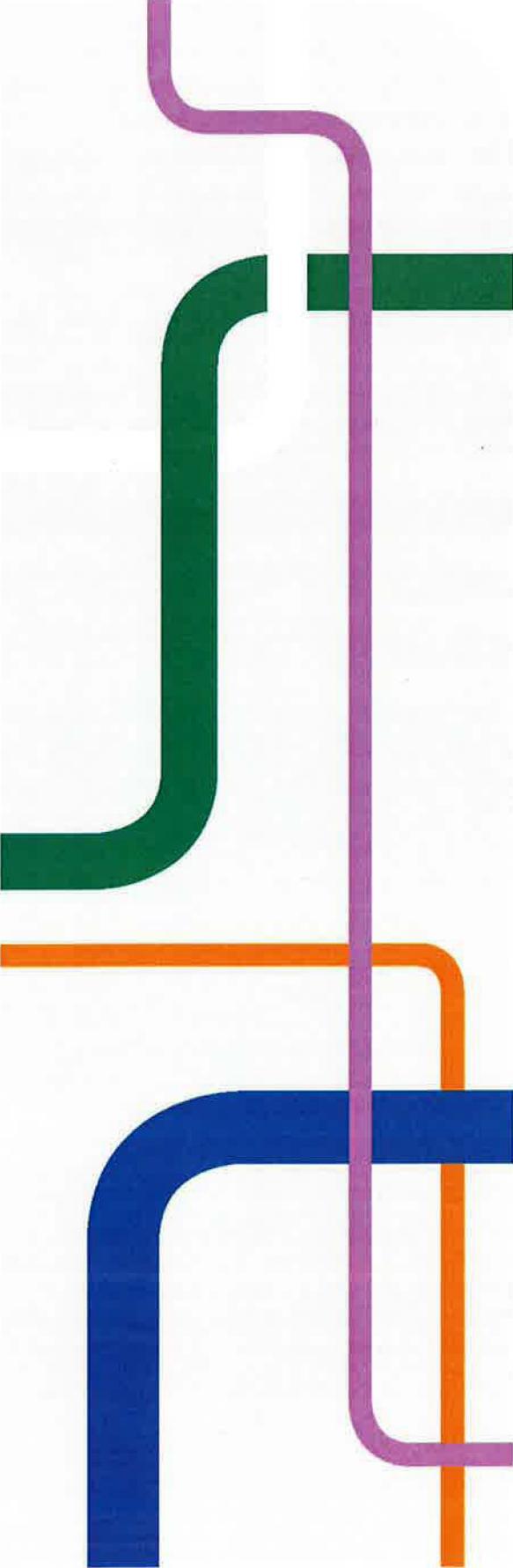
SA Water welcomes this inquiry and considers it a positive initiative to achieve an outcome that will benefit our customers. We are committed to assisting you as you work through the complex and broad range of pricing reforms proposed and encourage our customers to participate in the process.

We remain committed to meeting our challenge of delivering safe, sustainable and affordable water services for the community. The needs of our customers and our community will continue to be central to what we do. SA Water has framed its submission in response to the issues papers released on this basis. The submission is enclosed for your consideration.

Yours sincerely



John Ringham  
**CHIEF EXECUTIVE**

A decorative graphic on the left side of the page, consisting of several thick, colored lines (purple, green, orange, blue) that curve and cross each other, resembling a network of pipes or water lines.

SA Water submission

# **ESCOSA Inquiry into the reform of SA Water's drinking water and sewerage prices**

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Status: FINAL

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## Foreword

SA Water welcomes the Essential Services Commission of South Australia's (the Commission's) inquiry into the overall design, structure and implementation of SA Water's drinking water and sewerage prices.

SA Water looks forward to working with the Commission in its inquiry and acknowledges the complexity of such a broad range of pricing reforms. SA Water is committed to supporting the Commission undertake this difficult task.

SA Water believes that this inquiry provides an opportunity to review water and sewerage prices which have evolved over many years, and is confident that the Commission, the government and SA Water will be able to work together to achieve an outcome that will benefit customers.

As the interests of our customers are paramount, SA Water is keen to implement any changes to our current pricing approach where there is a clear net benefit for customers as a whole.

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# 1 Introduction

On 29 August 2013 the Commission released seven issues papers, seeking written submissions from the community in relation to the reform options identified.

The Commission has identified the following six areas for potential reform, posing the following high level questions:

- *“What changes should be made to the structure of drinking water tariffs?”*
- *Should the basis upon which sewerage prices are set be changed?*
- *How should water planning and management costs be factored into SA Water's prices?*
- *Should changes be made to metering?*
- *Who should pay water and sewerage charges?*
- *How can the impacts of price reform be best managed?”<sup>1</sup>*

The Commission has recently determined SA Water's efficient costs for the delivery of water and sewerage services for 2013-14 to 2015-16, and translated these into allowable revenues. This inquiry is therefore not about the magnitude of the revenue SA Water is entitled to collect, but how that revenue is collected and how it is allocated across customers and customer groups: if one group of customers is to pay less, then other customer groups must pay more.

This inquiry, at its most basic, is about the potential reallocation of revenue collected from different customers and customer groups.

While it is true that some possible tariff designs or system changes may impact on the level of demand and hence costs to supply (e.g. by changing incentives to consume water), the major impact on customers will be determined by:

- how the Commission's approved revenue is allocated across different customer groups;
- whether the changes will reduce costs in the longer term, taking into account the cost of implementation (e.g. new billing system and meters);
- the different magnitude of the impacts on those paying more versus those paying less; and
- whether the changes provide other social benefits and value to customers.

SA Water is conscious that the Commission has a very difficult and extensive inquiry to undertake. SA Water is concerned that there may be a temptation to throw out the existing tariff structures which have evolved over many decades of practice and review, and replace them with theoretical structures based on economic theory.

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<sup>1</sup> ESCOSA (2013), Overview of the Commission's Pricing Inquiry, Issues Paper No. 1, Inquiry into the reform of SA Water's drinking water and sewerage, p 2

Although the importance of economic efficiency cannot be overlooked, options under consideration also need to be assessed for their customer impact, otherwise unintended consequences could arise and the Commission's responsibility to give primary regard to "the long term interests of consumers" may be compromised.

At this early stage of the process, SA Water's submission concentrates on providing factual information on the possible consequences and risks for SA Water's customers associated with some of the reforms identified by the Commission.

SA Water is keen to provide additional information and submissions throughout the process, and as such this submission should not be seen to represent SA Water's final or complete views on all aspects relating to the inquiry. SA Water may raise new matters not addressed to date, or supplement or amend information or views contained in this submission where circumstances warrant.

SA Water's key overarching issues are outlined from sections 2 to 5, with more detailed comments outlined in section 6. A summary of SA Water's major comments is provided in the final segment.

## 2 Understanding Customer Value and Impacts

Understanding the impact on SA Water's customer base is of critical importance to SA Water. Due to the broad scope and complexity of these reforms, SA Water emphasises the value of taking into account broader customer impacts in conjunction with any assessment of economic efficiency. This will include giving consideration to the different impacts on customer utility (i.e. customer satisfaction or value received from consuming a good or service).

As already indicated, most of the reforms identified will generally be revenue neutral, as the Commission has already determined SA Water's efficient level of costs and revenue. Instead, this inquiry is to focus on price reform and in particular how the allowable revenue should be allocated between different customer groups.

Especially where different options do not have clear economic efficiency advantages, consideration on how to re-allocate the revenue collection most equitably from different types of customers is required. As such, SA Water believes this inquiry is quite different from the Commission's previous work in setting regulated energy and water prices.

The requirement in those exercises was to determine the efficient level of expenditure and consequently the allowable revenue or price. This inquiry, as indicated above, is about the potential redistribution of collected revenue between customers and customer groups, with the overall objective of protecting the long-term interests of South Australian consumers.

There appears to be an assumption in the Commission's issues papers that prices should mirror the cost of supply. However, it is also inevitable that in any reforms to price structures there will be winners and losers. It cannot be assumed that changes in customer value will be the same for those who will be required to pay more, compared to those who will pay less. SA Water therefore believes that it will not be sufficient for the Commission to determine the matters under review by only considering the relationship between prices and cost allocations.

There is, as indicated above, the need in determining overall customer value, to take account of the different value of the costs and benefits to the losers and winners. SA Water's view is that pricing structures should be linked to the "value" placed on the service by customers. Such a view can have radical implications for price structures:

### Example 1:

The value of having sewerage connected to a property may be more in dollar terms for a high value suburb than in a lower one (e.g. the "value" of a sewerage service may be 10% of the value of a house, and it may therefore be quite appropriate for the service provider to charge a higher price to that landowner. It may also explain why the practice of "abuttal" charging is common across water utilities). A similar concept applies to Council rates.

The provision of sewerage services involves long life assets and very substantial fixed cost in comparison to the marginal cost of service provision. As sewerage services provide amenity and public health benefits to the community, it would seem appropriate that the costs be shared in a manner that

is affordable to all. Therefore the question is not whether property based charges are a valid basis for applying charges (on an ability to pay basis), but whether there is an alternative approach that provides a higher social outcome (i.e. will overall customer satisfaction be increased from any change).

**Example 2:**

It is noted that in several instances in the issues papers, the Commission implies that the sole benefit of retaining the status quo is avoiding the costs associated with the implementation of an alternative. These comments may be misleading to customers, who may misinterpret this to mean that changes would have no real impact on prices for individual customers.

For instance, a move from the current property based charging for sewerage services to a flat fixed charge, an option identified by the Commission, could see increases of around 75% for around 170,000 of SA Water's customers (i.e. customer receiving the minimum sewerage charge due to the low value of their property). As discussed above, those incurring this increase are likely to incur a significantly higher loss in value than those receiving a reduction. This impact is not discussed in Issues Paper 3 as a benefit of retaining the status quo.

Feedback from customers will be crucial in understanding these issues.

### 3 Economic Efficiency

The Commission has stated that promoting economic efficiency is the overarching principle for this Inquiry, which it sees as consistent with the long-term interests of consumers.<sup>2</sup>

SA Water supports reforms that are in the long-term interests of its customers where the benefits of the change exceed the associated costs. However, as indicated above, we need to be careful in comparing the relative value of the benefits and costs of any change.

Economic efficiency is a very broad concept, and subject to differences in interpretation. The Commission states that economically efficient prices are said to promote the long-term interests of the consumer when they:

- *“are set to recover only the efficient costs incurred by SA Water in the delivery of its services*
- *signal to customers the true cost of their consumption, thereby promoting usage only where the benefits to customers exceed the costs*
- *promote efficient investment by businesses that rely on water and sewerage services, as their investment decisions can be based on the true cost of receiving those services.”<sup>3</sup>*

SA Water notes that the Commission has not referred to the National Water Initiative (NWI) principles in its issue papers. SA Water and the government have a formal commitment to the NWI. The pricing principles were agreed upon in 2004 by the Council of Australian Governments (CoAG), representing a *“commitment by governments to increase the efficiency of Australia's water use, leading to greater certainty for investment and productivity, for rural and urban communities, and for the environment”<sup>4</sup>*.

These national pricing principles, government policies and our vision and values mean SA Water is mindful of several factors when determining its water and sewerage prices, including:

- delivering affordable water services to the community;
- ensuring costs are prudent and efficient and that prices reflect these costs;
- sending the appropriate pricing signals to promote efficient use of resources;
- supporting the State's regional and economic development; and
- the impact of pricing reforms on different customer classes.

SA Water considers that the Commission should be mindful of these principles when considering any pricing reforms.

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<sup>2</sup> ESCOSA (2013), Overview of the Commission's Pricing Inquiry, Issues Paper No. 1, Inquiry into the reform of SA Water's drinking water and sewerage, p 2

<sup>3</sup> ESCOSA ibid

<sup>4</sup> NWI, Principles for urban water tariffs, Introduction.

SA Water is also conscious that cost allocations between different customer groups can become somewhat arbitrary where there are significant levels of shared and interconnected assets and large fixed costs to be recovered. Therefore it can be difficult at times to separate out costs for different customer groups and create strong incentives for customers that will result in overall reductions in costs.

In this context SA Water would welcome further clarification from the Commission on how it will assess options for economic efficiency and how it will separate options where the economic efficiency is similar.

## 4 Water Security

SA Water welcomes the opportunity to discuss with the Commission the ability of pricing reforms to enhance water security.

For many years, SA Water enjoyed a high degree of water security as it could draw from two major sources – the River Murray and the Mount Lofty Ranges catchments – to supply the majority of its customers. However, the prolonged and serious nature of the recent drought in both of these catchments – unprecedented in a recorded history extending beyond 100 years – required a fundamental shift in water security planning for the state. This resulted in the construction of the Adelaide Desalination Plant, along with other water security infrastructure. The Adelaide Desalination Plant is our state's insurance policy against future droughts and provides a climate independent water source.

SA Water agrees that an *“acceptable balance between the level of water security and cost must be found”*<sup>5</sup>, and would welcome further clarification on the link between water security and economic efficiency.

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<sup>5</sup> Overview of the Commissions Pricing Inquiry, Issues Paper No. 1, Inquiry into the reform of SA Water's drinking water and sewerage prices, p1.

## 5 Interdependency and Complexity of Reforms

The issues papers identify seventeen areas for possible reforms with over forty options being considered. The Commission notes the interdependency of reforms and that it will consider them as part of an overall reform package.

SA Water notes the complexity of such a broad range of reforms and that it will be critical for the Commission to take this complexity into account when assessing its final recommended package of reforms. Depending on the combination of options under consideration, certain reforms may result in additional price structure amendments or the reforms may counteract other government policies. Ensuring that all of the consequences of any suggested reforms are understood will be a crucial aspect of this inquiry.

Due to the interrelationship between pricing and a large range of other issues, there may be an impact on current practice and systems. These costs will be required to be understood and assessed as part of the cost and benefit analysis to be undertaken by the Commission.

For example, some of the suggested reforms are likely to require significant modifications or replacement of the current billing system. The costs and risks associated with the implementation of reforms cannot be understated, particularly given the size and complexity of the current billing system. Preliminary estimates to replace the current billing system could be upwards of \$60 million, based on costs incurred for new billing systems implemented by interstate utilities, and would take years to implement. These are significant additional costs and need to be factored into any evaluation of proposed changes. SA Water is keen to work with the Commission to firm up on the costs associated with any changes to the billing system, and when they would be incurred.

Furthermore, consideration needs to be given to the timing of the proposed changes and the need to allow for appropriate preparation time to implement the changes and transitioning arrangements so that affected customers have time to adapt.

## 6 Detailed Issues

### 6.1 Potential Approaches for Water Pricing Reforms (Issues Paper No. 2)

#### Removal of State-wide pricing

The approach of setting uniform charges across different supply networks or geographic areas (state-wide pricing) is recognised in the National Water Initiative (NWI) pricing principles in the urban water sector<sup>6</sup>. The NWI also provides guidance on differential water charges, stating that prices should be differentiated by the cost of servicing different customers where the benefits outweigh the costs of doing so. It also acknowledges the need to take into account the equity advantages of particular options<sup>7</sup>.

State-wide pricing has to date been considered as the most equitable method to share the full cost of service provision across the whole state. A community service obligation (CSO) is paid to SA Water to implement the government's state-wide pricing policy.

Costs for various regions vary significantly. The cost of supplying water in geographically dispersed systems that have a small number of customers is more likely to be much higher than more concentrated metropolitan systems that have a larger number of customers.

SA Water's operations span a wide geographic area and with an interconnected network service, it is impractical to isolate the costs for each customer or 'zone' (depending on how these are defined). Consequently, some averaging and subjective cost allocation assumptions will be required.

It is also important to recognise that the cost of implementing and administering location based pricing is likely to be directly related to the number of unique prices that may be charged.

Furthermore, when evaluating region based pricing, it should be considered that the physical location of assets is not necessarily indicative of the beneficiaries of these assets. For example, the Adelaide Desalination Plant was based on 'whole of region' water supply security objectives such as ensuring water security during periods of low water availability, greater flexibility in the management of SA Water's water resources, and enhancing confidence in the South Australian business community. SA Water suggests wider state-wide benefits such as these should be considered when evaluating region based pricing.

To better understand the implications of moving away from state-wide pricing, greater clarification is required around the approach the Commission may adopt regarding zoning other than metropolitan Adelaide and 'other zones'.

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<sup>6</sup> NWI, Principles for urban water tariffs, Section 7.

<sup>7</sup> NWI, Principles for urban water tariffs, Section 16.

### Move to single water use charge based on LRMC

The NWI provides guidance in terms of setting water charges with regard to long-run marginal cost (LRMC) of supply. The principles state that water prices should be set in two parts i.e. water use component and service availability charge (supply charge), where the usage component has regard to the LRMC of the supply of additional water.

The principles also note that:

*“On economic efficiency grounds the water usage charge should comprise only a single usage charge. However, governments may decide on more than one tier for the water usage charge for policy reasons, e.g. sending a strong pricing signal to encourage efficient water use; and having regard to equity objectives.”<sup>8</sup>*

Recovering the level of allowable revenue determined by the Commission based on a single water use charge equal to LRMC may require increases in the supply charge in the order of 75% or more.<sup>9</sup>

Consideration should be given to the impact any such approach would have on customers that use low volumes of water and how this would impact on their ability to control their water bill.

It should be noted that a robust estimate of LRMC should reflect short-term variable costs, future infrastructure costs arising from the level of predicted total water use, and provision for environmental and other externalities.

In this context, it should be recognised that LRMC estimates are generally subject to subjective judgement and interpretation and need to be used with caution. Generally speaking LRMC estimates provide a range of possible outcomes. For example, when SA Water last undertook a LRMC estimate as part of the 2011-12 pricing decision it estimated the LRMC to be in the range of \$2.00 to \$2.75 per kL. This estimate was based on metropolitan Adelaide costs. LRMC estimates for regional areas could fluctuate widely from this estimate depending on the geographical area used.

Should different regions be priced in isolation of one another, issues surrounding pricing equality for customers could arise.

### Scarcity Pricing

With regards to scarcity pricing in the water industry there are a number of issues that should be considered:

- further research is necessary to determine customers' acceptance and appetite for volatility in pricing for an essential service such as water supply;
- the level of price elasticity of demand for water has an important impact on the ability of scarcity pricing to create a demand response. The demand for water is relatively inelastic, in particular in the residential customer base, as it is an essential service. The price rises necessary to equate supply and demand

<sup>8</sup> NWI, Principles for urban water tariffs, Sections 10-11.

<sup>9</sup> Assuming usage price fixed at \$2.00 per kL.

could therefore be very large. This in turn would have a negative impact on customers' ability to pay and ease of understanding of pricing arrangements;

- current (quarterly) billing practice in South Australia means that customers do not receive bills for their consumption of water until after that consumption has occurred;
- with the desalination plant operational and SA Water's access to the River Murray it is unclear on what basis the scarcity pricing would be set, as SA Water's reservoir levels are just one factor in assessing water availability within the State; and
- it is not immediately clear why scarcity pricing would be introduced when there are limited concerns about water security.

The Commission notes that *"the price of water could well be excessively high for some consumers and hurt those on low incomes in particular"* with scarcity pricing. SA Water agrees that low income households and large families need to be considered from an equity perspective. SA Water also notes that economic development and activity, especially for those industries reliant on mains water supplies, should be considered.

The Commission also suggests that *"extra revenue that would result from higher prices charged could be used to ....help those most in need"*. As there are no known examples of scarcity pricing regarding water supply, the impact and value of this approach is also unknown. Being the first utility to introduce such a volatile regime raises concerns for SA Water.

SA Water would like the Commission to assess whether any rebate that too closely mirrors the impact of higher prices, may diminish the objective of scarcity pricing in the long run as customers may pay a higher water bill knowing that they will be compensated later. Such a scheme may also introduce cross-subsidies to certain customers.

In contrast, if payments do not broadly match the impact, some parts of the community may experience windfall gains, while others would suffer losses.

The efficiency losses and administrative costs inherent in any compensation scheme will also need to be considered when comparing the costs of scarcity pricing with water restrictions. Included in the administration of the scheme will be the inability to forecast future weather events and associated inflows, and the impact of prices on demand (which will be different for each set of circumstances). The practicality and risks of any such pricing regime will be required to be taken into account.

Consistency of scarcity pricing with the NWI pricing principles should be considered in more detail. Under the NWI water pricing reforms urban water utilities are supposed to be achieving "upper bound" or commercially viable pricing. The Commission's recent revenue determination effectively set SA Water's upper revenue bound.

### Fixed Charges

The majority of commercial customers will benefit from a movement to supply charges based on the number and size of meters. This is because commercial customers are currently charged based on the capital value of the property, subject to a minimum. The impact of the change will depend on the size of the customer's meter.

This benefit to commercial customers will be offset by impacts to other customer groups assuming a revenue neutral approach. Depending on the pricing structure implemented, some residential and industrial customers may see significant increases to their supply charges. Again the impact of change will depend on the size of the customer's meter and the final methodology adopted.

The Commission will need to consider the comparative gain to the commercial customers from a price reduction (where it has traditionally been assumed such businesses are able to pass on costs to consumers by their pricing), relative to the loss in satisfaction by other (residential) customers through higher prices.

SA Water currently charges customers for additional meters. This charge is consistent with the residential and industrial supply charge and the minimum supply charge for commercial customers. This applies to all customers other than country lands customers.

The Commission should note that approximately 20,000 customers that are classified as country lands customers. The definition of a country lands property is a property located in a water district outside an urban area. Country lands customers can have non-contiguous properties classified as a single assessment for rating purposes if all the properties are farmed as a single farming operation and are within a single country lands water district. This provides scope for country lands customers to incur a single fixed charge in circumstances where multiple charges would apply in urban water districts.

Each country lands assessment is permitted one meter for every 250ha of rateable land. The result is that country lands customers may have numerous meters under a single assessment while only incurring a single supply charge. Hence, it is likely that country lands customers will be worse off under a charging approach based on the number and size of meters. This highlights the need for a thorough cost-benefit analysis into such an approach as previously mentioned.

## 6.2 Potential Approaches for Sewerage Pricing Reforms (Issues Paper No. 3)

SA Water understands the Commission's intent is to ensure sewerage charges are reflective of actual costs, and therefore it is important to recognise what drives the cost of sewerage services.

Sewerage costs are heavily driven by the cost of the infrastructure i.e. network and treatment assets committed to service provision. Network systems are designed for optimal capital and operational costs by maximising gravity flow with a relatively small proportion of pumping as required. A significant driver for increasing capacity of existing sewers is the amount of wet weather infiltration that is not intended to enter the system but inevitably does. Such peak flow events have a limited relationship to metered water that is discharged.

In addition, treatment plant capital and operating costs are relatively minor in the scope of the total costs involved, and are dependent on not only sewerage flows but pollution loads as well. In particular, sewerage systems are generally designed around domestic type pollutants. Variations from this can cause not only issues at the treatment plants but also shorten the life span of network assets.

This is why SA Water monitors sewage loads of trade waste customers who discharge over certain thresholds, and their charges are based on both the volume and load of contaminants.

### Property based charges

The sewerage system provides benefits to the community as a whole, in terms of environmental and public health benefits. The availability of a sewerage service also contributes to the value of a property. It is therefore appropriate that sewerage service costs be shared across the community in a manner that is affordable to the public. Property based charges are therefore considered a valid basis for applying charges on the basis of ability to pay. One of the key objectives of discriminatory pricing is to make a product as affordable and attractive to as many potential customers as possible. For services that are essential such as sewerage services, where charges are compulsory, this objective is even more relevant.

Sewerage charges based on property value has different impacts on different customers and customer groups. Essentially customers with high capital values pay a higher sewerage bill than those with low valued properties

In considering customers ability to pay and the impact of property based charges it is important to mention customers that are 'asset rich and income poor'. Such circumstances are generally a matter of the social support system rather than the basis to move away from the current structure.

### Volumetric based charging (based on metered water use)

Metering customer sewage discharge is impracticable for small customers, thus the Commission has suggested estimating discharge volumes of metered water use as a potential pricing option.

Meter and load based charges for SA Water's largest discharge customers provide very strong incentives to amend their practices, resulting in overall reductions for SA Water's customers.

SA Water looks forward to working with the Commission to assess whether metered water is truly cost reflective, or whether sewerage pricing based on metered water use will provide the correct incentives for customers to reduce the overall cost of the service.

Charging for sewerage services based on metered water use may introduce customer inequities. The proportion of residential water use that is believed to go to sewer varies substantially between individual customers. Complicated seasonal indices or simple discharge factors can be applied to allow for outdoor water use; however it is clear that there would be certain customers who may benefit and others who would lose from such an arrangement.

For example customers with significant outdoor water use would pay more relative to customers who use little or no water outdoors, notwithstanding the customers' impact on the sewer system may be the same.

Metered water use is heavily influenced by the number of occupants. The principal burden of charges based on metered water use would fall more heavily on larger households even though the sewerage service costs imposed by those households may not be significantly higher than the costs imposed by small households.

It should also be noted that water use is not necessarily sourced from metered water. Some properties source toilet flushing and/or other water needs from bores, rain water tanks, as well as third party suppliers not owned or operated by SA Water (e.g. Salisbury Recycled Water Scheme). This tendency has increased with the government's building requirement that all new houses have rain water tanks or third pipe systems plumbed into the house.

This option seems to provide the possibility of cross-subsidies between customer groups that will require careful examination.

This option may also distort water pricing signals.

### Flat Fixed Charge

The Commission has suggested charging for sewerage services according to a fixed flat charge as this will better reflect the actual costs of the service. This of course presumes that charges should reflect the cost of supply, as opposed to alternative views that prices should be set with regard to the "value" of the service to individual customers.

In SA Water's *Water and Sewerage Revenues - Final Determination*, the Commission calculated that the maximum average sewerage revenue is \$610<sup>10</sup> per connection in 2013-14. Noting that this maximum average revenue includes other revenue, an approximate flat fixed charge would be in the order of \$600 per customer.

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<sup>10</sup> ESCOSA, 2013, SA Water's Water and Sewerage Revenues – Final Determination, pg 169

Under this approach, SA Water's preliminary analysis indicates that:

- around 80% of all customers would be subjected to higher sewerage prices compared with their current property based charge; and
- approximately 30% of all customers (nearly 170,000 sewerage customers) currently paying the minimum sewerage charge would incur an increase of approximately 75% in their sewerage bill.

A move to flat fixed charges could substantially impact on customers, and it is unclear how such a change would improve economic efficiency. The price does not appear to provide customers with a clear incentive to change their behaviour so that overall costs are reduced.

That is, any change is likely to only result in a redistribution of revenue from customers with low value properties to customers with high value properties.

The Commission will therefore need to assess whether any redistribution of revenue would result in improved social and general economic outcomes.

Additionally, if this option were considered appropriate to implement, consideration will have to be given to the most appropriate method to transition customers.

#### Volumetric and Fixed

A combination of consumption and fixed charging is stated by the Commission as potentially being the most cost reflective approach.

While this may be the case, it remains unclear whether this methodology would provide appropriate incentives to customers to reduce overall costs, or whether its main impact will be to redistribute revenue allocations from one set of customers to another set of customers.

The Commission therefore should consider whether any redistribution of revenue would result in improved social and general economic outcomes.

#### Property Based Charges

The Commission has raised concerns about the costs involved in acquiring the valuation information necessary from the State Valuation Office (SVO) to administer property based charging.

As mentioned in SA Water's response to the Commission's Draft 2013-14 to 2015-16 Revenue Determination, the SVO provides customer data on a daily basis. Capital values are just one piece of customer information that is provided. If capital values were no longer required it is not expected to deliver substantial cost savings as SA Water will still need the rest of the customer data for its billing system.

### Alternatives

While flat fixed charges for residential customers are the most common method for charging, alternatives based on meter size, occupants or numbers of pedestals could be applied.

However, charging by number of pedestals or occupants introduces administrative complexities in terms of availability and maintenance of information currently not held on the SA Water billing system.

The SVO has also advised that it does not have a complete dataset on the number of pedestals per property.

## **6.3 Water Planning and Management Costing Reforms (Issues Paper No. 4)**

The Treasurer, as part of the initial pricing order, has required that the Commission in its initial determination allow SA Water to recover the costs associated with water planning and management charges in accordance with Section 6 of the South Australian *Public Corporations Act 1993*.

This cost was assessed as part of the Commission's determination. While this particular cost is administered by the Department of Environment, Water and Natural Resources, SA Water will assist the Commission where it is able.

## **6.4 Metering (Issues Paper No. 5)**

SA Water encourages all newly built residences on group sites to install individual meters, so that customers can control their own water consumption. However, this is not mandated by SA Water as not all sites can support individual metering and ultimately the decision of how to set up the metering configuration on a group site is made by the developer.

Individual meters will provide customers with greater influence over their water bills and therefore provide a more equitable billing system. Additionally, it may remove neighbourhood disputes concerning water use under the current system which was also noted by the Commission.

Consistent with the Commission's previous findings<sup>11</sup> in relation to installing individual meters in public housing, the costs of this reform may outweigh the benefits of retrofitting individual meters to existing properties. The cost for some customers would also increase as customers with shared meters are charged a single supply charge and don't pay the third tier of water use.

The inquiry should also consider the issue around managing water use in common areas of group sites.

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<sup>11</sup> Report on Costs and benefits of Installing Water meters in Public Housing, Report prepared under the Water Industry Act 2012 Section 99, ESCOSA, June 2013

## Smart Metering

SA Water supports the Commission's view that "...a roll-out of smart meters would come at a cost to consumers and it should be determined, with **some surety** [emphasis added], if the long-term benefits outweigh the cost of installation"<sup>12</sup>.

The electricity industry has started to explore the use of smart meters and consider that there may be several benefits to the introduction of smart metering.

The main benefit is the opportunity to offer innovative time-of-use prices. This provides incentive for electricity customers to reduce consumption at peak times, which flows on to a reduction in generation and distribution costs in the short and long term.

Other benefits include:

- the ability of retailers to accurately detect electricity supply faults thus allow for greater response times.
- the collection of consumption data in shorter intervals eliminating the need for manual reads.

However, only small scale Australian trials and electricity examples are available at this time. A mass roll out of smart meters in the Australian water industry has not yet been undertaken and comparisons between the water and electricity markets have some limitations. For example, the water industry does not experience spot pricing so the benefit of time-of use pricing may be significantly diminished.

The benefits of installing smart meters would have to be significant given the likely significant cost and risks associated with integrating this into SA Water's billing system.

SA Water is an active member in one of the trials referred to in the *Issues Paper - the Optimal Water Mix for Metropolitan Adelaide Project*. SA Water has funded the meters and undertaken the installation in support of the Optimal Water Mix Project. It should also be noted that:

- this project is focused on understanding indoor water use only and is using 150 traditional single dwelling houses, not mass integration of smart metering; and
- the meters installed as part of the project are not networked, and data has to be downloaded individually by personnel attending the meter site.

A smart water meter and data collection network is likely to be substantially more expensive than an electricity smart meter rollout, noting the expense of electricity smart meter rollouts have been significant where undertaken interstate.

The potential to bill customers monthly and a potential to reduce call centre costs in the longer term are some benefits of installing smart meters. Current meter reading costs are relatively low on a per customer basis and these benefits are not available until the majority of customer base have installed smart meters.

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<sup>12</sup> ESCOSA (2013), Metering, Issues Paper No. 5, Inquiry into the reform of SA Water's drinking water and sewerage, p 4

Additionally, a communication network is required for the meters to become operational and, due to the significant amount of data generated the complexity of data collection, the cost of data management and the integration of this into SA Water's billing system needs to be considered.

It is noted that the smart metering section of the issues paper does not include an "optional roll out" as appears in the individual metering section. For completeness, it is suggested that this option be included.

## **6.5 Reforms Regarding How Customers are charged (Issues Paper No. 6)**

### Charging the Consumer Not the Property Owner

SA Water currently charges property owners for water and sewerage rates. In cases where the consumer is not the property owner, individual agreements are arranged between tenants and landowners. The historical justification for charging property owners may be that the value of having water and sewerage services at a property accrues to the property owner, in terms of the value of the property (relative to a property that does not have such services) and the rents the property owner can charge to tenants of that property.

Furthermore, charging property owners results in a lower cost structure for tenants, with no need to pay for special meter reads or additional connection/disconnection fees on occupying/exiting properties. Currently tenants are able to access usage information from SA Water if desired, and are also protected from debt recovery action i.e. SA Water will not knowingly apply a flow restrictor for non-payment to a tenanted property. Since the property owner is ultimately responsible for the debt, there is also an incentive to maintain pipe work (i.e. fix leaks) and install water efficient products.

SA Water has a 'first charge' on land resulting in greater certainty over the tracking and recovery of debt. This allows SA Water to have prudent debt recovery practises, minimise debt write-off and have lower cost structures for the debt management function.

Charging consumers instead of property owners would require significant changes to SA Water's billing system and also require an additional customer management system. This would incur a considerable cost to implement, and interstate experience suggests this would be at least a five year project.

Therefore, SA Water considers that charging consumers rather than property owners may result in a reduction in efficiency, and thus higher prices and costs for customers, due to an increase in resourcing for debt recovery, billing and customer management, an increase in final meter reads, final letters, bills and also an increase in debt write-offs.

### Rating on Abuttal

SA Water is permitted to charge land that is adjacent to water and/or sewerage infrastructure under Regulation 38 of the *Water Industry Regulations*. Rating on abuttal provides the benefit of availability of supply/service should the owner, or future owner, wish to connect. This future benefit will be reflected in the value of the property, should the owner choose to sell or develop it. Improved health, higher property values, and lower overall social cost may be some of the benefits of the current policy.

Rating on abuttal for water and sewerage services is used by other service providers in Australia. Of the major city water utilities, ACTEW (ACT), Power and Water Corporation (NT), Yarra Valley Water (VIC), Water Corporation (WA) and City West Water (VIC) charge based on ability to connect for water and sewerage services.

Availability of a water and/or sewer service benefits all customers whether directly (through a connection) or indirectly by providing the community with water security and water for essential needs, such as health requirements. There are also environmental benefits for the community by encouraging all owners to connect to the sewerage system, if available.

It is unlikely that removal of rating on abuttal would result in significant cost savings. Thus the main impact of removing rating on abuttal is likely to be a redistribution of revenue from non-connected customers to connected customers. That is, this suggestion would result in increases to average bills for the remaining customers. SA Water's billing system may also require auditing as available data is only used for limited purposes.

Eliminating the rating on abuttal charge may also lead to perverse outcomes whereby neighbours could use unapproved shared meters to avoid a supply charge. This would prevent SA Water contacting these water users in the event of a water quality event.

As the provision of public utilities, such as water and sewerage mains, are of benefit either directly or indirectly to the community it has traditionally been considered reasonable that all beneficiaries who do, or can, benefit from obtaining connections should contribute to the ongoing cost of providing these highly desirable facilities.

## **6.6 Reforms Regarding Application of Customer Subsidies (Issues Paper No. 7)**

SA Water acknowledges the need to consider concessions and exemptions when undertaking pricing reforms of this nature. Reinforcing the concerns raised above (Section 2), it is unclear how the Commission will balance social equity outcomes with its overarching focus of economic efficiency.

The following discussion outlines the current arrangements for processing exemptions and concessions (funded by the South Australian Government):

### Exemptions

Currently all charitable entities are required to apply to SA Water requesting an exemption. The customer must demonstrate the property is being used for charitable purposes and also prove they are a charitable entity with an Australian Taxation Office (ATO) letter stating they are exempt from income tax.

All other exemptions are applied by SA Water depending on land use type allocated by the State Valuer-General. This is considered the most fair and equitable way to ensure all customers of a particular type (e.g. all places of public worship) receive the same price.

If application were required by each different customer group, this would increase the administrative costs to provide effectively the same level of exemptions.

Currently exemptions are paid for by the government as a Community Service Obligation (CSO), hence they have no affect on other customers.

### Concessions

The South Australian Government provides water and sewerage concessions to eligible South Australians on low or fixed incomes. The Department for Communities and Social Inclusion (DCSI) is responsible for concessions. In 2013-14 the water concession is calculated as up to 30% of the total annual water bill, with a minimum of \$185, to a maximum of \$295. Sewerage service concessions are \$110.

## 7 Summary

SA Water reiterates that it welcomes and will assist the Commission in its inquiry into drinking water and sewerage pricing, and that it believes that this inquiry provides an opportunity for the Commission, the government and SA Water to work together to achieve an outcome that will benefit customers.

This Inquiry, at its most basic, is about the potential reallocation of revenue collected from different customers and customer groups.

While it is true that some possible tariff designs or system changes may impact on the level of demand and hence costs to supply (e.g. by changing incentives to consume water), the major impact on customers will be determined by:

- how the Commission's approved revenue is allocated across different customer groups;
- whether the changes will reduce costs in the longer term, taking into account the cost of implementation (e.g. new billing system and meters);
- the different magnitude of the impacts on those paying more versus those paying less; and
- whether the changes provide other social benefits and value to customers.

SA Water is conscious that the Commission has a very difficult and extensive inquiry to undertake. SA Water is concerned that there may be a temptation to throw out the existing tariff structures which have evolved over many decades of practice and review, and replace them with theoretical structures based on economic theory.

Due to the broad scope and complexity of these reforms, SA Water emphasises the value of taking into account broader customer impacts in conjunction with any assessment of economic efficiency. This will include giving consideration to the different impacts on customer utility (i.e. customer satisfaction or value received from consuming a good or service).

SA Water believes that many stakeholders will have a different understanding of what economic efficiency means. SA Water therefore suggests that the Commission should clearly outline the criteria it will be using to assess economic efficiency, to ensure the cost and benefits of all the various options can be clearly illustrated and tested.

SA Water agrees that an *"acceptable balance between the level of water security and cost must be found"*<sup>13</sup>, and would welcome further clarification on the link between water security and economic efficiency.

SA Water raises the points discussed in this submission in order to assist the Commission with its inquiry and is keen to work with the Commission to address the points raised in this and other submissions.

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<sup>13</sup> Overview of the Commissions Pricing Inquiry, Issues Paper No. 1, Inquiry into the reform of SA Water's drinking water and sewerage prices, p1.