



INQUIRY INTO THE 2004-05 WASTEWATER PRICING PROCESS

ISSUES PAPER

August 2004

REQUEST FOR SUBMISSIONS

The Essential Services Commission of SA (the Commission) invites written submissions from interested parties in relation to the issues raised in this paper. Written comments should be provided by **10 September 2004**. It is highly desirable for an electronic copy of the submission to accompany any written submission.

It is Commission policy to make all submissions publicly available via its website (www.escosa.sa.gov.au), except where a submission either wholly or partly contains confidential or commercially sensitive information provided on a confidential basis and appropriate prior notice has been given.

The Commission may also exercise its discretion not to exhibit any submission based on their length or content (for example containing material that is defamatory, offensive or in breach of any law).

Responses to this paper should be directed to:

INQUIRY INTO WASTEWATER PRICING PROCESSES

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Public Information about the Commission's activities

Information about the role and activities of the Commission, including copies of latest reports and submissions, can be found on the Commission's website at www.escosa.sa.gov.au.

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1. INTRODUCTION

Pursuant to section 35(1) of the *Essential Services Commission Act, 2002 (the Act)*, the Treasurer has referred to the Commission an inquiry into the wastewater pricing process in South Australia. The Commission received the referral on 17 August 2004, and is required to submit a draft report to the Treasurer and the Minister by 30 September 2004.

The following are the terms of reference for this inquiry:

- (a) *The Commission is to inquire into the processes undertaken in the preparation of advice to Cabinet, resulting in Cabinet making its decision on the level and structure of SA Water's wastewater prices for 2004-05, with respect to the adequacy of the application of CoAG pricing principles;*
- (b) *In undertaking this inquiry, the Commission is to consider the "Transparency Statement - (Part A) Wastewater Prices in South Australia 2004-05" dated June 2004;*
- (c) *In considering the processes undertaken for the preparation of advice to Cabinet, the Commission is to advise on the extent to which information relevant to the CoAG principles was made available to Cabinet.*

The Transparency Statement provided by the Treasurer provides the basis for the inquiry. This issues paper seeks submissions on the transparency statement generally, and particularly on some of the issues outlined in this paper.

The Transparency Statement for wastewater prices follows a similar structure and basic content to the previous Transparency Statement covering Urban Water Prices. Due to the similar nature of the two documents, there is an inevitable degree of duplication of content, in order for this paper to be sufficiently comprehensive in a stand-alone context, as must be the case to accommodate consideration by interested parties who may not have had an interest in the water supply case. It is, however, noted that the Wastewater Transparency Statement has taken steps to address some of the issues raised by the Commission with respect to the Urban Water Transparency Statement.

Although this is not the normal practice for the Commission, due to the short time available to the Commission to conduct this inquiry, time for submissions is restricted to two weeks.



2. THE COAG PRINCIPLES

The Commission's assessment in this inquiry is against the COAG pricing principles for water. These principles were developed for application to water (including wastewater) by Australia's State and Commonwealth governments as part of the National Competition Policy.

As is explained in the Transparency Statement, the pricing principles for water are contained in the strategic framework for water, as set out in the Compendium of National Competition Policy Agreements (NCC 1998, 2nd Edition).

Section 3 of the strategic framework is specifically dedicated to pricing issues. However, it is a very broad pricing statement and does not provide much detail (see below).

Relevant clauses of the CoAG Strategic Framework 1994 (pages 103-104).

In relation to water resource policy, CoAG agreed:

2 *to implement a strategic framework to achieve an efficient and sustainable water industry comprising the elements set out in (3) ... below.*

3 *In relation to pricing:*

(a) *in general —*

i. *to the adoption of pricing regimes based on the principles of consumption-based pricing, full-cost recovery and desirably the removal of cross-subsidies which are not consistent with efficient and effective service, use and provision. Where cross-subsidies continue to exist, they be made transparent, ...;*

ii. *that where service deliverers are required to provide water services to classes of customer at less than full cost, the cost of this be fully disclosed and ideally be paid to the service deliverer as a community service obligation;*

(b) *urban water services —*

iii. *to the adoption by no later than 1998 of charging arrangements for water services comprising of an access or connection component together with an additional component or components to reflect usage where this is cost-effective;*

iv. *that in order to assist jurisdictions to adopt the aforementioned pricing arrangements, an expert group, on which all jurisdictions are to be represented, report to CoAG at its first meeting in 1995 on asset valuation methods and cost-recovery definitions, and*

v. *that supplying organisations, where they are publicly owned, aiming to earn a real rate of return on the written down replacement cost of their assets, commensurate with the equity arrangements of their public ownership;*

To complement these clauses, the Standing Committee on Agriculture and Resource Management (SCARM), through the Agriculture and Resource Management Council of

Australia and New Zealand (ARMCANZ), provided a detailed set of guidelines. This detailed set of guidelines is generally referred to as “the COAG Pricing Principles”.

Guidelines for applying Section 3 of the Strategic Framework and Related Recommendations in Section 12 of the Expert Group Report

- 1. Prices will be set by the nominated jurisdictional regulators (or equivalent) who, in examining full cost recovery as an input to price determination, should have regard to the principles set out below.*
- 2. The deprival value methodology should be used for asset valuation unless a specific circumstance justifies another method.*
- 3. An annuity approach should be used to determine the medium to long-term cash requirements for asset replacement/refurbishment where it is desired that the service delivery capacity be maintained.*
- 4. To avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or TERs (tax equivalent regime), provision for the cost of asset consumption and cost of capital, the latter being calculated using a WACC.*
- 5. To be viable, a water business should recover, at least, the operational, maintenance and administrative costs, externalities, taxes or TERs (not including income tax), the interest cost on debt, dividends (if any) and make provision for future asset refurbishment/replacement (as noted in (3) above). Dividends should be set at a level that reflects commercial realities and stimulates a competitive market outcome.*
- 6. In applying (4) and (5) above, economic regulators (or equivalent) should determine the level of revenue for a water business based on efficient resource pricing and business costs.*
- 7. In determining prices, transparency is required in the treatment of community service obligations, contributed assets, the opening value of assets, externalities including resource management costs, and tax equivalent regimes.*

Terms requiring further comment in the context of these guidelines (these comments form part of the CoAG Strategic Framework) (Pages 112-113)

- *The reference to “or equivalent” in principles 1 and 6 is included to take account of those jurisdictions where there is no nominated jurisdictional regulator for water pricing.*
- *The phrase “not including income tax” in principle 5 only applies to those organisations which do not pay income tax.*
- *“Externalities” in principles 5 and 7 means environmental and natural resource management costs attributable to and incurred by the water business.*
- *“Efficient resource pricing” in principle 6 includes the need to use pricing to send the correct economic signals to consumers on the high cost of augmenting water supply systems. Water is often charged for through a two-part tariff arrangement in which there are separate components for access to the infrastructure and for usage. As an augmentation approaches, the usage component will ideally be based on the long-run marginal costs so that the correct pricing signals are sent.*
- *“Efficient business costs” in principle 6 are the minimum costs that would be incurred by an organisation in providing a specific service to a specific customer or group of customers. Efficient business costs will be less than actual costs if the organisation is not operating as efficiently as possible.*

As outlined in Terms of Reference (a), the Commission is required to review the processes undertaken by (and the provision of information to) Cabinet in coming to its 2004-05 wastewater pricing decision, with regard to the application of these principles. The following sections address a number of key elements of the principles and their application during the pricing process.



3. FULL COST RECOVERY

The National Competition Policy provides a detailed guideline¹ on what is considered to be full cost recovery. Comments are sought on a number of specific issues under the guideline.

- (i) The COAG principles require a deprival value methodology to be used for asset valuation. The Transparency Statement uses a “fair value” for its asset base, and states “there is no practical difference between the asset valuation using the ODV approach and the fair value method”.

The CoAG guidelines also require that the treatment of contributed assets is transparent when determining prices. Contributed assets comprise customer contributions, for construction of a new main, and subdividers contributions.

While acknowledging that the treatment of contributed assets is broadly compliant with CoAG guidelines, more effective compliance with the CoAG principles will be achieved when the contributed assets are valued (or a best estimate is determined), and removed from the regulatory asset base.

Contributions have been occurring over a considerable period of time and could represent a significant portion of the asset base. This would be higher for wastewater than is the case for water supply, due to the absence of a sewerage equivalent to the Country Lands water mains network.

The Government is currently reviewing the treatment of contributed assets for water and wastewater pricing purposes. The significant issues include:

- ▲ whether to remove contributed assets from the asset base,
- ▲ whether to include contributed assets in the asset base and provide some offsetting mechanism to account for the contribution (Queensland Competition Authority approach)
- ▲ an appropriate treatment for asset replacement/refurbishment of contributed assets.

ISSUE: Is the asset valuation methodology, as outlined in the Transparency Statement, consistent with the COAG principles? In particular, how should contributed assets and customer contributions for the construction and/or acquisition of infrastructure be treated to ensure consistency with the COAG principles?

¹ Compendium of National Competition Policy Agreements (Second Edition 1998), National Competition Council, June 1998, pg 112 (the document can be accessed from the National Competition Council's web site: <http://www.ncc.gov.au/pdf/PIAg-005.pdf>).

- (ii) The COAG principles require an annuity approach to determining the cash requirements for asset replacement/refurbishment where it is desired that the service delivery capacity be maintained.

The Transparency Statement uses the straight line method for calculating the depreciation, stating that this is consistent with other regulatory decisions.

It is highly likely that the straight-line depreciation method will generate a significantly lower outcome to an annuity estimate of the provision for future asset refurbishment/replacement sufficient to maintain the ongoing service capacity of the wastewater business.

The Government is expediting the development of an appropriate annuity-based estimate of the provision for asset refurbishment/replacement in the minimum revenue outcome.

ISSUE: If there is a material difference between the two methodologies, what are the implications in adopting the straight line method as a proxy for the annuity method to satisfy the COAG principles?

- (iii) The COAG principles state that the total revenue recovery must lie between the maximum amount (to avoid monopoly rents) and a minimum amount (to ensure financial viability). Common costs under the two amounts are:

- a) efficient operating, maintenance and administrative expenses,
- b) externalities,
- c) taxes and TERs.

In addition, the maximum revenue includes:

- d) a risk adjusted return on assets, and
- e) provision for the cost of asset consumption

The minimum revenue includes:

- f) provision for future asset refurbishment (based on the annuity approach)
- g) dividends, and
- h) interest cost of debt.

In the above context, the COAG principles require that a level of revenue is determined based on efficient resource pricing and business costs.

In relation to the operating costs, the Transparency Statement uses the Water Services Association of Australia data from its annual publication *WSAAfacts* to show that “SA Water is one of if not the most efficient operator in terms of wastewater operating and total costs per property. (and) ... over the last three years most providers have indicated that their operating and total costs per property have increased.”

It also states that “The ability to achieve future substantial cost economies is somewhat limited because the current substantial degree of competitive tendering delivers efficient business costs for those aspects of SA Water’s costs that are open to competition for the market.”.

The analysis provided on the outcomes for the Adelaide wastewater undertaking is quite extensive. However, the commentary on the outcomes for the SA Water Country systems is effectively restricted to observations on the perceived difficulties in identifying ‘suitable’ benchmarking frameworks.

The Transparency Statement observes that, “the Australian Water Association produced a similar report to *WSAAfacts*, which covered country service providers (commonly referred to as non-major urban), with at least 10,000 but less than 50,000 connected properties. (and) promoted the use of the data to analyse trends over time for a specific utility. Like *WSAAfacts* (the AWA Report) cautions against the use of inter-utility comparisons due to:

substantially different operating environments and underlying cost drivers
(*Australian Water Association, 2001, p 4*).”

Both the AWA and WSAA texts relate to both water supply and wastewater services. An argument could be made that wastewater cost drivers are considerably less prone to many of the geographic and climatic variations that may significantly impact on water supply costs.

In addition:

- ▲ the delivery mechanisms for Country and Adelaide Wastewater services are quite different. Country services are resourced ‘in-house’ by SA Water, while Adelaide services are subject to a facilities management contract with United Water International; and
- ▲ the South Australian Government provides a CSO payment for Country Wastewater services, which has increased significantly over past years.
- ▲ There are other sources of Country Wastewater performance data available.

ISSUES:

To the extent that the information in WSAA facts is not relevant to the SAW Country Systems, on what basis has the cost effectiveness of Country Services been assessed?

Given the existence of the CSO payments, should, at the very minimum, the performance for Country Wastewater systems be analysed in the context of Adelaide cost and service level movements?

- (iv) With regard to the risk-adjusted rate of return, the Transparency Statement uses a range of pre-tax real WACC, between 6% and 8%. Due to the use of pre-tax WACC, it does not use tax or TER in the Transparency Statement.

The Government is currently undertaking a review of a suitable WACC for SA Water.

Figure 4 in the Transparency Statement “*Comparison of wastewater revenue outcomes for SA Water— 2002 03 to 2006 07 (in real terms)*” indicates that the Forecast Target Revenue outcomes broadly equate to a Maximum Revenue Outcome using a 7% WACC applied to the total wastewater asset base (i.e. with no adjustments for contributed assets: see above).

For the Wastewater case presented in the Transparency Statement, the Minimum Revenue outcome is in excess of the Maximum Revenue case using a WACC of 6%. However it is also identified that “SA Water’s forecast target revenue of the total business lies below their respective maximum revenue outcomes using a 6% pre-tax, real WACC.”

ISSUE: What would be the implications if the correct pre-tax real WACC for SA Water is determined to be 7%, or less?

- (v) For compliance with the dividend policy, the Transparency Statement states that SA Water’s policy is to provide 55% of Earnings before interest, taxes, depreciation and amortisation (EBITDA) as total contribution (eg. dividends and the income tax equivalent) to SA Government. EBITDA is used as a proxy for free cash flow.

The Transparency Statement identifies that “Government considers that the dividends paid by SA Water are consistent with commercial realities; the Government acknowledges that it would be more appropriate to develop a separate dividend policy that can be clearly identified as being consistent with commercial realities and with competitive neutrality principles.

It is also stated that: "SA Water is earning significantly higher rates of return on its wastewater operations than on its water operations (using the present allocation methodology)." (Page 43)

Further, the reasons behind a higher level of operating profit for Wastewater services than achieved for Water Supply are identified as:

- ▲ "reduced water sales in 2003-04, due to the weather and water conservation measures, resulted in a (real) decline in the profitability of water operations
- ▲ an increase in the wastewater rate revenue and CSO payment for country wastewater operations, combined with a relatively small increase in the operating expenditure of the wastewater operations, resulted in a (real) improvement in the profitability of the wastewater operations."

The Government is currently reviewing its Dividend Policy for all South Australian public non-financial corporations (PNFCs), including SA Water. (and) expects to have a new Dividend Policy finalised in the second half of 2004."

ISSUE: Does the current dividend contribution allocation methodology, if continued, present the risk of causing price rises for Wastewater services to offset reductions in Water Supply Revenues, resulting from such factors as water restrictions?

- (vi) The benchmark data provided in the Transparency Statement shows that South Australia has performed relatively poorly over the last few years in terms of the number of sewer breaks and chokes (see table 18 of the Transparency Statement).

It would be expected that such performance would trigger questions in respect of the investment and other strategies devised to improve performance in this area. These questions could therefore affect wastewater pricing decisions.

ISSUE: Was sufficient attention paid to this performance in determining an appropriate allowance for investment or operating expenditure?

- (vii) Externalities include only actual environmental expenses.

ISSUE: Is it sufficient to include only the actual environmental expenses, due to difficulty in determining the full cost of "externalities" as defined in the COAG principles?



4. COMMUNITY SERVICE OBLIGATIONS

Section 3(a)(ii) of the COAG principles states:

“that where service deliverers are required to provide water services to classes of customer at less than full costs, the cost of this be fully disclosed and ideally be paid to the service deliverer as a community service obligation”.

The Transparency Statement lists CSOs in a number of categories, as follows:

Table 13: Estimated CSO payments and subsidies to SA Water for wastewater services

CSO PAYMENTS (IN NOMINAL TERMS)	RELEVANT AGENCY	2002-03	2003-04	2004-05
		(\$M)	(\$M)	(\$M)
Service charge exemptions	Human Services	5.7	5.7	5.7
Trade waste	DTED	2.7	2.6	2.4
Statewide pricing/country operations	PIRSA	9.4	9.4	9.4
New country investments	PIRSA	0.7	6.2	7.4
Total CSO (wastewater) payments		18.5	23.9	24.9

With regard to materiality, the main area of interest for future pricing considerations would be the combination of the CSOs for Statewide pricing and ‘New country investments’.

The increase in the CSO payment for ‘New country investments’ over the three years 2002-3 to 2004-05 is significant, yet there is no discussion of the reason for this increase in the Transparency Statement, or the nature of any emerging trends. Also, as previously noted, there is no discussion of cost and/or service performance trends in Country Areas.

The Transparency Statement identifies that Table 13 was part of information in the Statement which “was not provided to the Government in the 2004 05 wastewater pricing decision, as it had already been provided as part of the budget process.”

ISSUE: Is the level of review afforded CSO payments for Wastewater services, particularly those attributed to ‘New country investments’, in keeping with the intent of the CoAG requirements?



5. PRICING STRUCTURE

The CoAG principles show a preference for usage-based pricing, where it is cost effective to do so. As the Transparency Statement identifies, there are difficulties with applying usage charges for most wastewater customers, suggesting that other approaches are required. For all but the largest customers, SA Water's wastewater charges are based solely on property values.

The Government policy of statewide pricing, supported by CSOs, ensures that country customers pay no more on average than metropolitan customers. Consequently, Country customers are charged at higher rates than Adelaide metropolitan customers.

The higher country rate-scales are a reflection of the lower average property values in country areas. Over recent years, the average country customer's charges for wastewater services have decreased relative to Adelaide metropolitan customers, due to differential movements in the capital value of properties. Cabinet has approved the removal of some of this discrepancy in 2004-05.

It is noted that in its 2003 assessment the NCC stated that: "The Council is satisfied that South Australia is appropriately addressing consumption-based pricing obligations relating to water and wastewater services."

There is an argument that using a form of property-based tax provides some measure of 'ability to pay' re-distribution of costs for social equity purposes, although noting that in the short-term, variable property value movements may cause some divergence from this outcome. The property-based approach may also provide a relatively secure base for annual pricing decisions, in so far as wastewater charge rates are set on known property values and hence the total revenue collection will be stable.

However, it is also true that alternate approaches, including uniform charges structured around connection size are closer to the user-pays ideals underpinning the COAG principles. Such approaches may be equivalent in terms of revenue stability and could remove the need to insert country differentials into the property-based approach.

Issue: is charging on the basis of property value (for all but the largest customers) an appropriate approach in the context of the CoAG principles?



6. NEXT STEPS

Due to the short time frame available to ESCOSA to conduct this inquiry, submissions are sought on this issues paper by 10 September 2004.

ESCOSA will consider all submissions received and prepare a draft report by 30 September 2004. In accordance with the requirements for the inquiry, the draft report will be submitted to the Treasurer and the Minister for Administrative Services.

A final report will be presented to the two Ministers by 14 October 2004.