

APPENDIX 6: PRICING TO REFLECT THE COSTS OF DECISIONS

Final Inquiry Report: Inquiry into Reform Options for SA Water's Drinking Water and Sewerage Prices

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The Essential Services Commission of South Australia is the independent economic regulator of the electricity, gas, ports, rail and water industries in South Australia. The Commission's primary objective is the *protection of the long-term interests of South Australian consumers with respect to the price, quality and reliability of essential services*. For more information, please visit www.escosa.sa.gov.au.

1. PRICING TO REFLECT THE COSTS OF DECISIONS

In considering drinking water and sewerage prices that best promote economic efficiency, the Inquiry has addressed the following three questions:

- ▲ What costs should be recovered through usage charges and fixed charges?
- ▲ Who creates the need for those costs to be incurred?
- ▲ How should those costs be recovered from the responsible parties?

Table 1 summarises the preferred approach for the recovery of costs, including fixed costs, based on allocating them either to customers or developers, depending on which group is the cost-driver. This framework guides the recommendations set out in the Inquiry report.

Table 1: Pricing to reflect the costs of decisions

| DECISION | WHO MAKES THIS DECISION? | EXAMPLES OF RELEVANT COSTS | HOW TO CHARGE FOR IT? |
|---|----------------------------------|--|---|
| DRINKING WATER | | | |
| Consume drinking water | Customers | Bulk water supply; treatment and transmission costs | Usage charge to customer |
| Run water distribution infrastructure past premises | Developers (sometimes customers) | Initial cost of distribution infrastructure | One-off augmentation charge to developer (or customer, if applicable) |
| Run water connection infrastructure to premises; establish customer account | Customers | Initial cost of connection infrastructure (varies by pipe/meter size). Account establishment costs. | One-off connection charge to customer |
| Retain ongoing water connection/ customer status | Customers | Ongoing repair/maintenance and replacement of distribution/connection infrastructure; ongoing account management; bulk water supply; treatment and transmission costs not recovered by LRM-based usage charges | Supply charge to customer |
| Disconnect as a water customer | Customers | Account finalisation costs (e.g. meter reading, final bill) | Disconnection charge to customer |

| SEWERAGE | | | |
|--|----------------------------------|--|--|
| Run sewerage distribution infrastructure past premises | Developers (sometimes customers) | Initial cost of distribution infrastructure | One-off augmentation charge to developer (or customer if applicable) |
| Run sewerage connection infrastructure to premises; establish customer account | Customers | Initial cost of connection infrastructure (varies by pipe) Account establishment costs | One-off connection charge to customer |
| Retain ongoing sewerage connection/customer status | Customers | Ongoing repair/maintenance and replacement of distribution/connection infrastructure; ongoing account management | Fixed charge to customer |
| Disconnect as a sewerage customer | Customers | Account finalisation costs | Disconnection charge to customer |
| Put sewerage into sewer | Customers | Sewerage treatment and disposal | Fixed charge (as costs to SA Water do not vary based on customer sewage volumes) |

In considering drinking water and sewerage prices that best promote economic efficiency, the Inquiry has addressed the following three questions:

1. What costs should be recovered through usage charges and fixed charges?
2. Who creates the need for those costs to be incurred?
3. How should those costs be recovered from the responsible parties?

Further explanation of the preferred approach is set out in the following sections.

1.1 What costs should be recovered through supply charges?

As a starting point, it is useful to group all of the costs of SA Water that would not be recovered through efficient usage charges. As explained previously, usage charges should be set, on average, to recover the long-run marginal cost of supplying water to consumers. The only types of costs that are driven by consumption and should therefore be recovered through usage charges are: the marginal costs of bulk water costs (including water treatment costs); and transmission costs, where transmission costs are ultimately driven by

the need to transport bulk water. This is consistent with the views of the Productivity Commission in its inquiry into urban water.¹

Infrastructure costs and other costs that are not linked to future consumption represent the “other” costs that must be recovered. The question of whether these other costs should be recovered through quarterly supply charges or through other means (e.g. developer connection charges) is considered later in this chapter. At this stage, however, the Inquiry considers that these “other” costs will include:

- ▲ Customer connection assets – The provision of a connection to a water main, including a meter, provides the ability for a customer to use water. The costs of those assets are independent of the amount of water consumed by the customer, except to the extent that a customer may wish to consume large amounts of water at any point in time, which would require connection assets with greater capacity (and greater cost). This, however, is driven by a customer’s demand for greater capacity rather than usage. In any case, a fixed charge (either up-front or ongoing) is a preferred means of recovering connection costs.
- ▲ Distribution network costs – Distribution networks also provide the ability for consumers to receive water. As recognised by the Productivity Commission, distribution network costs are driven primarily by growth in customer numbers rather than growth in consumption. The length of pipes required to serve each customer is also a major cost driver. SA Water will expand its distribution networks to accommodate new developments or the connection of individual customers. The size of its distribution pipes will generally provide excess capacity over demand as, in the long run, the incremental cost of installing a pipe that is above the immediate capacity requirements is less than the cost of having to replace a smaller pipe at some point in the future, when demand exceeds its capacity. As distribution costs are therefore generally unrelated to consumption, it is more appropriate for these costs to be recovered through fixed charges than through usage charges
- ▲ Retail costs – SA Water will incur costs associated with billing customers, reading meters and providing other forms of customer service. Those costs, which will include operating as well as capital costs, are generally independent of consumption and should therefore be recovered through fixed charges.
- ▲ If total bulk water and transmission costs are not recovered through LRMC-based usage charges, they will still need to be recovered, assuming those costs are prudent and efficient.

1.2 *Who creates the need for these costs to be incurred?*

- ▲ Ultimately, it is the need for customers to be able to receive safe and reliable drinking water that drives the need for SA Water to incur these costs. In some cases, however, developers require water infrastructure to be put in place to meet future customer

¹ Productivity Commission, *Australia's Urban Water Sector*, October 2011, Chapter 6 (available at http://www.pc.gov.au/data/assets/pdf_file/0019/113167/09-urban-water-volume1-chapter6.pdf)

needs, even if there are no customers taking supply at the time of development. It is appropriate for developers to pay for those costs, to encourage the right decisions about where to develop (through a locational price signal) and to avoid the risk of SA Water not recovering those costs from customers, should no customer choose to connect. In this respect, it is noted that the Commission has recommended removal of the current “rating on abuttal” regime which would otherwise provide SA Water with an ability to recover those fixed costs from customers even if they do not connect.

- ▲ The Commission has considered the most efficient ways of allocating fixed costs between developers and customers.

1.3 Costs to be recovered from developers

- ▲ Development is likely to require the provision of new distribution assets and may require the augmentation of existing distribution and, possibly, transmission assets.
- ▲ As explained above, transmission assets are driven primarily by consumption and should therefore be recovered through usage charges. They are therefore seen as outside the scope of developer charges.
- ▲ The cost of new distribution assets required specifically for a development should be recovered from the developer, as it is the beneficiary of those assets. Where the development triggers the need for augmentation of existing distribution infrastructure, it is appropriate that the developer contribute towards the cost of that augmentation, but only to the extent required to meet the capacity requirements of the development. It is generally unknown at the time of “greenfields” development exactly how many customers will ultimately connect to the new reticulated network and it is appropriate for the developer to take on that risk through paying for all new infrastructure up front, rather than passing on that cost to customers as they connect. If additional capacity is installed (to meet future growth), it is more appropriate for the incremental cost of that additional capacity to be recovered from all customers that will benefit from that capacity.
- ▲ The cost of maintaining and replacing the new and upgraded distribution infrastructure triggered by the development should be borne by future customers through the supply charge.

1.4 Costs to be recovered from customers

- ▲ Individual connection assets are installed by SA Water at the time a customer requests connection. In the case of “greenfields” development, this may occur sometime after the development has occurred. The cost of providing individual connection assets to customers (including a meter) should be recovered directly from the customer, as those costs are incurred directly as a result of the customer’s decision to connect. For standard connections, it is efficient to reflect those costs in the supply charge on the basis that customers of the same class will require the same connection assets and should therefore pay the same connection cost. For example, residential customers

generally require the same connection assets and a standardised supply charge that recovers the cost of those assets is consistent with cost-reflective pricing. For non-standard connections, the incremental cost of the connection (above the standard cost) should be charged directly to the customer up front. The administrative cost of building in the incremental connection cost (which may differ across customers) to each customer's supply charge is likely to outweigh any associated benefits.

- ▲ As discussed above, it is appropriate for customers to pay for the cost of maintaining and replacing distribution infrastructure through the supply charge. The supply charge should also be used as the means for recovering SA Water's retail costs, which are unrelated to usage and are not related to new development.
- ▲ Bulk water and transmission costs that are not recovered by LRMC-based usage charges and developer charges should be recovered from customers who benefit from those costs.



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