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Water

Fact Sheet

Pricing principles guidance

The purpose of this fact sheet is to provide guidance to small-scale water networks (also known as minor and intermediate water retailers) on the National Water Initiative (**NWI**) pricing principles. Under the Price Determination for Minor and Intermediate Water Retailers, small-scale water networks must comply with certain pricing principles in respect of water and/or sewerage services.

Background

The South Australian Government is a signatory to the National Water Initiative (**NWI**), which was agreed to in 2004 by the Council of Australian Governments (**COAG**). The NWI includes reforms which aim to increase the efficiency of Australia's water sector, and lead to greater certainty for investment and productivity. In 2010 a set of pricing principles was developed to assist the States and Territories to meet their obligations under the NWI. The NWI Pricing Principles are principles relating to cost recovery, pricing, transparency and other related matters.

Price Determination

The Essential Services Commission (**Commission**) has made a Price Determination requiring small-scale water networks with 50,000 or fewer connections (minor and intermediate water retailers) to apply the NWI pricing principles when setting their water and sewerage (including Community Wastewater Management Systems) prices.[1]

The Commission recognises that small-scale water networks may require further guidance on applying certain aspects of the NWI pricing principles and has therefore developed this fact sheet to assist.

Please refer to:

- **Table 1**: Recovery of Capital Expenditure (applicable to drinking water and sewerage services retailers)
- **Table 2**: Principles for urban water tariffs (applicable to drinking water and sewerage service retailers), and
- **Table 3**: Pricing principles for recycled water and stormwater use.

Further Information

- Economic regulation of minor and intermediate water retailers – Price determination 2013-2017
- Subsequent determination to extend the term of the Price Determination until such time as a new price determination is made or it is revoked
- National Water Initiative pricing principles

Contact

For queries regarding this fact sheet, please email compliance@escosa.sa.gov.au.

Alternatively, you may call the Commission on (08) 8463 4444 or 1800 633 592 (freecall - mobile phones and SA only).

[1] Prices for drinking water and sewerage services provided by the Municipal Council of Roxby Downs are set pursuant to Clause 13 of the Schedule to the Roxby Downs (Indenture Ratification) Act 1982

Table 1: Recovery of Capital Expenditure (applicable to drinking water and sewerage services retailers)

Pricing principle	Description	Level of compliance
Principle 1: Cost recovery for new capital expenditure	Retailers are required to set water and sewerage service charges to achieve full cost recovery of: ▶ prudent and efficient capital expenditure and ▶ a return on capital. Future asset replacement costs must be set either through: ▶ depreciation of the asset base (Regulatory Asset Base approach) or ▶ a renewals annuity. ▶ To meet this principle, a retailer must: ▶ have undertaken a recent asset valuation, so the depreciation charge is sufficient to fund asset renewal; or ▶ if using a renewals annuity, have an Asset Management Plan (AMP) that specifies the prudent and efficient capital expenditure for renewing, upgrading or extending assets over a medium to long-term time period, and be able to convert the capital expenditure forecasts to a future annualised charge.	Fully-compliant – a retailer has set prices to achieve full-cost recovery of prudent and efficient new capital expenditure. It has either undertaken regular asset valuations to ensure the depreciation charge is appropriate, or has applied a renewals annuity using the capital expenditure forecasts from an AMP. Partially-compliant – a retailer hasn't set prices to achieve full-cost recovery of prudent and efficient new capital expenditure, but has the necessary tools (recent valuations, AMP etc) and is adjusting prices to achieve full-cost recovery in the future. Non-compliant – a retailer hasn't set prices to achieve full-cost recovery of prudent and efficient new capital expenditure, and doesn't have the necessary tools (recent valuations, AMP etc) to know what prices will achieve full-cost recovery.
Principle 2: Valuation of new assets	All new and replacement water and sewerage infrastructure assets should be valued initially at their cost of acquisition (or fair value where cost of acquisition is not available). To meet this principle, a retailer must: ▶ determine acquisition cost by the amount paid for the asset after adjusting for any discounts, rebates, incidental costs and other similar items	Fully-compliant – a retailer has valued all of its new infrastructure assets at their cost of acquisition (or fair value where cost of acquisition is not available) Partially-compliant – a retailer has only valued some of its new infrastructure assets at their cost of acquisition (or fair value where cost of acquisition is not available) Non-compliant – a retailer has not valued any of its new infrastructure assets at their cost of acquisition (or fair value where cost of acquisition is not available)
Principle 3: Valuation of legacy assets	Legacy assets refer to investment decisions made prior to the legacy date (no later than 1 January 2007). Retailers should use the same accounting treatment to value both new and legacy assets. To meet this principle, a retailer must:	Fully-compliant – a retailer has valued all its assets at fair value or cost using a recognised valuation method Partially-compliant – a retailer has identified legacy assets but has not valued those assets at fair value or cost using a recognised valuation method

Pricing principle	Description	Level of compliance
	▶ value legacy assets at fair value or cost using a recognised valuation methodology.	Non-compliant – a retailer has not valued all its assets at fair value or cost using a recognised valuation method
Principle 4: Recovery of legacy capital expenditure	Retailers are required to set charges to achieve full cost recovery of capital expenditure. It is important for all water retailers, regardless of size and scale, to ensure that prices and revenues are sufficient to recover prudent and efficient costs irrespective of when those assets were acquired. Retailers should apply the same approach to recover both legacy and new capital expenditures. To meet this principle, a retailer must: ▶ have undertaken a recent asset valuation, so the depreciation charge is sufficient to fund asset renewal; or ▶ If using a renewals annuity, have an Asset Management Plan (AMP) that specifies the prudent and efficient capital expenditure for renewing, upgrading or extending assets over a medium to long-term time period, and be able to convert the capital expenditure forecasts to a future annualised charge.	Fully-compliant – a retailer has set prices to achieve full-cost recovery of prudent and efficient new capital expenditure. It has either undertaken regular asset valuations to ensure the depreciation charge is appropriate, or has applied a renewals annuity using the capital expenditure forecasts from an AMP. Partially-compliant – a retailer hasn't set prices to achieve full-cost recovery of prudent and efficient new capital expenditure, but has the necessary tools (recent valuations, AMP etc) and is adjusting prices to achieve full-cost recovery in the future. Non-compliant – a retailer hasn't set prices to achieve full-cost recovery of prudent and efficient new capital expenditure, and doesn't have the necessary tools (recent valuations, AMP etc) to know what prices will achieve full-cost recovery.
Principle 5: Rolling forward asset values after the legacy date	If a retailer is using the Regulatory Asset Base (RAB) approach to price future asset replacement costs, the change in the RAB at the end of the year should be calculated as follows: RAB t = (RABt-1 + Prudent Capital Expenditure t – Depreciation t – Disposal t (discarded assets)). (Where t = the year under consideration). If a retailer is using the Renewals Annuity approach, asset values should not be depreciated. To meet this principle, a retailer must: ▶ roll forward its asset base as described above	Fully-compliant – a retailer has employed an asset roll-forward methodology that is consistent with the pricing principle Partially-compliant – a retailer has not employed an asset roll-forward methodology that is consistent with the pricing principle but has identified the steps need to do so Non-compliant – a retailer has not employed an asset roll-forward methodology that is consistent with the pricing principle
Principle 6: Contributed assets	Retailers may receive contributed assets, relating to water or sewerage infrastructure, either as physical assets received free of charge or amounts received specifically for new or upgraded assets. These could be either Government or customer contributions. To meet this principle, a retailer must ▶ ensure contributed assets are excluded from the retailer's regulatory asset base so that a return on the contributed capital is not recovered from customers.	Fully-compliant – a retailer has excluded contributed assets from its regulatory asset base Partially-compliant – a retailer has excluded some but not all contributed assets from its regulatory asset base Non-compliant – a retailer has not excluded contributed assets from its regulatory asset base

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Table 2: Principles for urban water tariffs (applicable to drinking water and sewerage service retailers)

Pricing principle	Description	Level of compliance
Principle 1: Cost recovery	Retailers are required to set water charges to achieve full cost recovery. Retailers should not recover more than: ▶ operational, maintenance and administrative costs ▶ taxes (or tax equivalent) ▶ provision for asset consumption (depreciation or a renewals annuity) ▶ cost of capital (calculated using a Weighted Average Cost of Capital) To meet this principle, a retailer must: ▶ be able to reasonably estimate the costs that it incurs in providing water services to its customers (as detailed above) ▶ be able to convert the capital expenditure forecasts to a future annualised charge (if using the Renewals Annuity approach).	Fully-compliant – a retailer knows the prudent and efficient costs that it incurs in providing water services to its customers and has set prices to achieve full-cost recovery
		Partially-compliant – a retailer knows the prudent and efficient costs that it incurs in providing water services to its customers but has not set prices to achieve full-cost recovery (but is adjusting prices to achieve full-cost recovery in the future)
		Non-compliant – a retailer does not know the prudent and efficient costs that it incurs in providing water services to its customers and has not set prices to achieve full-cost recovery
Principle 2: Tariff structures	A tariff structure refers to the pricing structure used by a retailer to charge their customers for water services. To meet this principle, a retailer must: ▶ use two-part tariffs (comprising a service availability charge and a water usage charge), unless it is not cost effective to do so.	Fully-compliant – a retailer has implemented a two-part tariff structure (comprising a service availability charge and a water usage charge) to charge their customers for water services
		Partially-compliant – a retailer has not implemented a two-part tariff structure (comprising a service availability charge and a water usage charge) to charge their customers for water services, but has provided supporting information to demonstrate why is it not cost effective to do so
		Non-compliant – a retailer has not implemented a two-part tariff structure (comprising a service availability charge and a water usage charge) to charge their customers for water services, and has not provided supporting information to demonstrate why is it not cost effective to do so
Principle 3: Cost reflective tariffs	Setting cost reflective tariffs refers to setting the water usage charge (price per kL) having regard to the long-run marginal cost (LRMC) of supplying water. LRMC is the cost of supplying an additional unit of water over the long run. It takes into account the additional capital costs required to meet future demand and usage, but does not take into account the cost of past investments (sunk investments).	Fully-compliant – a retailer is able to reasonably estimate the long-run marginal cost of water supplied and has set a single water usage charge based on the long-run marginal cost of water supply
		Partially-compliant – a retailer is able to reasonably estimate the long-run marginal cost of water supplied but has not set a

<table>
<tr><th>Pricing principle</th><th>Description</th><th>Level of compliance</th></tr>
<tr><td rowspan="2"></td><td rowspan="2">To meet this principle, a retailer must:
▶ be able to reasonably estimate the long-run marginal cost of an additional unit of water supplied
▶ set a single water usage charge based on the long-run marginal cost of water supply unless there are policy reasons not to do so</td><td>single water usage charge based on the long-run marginal cost of water supply</td></tr>
<tr><td>Non-compliant – a retailer is unable to reasonably estimate the long-run marginal cost of water supplied and has not set a single water usage charge based on the long-run marginal cost of water supply</td></tr>
<tr><td rowspan="3">Principle 4: Setting the service availability charge</td><td rowspan="3">Service availability charge (SAC) refers to the fixed fee recovered by retailers from their water customers even if no water is consumed.
The SAC should be set as follows:
SAC = Total revenue requirement (per Principle 1) – usage charges – developer charges.
Retailers may levy different service availability charges on customers or customer classes depending on circumstances (for example, service demands and equity considerations).
To meet this principle, a retailer must:
▶ calculate the revenue to be recovered through the SAC as detailed above.
▶ able to convert the revenue figure to a SAC per customer</td><td>Fully-compliant – a retailer is able to calculate the revenue to be recovered through the service availability charge per the principle and convert the revenue figure to a SAC per customer</td></tr>
<tr><td>Partially-compliant – a retailer is able to calculate the revenue to be recovered through the service availability charge per the principle but has chosen not to apply this amount as the SAC per customer</td></tr>
<tr><td>Non-compliant – a retailer is unable to calculate the revenue to be recovered through the service availability charge per the principle and convert the revenue figure to a SAC per customer</td></tr>
<tr><td rowspan="3">Principle 5: Pricing transparency</td><td rowspan="3">Water tariffs should be set using a transparent methodology, through a process which seeks and takes into account public comment, or which is subject to public scrutiny (for example, as part of the development of the retailer’s annual business plan).
To meet this principle, a retailer must:
▶ have set prices through a transparent process, for example, through an annual business plan
▶ disclose to water customers the methodology used to set those prices, for example, through a Pricing Policy Statement on its website that clearly sets out how the retailer has developed water prices</td><td>Fully-compliant – a retailer can demonstrate that a transparent process was used to set prices, and the methodology used to set prices is clearly disclosed</td></tr>
<tr><td>Partially-compliant – a retailer cannot demonstrate that a transparent process was used to set prices, but the methodology used to set prices is clearly disclosed</td></tr>
<tr><td>Non-compliant – a retailer cannot demonstrate that a transparent process was used to set prices, nor is methodology used to set prices clearly disclosed</td></tr>
<tr><td rowspan="2">Principle 6: Over recovery of revenue</td><td rowspan="2">When water usage charges lead to revenue recovery in excess of the costs incurred in providing the water services, the excessive revenue should be redistributed to water customers.
To meet this principle, a retailer must:
▶ be able to reasonably estimate the costs that it incurs in providing water services to its customers (for example, capital and operating expenditures)</td><td>Fully-compliant – a retailer is able to reasonably estimate if there has been over recovery of revenue and, if so, have a strategy in place to redistribute excessive revenues to customers as soon as practicable</td></tr>
<tr><td>Partially-compliant – a retailer is able to reasonably estimate if there has been over recovery of revenue but does not have a strategy in place to redistribute excessive</td></tr>
</table>

Pricing principle	Description	Level of compliance
	▶ be able to reasonably estimate the actual amount of revenue that it collects from customers through water charges ▶ have a strategy in place to redistribute excessive revenues to customers as soon as practicable	revenues to customers as soon as practicable Non-compliant – a retailer is unable to reasonably estimate if there has been over recovery of revenue and does not have a strategy in place to redistribute excessive revenues to customers as soon as practicable
Principle 7: Differential water charges	Water charges should be differentiated by the cost of serving different customers, for example, those in different locations, where there is a net benefit to doing so. To meet this principle, a retailer must: ▶ be able to reasonably estimate if there are any differences in the costs of serving different customers or customer groups ▶ set differential water charges if there are differences in the costs of serving different customers or customer groups and there is a net benefit to doing so	Fully-compliant – a retailer is able to reasonably estimate if there are any differences in the costs of serving different customers or customer groups and has set differential charges (if there is a net benefit to doing so) Partially-compliant – a retailer is able to able to reasonably estimate if there are any differences in the costs of serving different customers or customer groups but is unable to determine if there is a net benefit to setting differential charges (if there are differences in the costs of serving different customers or customer groups), and has not set differential charges. Non-compliant – a retailer is unable to reasonably estimate if there are any differences in the costs of serving different customers or customer groups and determine if there is a net benefit to setting differential charges (if there are differences in the costs of serving different customers or customer groups)), and has not set differential charges.
Principle 8: Setting developer charges	Developer charges exist in a number of areas across the state where development activity (for example, new land divisions) is proposed or ongoing and water infrastructure either does not exist or does not have sufficient capacity to accommodate the new development. Developer charges should be cost-reflective. To meet this principle, a retailer must: ▶ be able to reasonably estimate the direct costs of new investments and augmentation of existing water infrastructure to serve a new development	Fully-compliant – a retailer is able to reasonably estimate the direct costs of new investments and augmentation of existing water infrastructure to serve a new development and has set developer charges to reflect those costs Partially-compliant – a retailer is able to reasonably estimate the direct costs of new investments and/or augmentation of existing water infrastructure to serve a new development but has not set developer charges to reflect those costs Non-compliant – a retailer is unable to reasonably estimate the direct costs of new investments and/or augmentation of existing water infrastructure to serve a new development and has not set developer charges to reflect those costs

Pricing principle	Description	Level of compliance
Principle 9: Capping developer charges	To avoid over recovery, retailers must ensure cost-reflective developer charges are set. To meet this principle, a retailer must: ▶ be able to reasonably estimate the direct costs of new investments and augmentation of existing water infrastructure to serve a new development ▶ set developer charges to reflect those direct costs	Fully-compliant – a retailer is able to reasonably estimate the direct costs of new investments and augmentation of existing water infrastructure to serve a new development and has set developer charges to achieve full cost recovery Partially-compliant – a retailer is able to reasonably estimate the direct costs of new investments and/or augmentation of existing water infrastructure to serve a new development but has not set developer charges to achieve full cost recovery Non-compliant – a retailer is unable to reasonably estimate the direct costs of new investments and/or augmentation of existing water infrastructure to serve a new development and has not set developer charges to achieve full cost recovery
Principle 10: Revenue from developer charges	To avoid over recovery, retailers must ensure revenue from developer charges are offset against the total revenue requirement for the provision of water services To meet this principle, a retailer must: ▶ be able to determine the revenue collected from developer charges ▶ if using a RAB approach to set prices, deduct the contributed assets from the RAB (so depreciation of the RAB and cost of capital are calculated on the RAB net of contributed assets) ▶ if using a renewals annuity approach, offset the revenue recovered from developer charges in calculating the future annualised charge.	Fully-compliant – a retailer is able to determine the revenue collected from developer charges and offset it against the total revenue requirement Partially-compliant – a retailer is able to determine the revenue collected from developer charges but has not fully offset it against the total revenue requirement Non-compliant – a retailer is unable to determine the revenue collected from developer charges and has not offset it against the total revenue requirement

Table 3: Pricing principles for recycled water and stormwater use

Pricing principle	Description	Level of compliance
Principle 1: Flexible regulation	The principle states that "light-handed regulation and flexible regulation (including the use of pricing principles) is preferable for the purposes of setting recycled water and stormwater use charges, as it is generally more cost-efficient than formal regulation." This principle relates to the Commission's approach to regulation, rather than a principle to be applied by retailers. Retailers are not required to demonstrate compliance with this principle.	Not applicable
Principle 2: Cost allocation	Retailers should use the beneficiary pays approach when allocating costs associated with the provision of recycled water and stormwater use services. The beneficiary-pays approach builds on the user pays approach but is broader. It acknowledges that benefits accrue to others beyond the direct customer base and allows for costs to be allocated across a broader base. In other words, a beneficiary pays approach provides a framework for allocating costs to all other indirect beneficiaries. To meet this principle, a retailer should: ▶ be able to separately identify the direct users and indirect beneficiaries of the service ▶ have a methodology to allocate costs between direct users and indirect beneficiaries of the service	Fully-compliant – a retailer is able to separately identify the direct users and indirect beneficiaries of the service and have a methodology to allocate costs between direct users and indirect beneficiaries of the service Partially-compliant – a retailer is able to separately identify the direct users and indirect beneficiaries of the service but does not have a methodology to allocate costs between direct users and indirect beneficiaries of the service, or does have a methodology but is not doing so Non-compliant – a retailer is unable to separately identify the direct users and indirect beneficiaries of the service and does not have a methodology to allocate costs between direct users and indirect beneficiaries of the service
Principle 3: Water usage charge	To meet this principle, a retailer must: ▶ ensure prices contain a water usage (for example, volumetric) charge	Fully-compliant – a retailer has implemented a water usage charge Partially-compliant – a retailer has not implemented a water usage charge but has provided supporting information to demonstrate why it is not economically efficient to do so Non-compliant – a retailer has not implemented a water usage charge and has not provided supporting information to demonstrate why it is not economically efficient to do so
Principle 4: Substitutes	The Commission recognises that a number of retailers have chosen to link their current recycled water and stormwater prices with SA Water prices (for potable water).	Fully-compliant – a retailer has used the price of substitutes to set recycled water and stormwater use charges and its pricing regime meets all other pricing principles

Pricing principle	Description	Level of compliance
	While this practice is not inconsistent with the pricing principle, retailers must ensure that their pricing regime moves towards compliance with the other pricing principles (for example, ensuring full cost recovery and transparency). To meet this principle, a retailer may: ▶ use the price of substitutes to set recycled water and stormwater use charges only when their pricing regime meets all other pricing principles	Partially-compliant – a retailer has used price of substitutes to set recycled water and stormwater use charges and its pricing regime meets most of all other pricing principles
		Non-compliant – a retailer has used price of substitutes to set recycled water and stormwater use charges and that its pricing regime does not meet most other pricing principles
Principle 5: Differential pricing	Pricing structures should also be able to reflect differentiation in the quality or reliability of water supply. To meet this principle, a retailer should: ▶ be able to reasonably estimate if there are any differences in the costs associated with supplying water services of different quality and reliability standards ▶ determine if there is a net benefit to charge prices accordingly to reflect the differentiation in the quality or reliability of water supply	Fully-compliant – a retailer is able to reasonably estimate if there are any differences in the costs associated with supplying water services of different quality and reliability standards and has reflected (if necessary) those differences in prices if there is a net benefit to doing so
		Partially-compliant – a retailer is able to reasonably estimate if there are any differences in the costs associated with supplying services of different quality and reliability standards but is unable to determine if there is a net benefit to setting differential charges (if there are differences in the quality or reliability of supply) has not reflected those differences in prices
		Non-compliant – a retailer is unable to reasonably estimate if there are any differences in the costs associated with supplying services of different quality and reliability standards and determine if there is a net benefit to setting differential charges (if there are differences in the quality or reliability of supply)
Principle 6: Integrated water resource planning	Where appropriate, retailers should consider the costs and benefits to customers when considering alternative water supply options to balance supply and demand and consequently minimise system-wide costs. To meet this principle, if in setting prices, a retailer has reflected the benefit of the recycled water in reducing the strain on other water sources, a retailer should: ▶ be able to evidence that net benefit to the integrate water resource system	Fully-compliant – where appropriate, a retailer's prices reflect the benefit of the recycled water in reducing the strain on other water sources, and can evidence that net benefit to the integrated water resource system, OR Prices do not reflect the net benefit to the integrated water resource system of the recycled water.
		Partially-compliant – Not applicable.
		Non-compliant – a retailer's prices reflect the benefit of the recycled water in reducing the strain on other water sources, but it cannot

Pricing principle	Description	Level of compliance
		evidence that net benefit to the integrated water resource system
Principle 7: Cost recovery	Retailers are required to set water charges to achieve full direct costs. The upper limit of full direct costs are the lesser of stand-alone system costs and customer's willingness to pay. The lower limit of full direct costs are system-wide incremental (marginal) costs. Where water charges meet less than the upper limit, the gap should be recovered from other beneficiaries, for example, sewerage services customers, for a treated effluent recycled water scheme. To meet this principle, a retailer must: ▶ water charges must cover a minimum of incremental costs ▶ any full cost recovery gap should be recovered from other beneficiaries	Fully-compliant – a retailer is recovering full direct costs as defined by this principle. Partially-compliant – a retailer is not recovering full direct costs as defined by this principle, but has a plan to achieve that in the near future Non-compliant – a retailer is not recovering full direct costs as defined by this principle
Principle 8: Transparency	Water tariffs should be transparent, understandable to users and published to assist efficient choices. To meet this principle, a retailer must: ▶ clearly disclose its schedule of prices ▶ clearly disclose the methodology used to set those prices, for example, through a Pricing Policy Statement on its website that sets out how the retailer has developed water prices	Fully-compliant – a retailer has disclosed its prices and pricing methodology to its customers Partially-compliant – a retailer has partially disclosed its prices and pricing methodology to its Non-compliant – a retailer has not disclosed its prices and pricing methodology to its customers
Principle 9: Gradual approach	The Commission recognises that some retailers will not currently be undertaking pricing practices in line with the pricing principles and there should be a transition period for retailers to achieve full compliance (for example, implement process changes for retailers and complying with the terms and conditions of existing contracts). However, retailers are required to adopt a pricing strategy for recycled water and stormwater services that allows for consumer education and the community to adapt. To meet this principle, a retailer must: ▶ be able to determine whether or not their existing pricing practices comply with the NWI Pricing Principles ▶ have a strategy to ensure their pricing practices will transition gradually to compliance with the NWI Pricing Principles as soon as practicable if they are currently non-compliant	Fully-compliant – a retailer has a strategy to ensure their pricing practices will transition gradually to compliance with the NWI Pricing Principles Partially-compliant – a retailer has a strategy to ensure their pricing practices will transition gradually to compliance with most of the NWI Pricing Principles Non-compliant – a retailer does not have a strategy to ensure their pricing practices will transition gradually to compliance with the NWI Pricing Principles.