



**INQUIRY INTO THE 2006-07  
METROPOLITAN AND  
REGIONAL WATER AND  
WASTEWATER PRICING  
PROCESS  
FINAL REPORT**

**November 2005**

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## TABLE OF CONTENTS

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<b>Glossary of Terms</b>	<b>ii</b>
<b>Overview</b>	<b>3</b>
<b>1 Introduction</b>	<b>3</b>
1.1 Purpose of this paper	3
1.2 Conduct of the inquiry	4
1.3 Link to the previous inquiries	5
1.4 Structure of this paper	5
<b>2 The 1994 CoAG pricing principles</b>	<b>7</b>
2.1 The National Water Initiative	9
<b>3 The price setting process</b>	<b>11</b>
3.1 Cabinet process	11
3.2 Preparation of the Transparency Statement	11
3.3 Nature of the Transparency Statement	12
<b>4 Compliance with the 1994 CoAG pricing principles</b>	<b>13</b>
4.1 Operating, maintenance and administrative expenses – efficient business costs	14
4.2 Asset valuation	23
4.3 Contributed assets	25
4.4 Depreciation – provision for asset consumption (maximum revenue case)	27
4.5 Provision for future asset refurbishment/rehabilitation (minimum revenue case)	29
4.6 Externalities	30
4.7 Return on assets	33
4.8 Dividends	36
4.9 Tax equivalent regime	38
4.10 Efficient Resource Pricing – Tariffs and Rates	40
4.11 Cross-Subsidies	43
<b>5 Conclusion</b>	<b>49</b>
5.1 Statement of Compliance	49

## GLOSSARY OF TERMS

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<b>ANNUITY APPROACH</b>	The constant annual provision (in real cost terms) that will cover the cost of replacing/rehabilitating all assets falling due within the period of the annuity/planning period, assuming retention of earnings from any accumulated annual surpluses
<b>ARMCANZ</b>	Agricultural and Resources Management Council of Australia and New Zealand
<b>CoAG</b>	Council of Australian Governments
<b>THE COMMISSION</b>	Essential Services Commission of South Australia
<b>CPA</b>	Competition Principles Agreement
<b>CSO</b>	Community Service Obligation
<b>DWLBC</b>	Department of Water, Land and Biodiversity Conservation (SA)
<b>EEL</b>	Environmental Enhancement Levy
<b>EIP</b>	Environmental Improvement Program
<b>EPA</b>	Environment Protection Authority (SA)
<b>EXPERT GROUP</b>	The Expert Group on Asset Valuation Methods and Cost-Recovery Definitions for the Australian Water Industry
<b>NCC</b>	National Competition Council
<b>NCP</b>	National Competition Policy
<b>NMU</b>	Non-Major Urban (water authority)
<b>NWC</b>	National Water Commission
<b>NWI</b>	National Water Initiative
<b>OMA</b>	Operating, Maintenance and Administration
<b>PNFCs</b>	Public Non-Financial Corporations
<b>SA WATER</b>	South Australian Water Corporation
<b>SCARM</b>	Standing Committee on Agriculture and Resource Management
<b>TER</b>	Tax Equivalent Regime
<b>WACC</b>	Weighted average cost of capital
<b>WSAA</b>	Water Services Association of Australia

**NOTICE OF REFERRAL FOR AN INQUIRY INTO WATER AND  
WASTEWATER PRICING IN METROPOLITAN AND REGIONAL SOUTH  
AUSTRALIA FOR 2006-07 PURSUANT TO PART 7 OF THE ESSENTIAL  
SERVICES COMMISSION ACT 2002**

**FROM:       The Hon Kevin Foley MP, Treasurer**

**TO:         The Essential Services Commission of South Australia**

**RE:         Water and Wastewater Prices in Metropolitan and Regional  
              South Australia from 1 July 2006 to 30 June 2007**

**BACKGROUND:**

1. Pursuant to section 35(1) of the *Essential Services Commission Act, 2002* (**the Act**), the Commission must conduct an inquiry into any matter that the Minister, by written notice, refers to the Commission.
2. The Act is committed to the Treasurer by way of *Gazettal* notice dated 12 September 2002 (p. 3393).
3. The South Australian Government proposes to publish a Transparency Statement each year on SA Water's water and wastewater prices. The Government has prepared the attached Transparency Statement (Part A).
4. The Transparency Statement (Part A) links Cabinet's decision on water and wastewater prices to 1994 CoAG pricing principles, provides information on SA Water's financial performance in the context of pricing decisions and past and future expenditures, and addresses details of estimates of revenues, community service obligations, capital expenditure program, profit and its distribution.
5. SA Water is to meet the reasonable costs of the Commission in undertaking the inquiry.
6. The Government is currently in the process of finalising its National Water Initiative Implementation Plan for consideration by the National Water Commission. Accordingly, this Transparency Statement process occurs pursuant to the 1994 CoAG pricing principles.

**REFERRAL:**

I, Kevin Foley, Treasurer, refer to the Commission the matter described in paragraph (a) of the Terms of Reference for inquiry, in accordance with those matters in paragraphs (b) and (c) of the Terms of Reference and subject to the Directions set out in this Notice.



## **TERMS OF REFERENCE:**

The following are the Terms of Reference for the inquiry referred pursuant to section 35(1) of the Act:

- (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 water and wastewater prices in metropolitan and regional South Australia for 2006-07, with respect to the adequacy of the application of 1994 CoAG pricing principles;
- (b) In undertaking this inquiry, the Commission is to consider the *Transparency Statement Metropolitan and Regional Water and Wastewater Prices in South Australia 2006-07 (Part A)* dated August 2005;
- (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 1994 CoAG pricing principles was made available to Cabinet.

## **REQUIREMENTS FOR INQUIRY:**

The following requirements are made pursuant to section 35(5) of the Act:

- (a) I require that the Commission undertake its inquiry and submit a Draft Report to both myself and the Minister for Administrative Services by no later than 31 October 2005;
- (b) I require that the Commission submit a Final Report on the inquiry to both myself and the Minister for Administrative Services by no later than 30 November 2005;
- (c) In conducting the inquiry, the Commission is not required to hold public hearings, public seminars or workshops but may receive and consider any written submissions as it thinks appropriate and it must advertise to call for written submissions to be lodged no later than 14 days from the date of publication of the Notice of Inquiry;
- (d) If the Commission wishes to seek further information or guidance in relation to the conduct of this inquiry, it may contact the Director, Economic Regulation Section, Revenue and Economics Branch, Department of Treasury and Finance.

## **DIRECTIONS:**

The following direction is made pursuant to section 35(5)(f) of the Act:

I direct that in undertaking its enquiry the Commission must preserve the confidentiality of any information, material or documentation provided by Government to enable the Commission to undertake its enquiry and stamped "Strictly Confidential".

Kevin Foley MP

**TREASURER**

## OVERVIEW

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In September 2005, the Treasurer directed that the Essential Services Commission of South Australia (the Commission) undertake an inquiry into the processes leading to the Cabinet decision on the level and structure of SA Water's water and wastewater prices in metropolitan and regional South Australia for 2006-07. The focus of the inquiry is on the adequacy of the application of the 1994 CoAG pricing principles in these processes.

In undertaking its Inquiry, the Commission was required to consider the report: *Transparency Statement Metropolitan and Regional Water and Wastewater Prices in South Australia 2006-07* (Part A), dated August 2005, which was prepared by the Department of Treasury and Finance and endorsed by Cabinet.

In undertaking this Inquiry, the Commission is, for the third time, considering the adequacy of the application of the CoAG pricing principles by the South Australian Government in the process of setting SA Water's water and wastewater prices.

In the first half of 2004 the Commission undertook an inquiry in relation to the Government's processes for setting SA Water's 2004-05 urban water prices. Later in 2004 the Commission undertook a separate inquiry in relation to wastewater charges. Earlier in 2005 the Commission then completed a combined inquiry in relation to the 2005-06 water and wastewater pricing decisions. Many of the analyses and conclusions arising from those previous inquiries are relevant to this inquiry and hence are repeated, summarised or referred to in this report. This inquiry again combines the water and wastewater pricing decisions.

This report indicates the extent to which information provided to Cabinet adequately set out and considered the 1994 CoAG pricing principles. The Commission has concluded compliance in the following areas:

- |                            |                              |
|----------------------------|------------------------------|
| ▲ Efficient business costs | ▲ Return on Assets           |
| ▲ Asset valuation          | ▲ Dividends                  |
| ▲ Contributed assets       | ▲ Tax Equivalent Regime      |
| ▲ Depreciation             | ▲ Efficient resource pricing |
| ▲ Annuity                  | ▲ Cross-subsidies            |
| ▲ Externalities            |                              |

However, the Commission has suggested improvements in some areas and particularly stresses the desirability of more significant development in the areas of efficient business costs and contributed assets.



## 1 INTRODUCTION

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The South Australian Water Corporation (SA Water) is established under the *South Australian Water Corporation Act 1994* and is subject to the provisions of the *Public Corporations Act 1993*. SA Water provides water and wastewater services to domestic, retail and industrial customers throughout South Australia.

The South Australian Government wholly owns SA Water. The Minister for Administrative Services is responsible for setting the prices that SA Water charges for services provided. In doing so, the Government has committed to set prices such that they comply with pricing principles set by the Council of Australian Governments (CoAG).

The CoAG pricing principles are related to the Competition Principles Agreement (CPA), which outlines a policy framework governing significant national micro-economic reforms. The CoAG pricing principles provide the framework for water and wastewater prices for jurisdictions that have signed the CPA – such as South Australia.

The CoAG pricing principles relate to a broad range of issues, including the types of costs that may be recovered by SA Water, and specifically the application of a real rate of return that is commensurate with the equity arrangements of the entity. The CoAG pricing principles also guide how a water entity is allowed to recover its costs from consumers, including how tariffs are structured.

The National Competition Council (NCC) was established in 1995 with the agreement of all Australian governments to, among other things, assess each jurisdiction's progress with implementing the National Competition Policy (NCP), which includes the CPA. The CoAG pricing principles relating to water reform are part of the NCP.

The water role of the NCC has now been subsumed by the National Water Commission (NWC). The creation of the NWC in 2005 arises from the National Water Initiative (NWI), which carries forward the water component of the NCP as well as broader water policy initiatives. The NWI impacts upon the CoAG pricing principles, and may involve some reinterpretation of them. However, the Commission in this Inquiry is limited to an assessment against the original 1994 CoAG pricing principles as the water and wastewater pricing decisions were made in relation to those pre-NWI principles only.

### **1.1 Purpose of this paper**

The South Australian Government has prepared a report: *Transparency Statement Water and Wastewater Prices in Metropolitan and Regional South Australia 2006-07 (Part A)*, dated August 2005, setting out the process and the matters that have been considered by the Government in setting 2006-07 water and wastewater prices. One of the purposes of Transparency Statement – Part A is to document the extent to which the Government's 2006-07 water and wastewater pricing decision complies with the 1994 CoAG pricing principles.



To this end, the Treasurer has referred to the Commission an inquiry into the process undertaken in the preparation of advice to Cabinet to approve the 2006-07 water and wastewater prices. This includes an assessment of the extent to which:

- ▲ the process resulted in Cabinet setting 2006-07 water and wastewater prices based on an adequate application of the 1994 CoAG pricing principles; and
- ▲ relevant information on the 1994 CoAG pricing principles was made available to Cabinet when it made its decision.

This report considers Transparency Statement – Part A as the Government’s explanation of its process and its justification that the 2006-07 water and wastewater prices comply with the 1994 CoAG pricing principles. This report also comments, where possible, on the information that was made available to Cabinet in making its decision on 2006-07 water and wastewater prices (but is restricted given the confidential nature of Cabinet’s consideration).

Importantly, it was the task of the Commission to examine only the process used to prepare advice to Cabinet with respect to the adequacy of the application of the 1994 CoAG pricing principles and whether information relevant to those principles was made available to Cabinet when a decision on the level and structure of SA Water’s 2006-07 water and wastewater prices was made.

In following its terms of reference, the Commission has not investigated water or wastewater prices themselves. Nor has it investigated whether achieving compliance with the 1994 CoAG pricing principles indeed achieves the desired outcomes of those principles, which include, for example, avoiding monopoly rents (see Chapter 2).

Ultimately, this report is to serve as Part B of the overall Transparency Statement, and has been prepared accordingly. This means that it often refers to Part A – rather than repeating the content of Part A.

## **1.2 Conduct of the inquiry**

The Commission received the Notice of Referral of an Inquiry from the Treasurer on 6 September 2005 setting out the Terms of Reference for the Inquiry.

The Notice of Referral required the Commission to:

- ▲ advertise the Inquiry;
- ▲ provide 14 days for the lodgement of written submissions;
- ▲ provide a draft report by 31 October 2005; and
- ▲ provide a Final Report by 30 November 2005.

Pursuant to Section 36 of the *Essential Services Commission Act 2004*, a Public Notice of Inquiry was placed in *The Advertiser* on 16 September 2005, asking for written submissions by 30 September 2005. An Issues Paper was also released.

The Commission received one submission in response to the Public Notice and Issues Paper. The submission is available on the Commission website at [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au).

The Commission sought and received some additional information from the South Australian Government, including through discussions with representatives of the Revenue and Economics Branch of the Department of Treasury and Finance, and SA Water, in order to clarify its understanding of the processes surrounding the Cabinet approval of 2006-07 water and wastewater prices.

On 30 September 2005 the Department of Treasury and Finance wrote to the Commission advising of a minor amendment on page 42 of Transparency Statement – Part A. The amendment affected neither the conduct, nor the outcomes, of the Inquiry.

### ***1.3 Link to the previous inquiries***

In 2004, and earlier in 2005, the Commission undertook similar inquiries into the processes for determining the 2004-05 and 2005-06 water and wastewater prices. Many of the analyses and conclusions arising from those previous inquiries are relevant to this one. As a result, this report often makes reference to the Commission's earlier reports. In some cases, elements of them are repeated or summarised.

The Commission's previous reports are available from its website: [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au).

### ***1.4 Structure of this paper***

Chapter 2 sets out the key elements of the 1994 CoAG pricing principles.

Chapter 3 discusses the process for setting water and wastewater prices for 2006-07.

Chapter 4 deals with Transparency Statement – Part A's compliance with the 1994 CoAG pricing principles and the extent that they have been adhered to in setting 2006-07 prices.

Chapter 5 summarises the Commission's conclusions.



## **2 THE 1994 COAG PRICING PRINCIPLES**

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The Commission's assessment in this inquiry is against the 1994 CoAG pricing principles for water. These principles were developed for application to water (including wastewater) by Australia's State and Commonwealth governments.

As is explained in Transparency Statement – Part A, the pricing principles 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 dedicated specifically 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 (pp. 103-104) are as follows:

*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 1994 CoAG Pricing Principles”.

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

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) are as follows:

- *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.*

## **2.1 The National Water Initiative**

Appendix 5 of Transparency Statement – Part A sets out some of the elements of the NWI<sup>1</sup> that will impact upon the 1994 CoAG pricing principles and their interpretation. Examination of the NWI indicates that it could have significant implications for the interpretation of the principles. This in turn could have implications for conclusions about compliance.

As was noted earlier, the South Australian Government did not incorporate NWI considerations into its 2006-07 pricing decisions, having only recommitted to implementing the NWI shortly before the decisions were made. Accordingly, the Commission’s conclusions about compliance are based only on the original 1994 CoAG pricing principles.

However, the Commission has, as it did in its previous report, included in this report some comment in particular areas where the NWI might have an impact in future.

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<sup>1</sup> The complete text of the NWI is on the CoAG website at: [http://www.coag.gov.au/meetings/250604/iga\\_national\\_water\\_initiative.pdf](http://www.coag.gov.au/meetings/250604/iga_national_water_initiative.pdf).



## **3 THE PRICE SETTING PROCESS**

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The 2006-07 water pricing decision affecting most customers will be gazetted by December 2005, with commercial rates gazetted in June 2006, in accordance with the *Waterworks Act 1932*. Wastewater rates will also be gazetted in June 2006, in accordance with the *Sewerage Act 1929*. The June 2006 dates arise because those charges utilise property values, which are not available until that time.

### **3.1 Cabinet process**

The key consideration for the Commission concerns the processes undertaken in the preparation of advice to Cabinet with respect to the adequacy of the application of the 1994 CoAG pricing principles. The Commission's role is to advise on the extent to which adequate and relevant information on this matter was made available to Cabinet in its water and wastewater pricing decision.

As Transparency Statement – Part A documents, most notably in its Appendix 1, the decision making process for the 2006-07 water and wastewater prices involved a sequence of Cabinet submissions. The general nature of the sequence covered approval of the methodologies to be applied for pricing purposes, followed by approval of the 2006-07 prices. This approach was generally consistent with that used for 2005-06 prices, although the timing of the decisions was brought forward compared to that earlier process – March to May the year before taking effect rather than September to November.

The business and decision making of Cabinet is completely confidential, as are all Cabinet documents and submissions. However, in order for the Commission to undertake this inquiry, it has been provided with copies of Cabinet submissions and agency Cabinet comments which related to the setting of SA Water's water and wastewater prices for 2006-07. These documents are classified "Strictly Confidential" and the Commission is required to preserve the confidentiality of such documents.

The Commission has been able to compare the information provided in the Cabinet submissions with the information in Transparency Statement – Part A. It is satisfied that Transparency Statement – Part A adequately and reliably represents the majority of the material which was available to Cabinet on the 1994 CoAG pricing principles and can therefore be used and analysed by the Commission as a proxy for the contents of the Cabinet submissions. For this reason this report refers to Transparency Statement – Part A when setting out the particular 1994 CoAG pricing principle and the Government's assessment of its compliance with each principle.

### **3.2 Preparation of the Transparency Statement**

The Part A Transparency Statements for the 2004-05 water and wastewater pricing decisions were not prepared and approved by Cabinet until well after the pricing decisions



had been made. The Commission commented in its previous reports that it would be more useful for the Transparency Statement to be provided to Cabinet either prior to or, at the very latest, at the time it makes its pricing decisions.

On this occasion, most of Transparency Statement – Part A was presented to Cabinet for approval at or around the same time as the pricing decisions. The exceptions were Chapters 6, 7 and 8, which could not be finalised until after Cabinet had made its pricing decisions.

### **3.3 Nature of the Transparency Statement**

One feature of this latest Transparency Statement – Part A is that it is an incremental document. That is, it refers heavily to practices reported in the earlier Transparency Statements and earlier Commission reports rather than repeating all relevant detail. As a result, it focuses on areas of change or new information. This approach is reflective of the information presented to Cabinet, which was also generally incremental in the sense of not repeating the same information presented earlier.

This approach recognises the considerable repetition that would arise in respect of some elements of Transparency Statement – Part A, given that some methods and practices do not, and need not, change from year to year. It is also partly the result of the fact that the 2006-07 pricing decisions were made only a few months after the 2005-06 pricing decisions. Hence there would be some sense in making reference to earlier but relatively recent materials.

As a result of this, the Commission sometimes refers in the next chapter to words from the earlier reports to more fully explain the issue at hand – particularly where a quote from the latest Transparency Statement – Part A would be insufficient to explain the issue.

## 4 COMPLIANCE WITH THE 1994 COAG PRICING PRINCIPLES

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At the commencement of its first inquiry into water prices in 2004, the Commission sought clarification from the NCC about the appropriate documents that the Commission should consider in undertaking this inquiry. The NCC advised the Commission that "... the CoAG strategic framework and CoAG pricing principles are the key reference documents ...".

The Compendium of National Competition Policy Agreements (2<sup>nd</sup> Edition, 1998)<sup>2</sup> provides details of the relevant CoAG agreements for the various industries, including water, the key components of which were set out in Chapter 2 of this report.

This chapter considers the 1994 CoAG pricing principles and the compliance of the pricing processes undertaken in the preparation of advice to Cabinet, with respect to these principles. As was noted earlier, the influence of the NWI is raised at certain points. However, the compliance conclusions do not incorporate the NWI as it was not a consideration for the purposes of the decision.

In its previous inquiry reports the Commission included in each section a summary of comments by the NCC on that issue in its NCP Assessment Reports. The most recent of these remains the NCC's 2004 Assessment Report, Volume II<sup>3</sup> being dedicated to an assessment of water. In the main, the South Australian section of that report reflects upon the Commission's 2004 water inquiry report. Therefore, the Commission has only included comments from the NCC's 2004 Assessment Report where there is a matter of specific relevance to this report.

The NWC has not yet released its 2005 NCP assessment, but has released a paper on the framework for the assessment.<sup>4</sup> The Commission has noted the relevant comments in that report, in terms of what the NWC anticipates being demonstrated. The Commission has considered comments from that report where specifically relevant.<sup>5</sup> The NWC also notes (p. 50 of its report) its interest in examining South Australia's implementation of the NWI, which is, of course, outside the terms of reference for this inquiry.

As previously discussed the approach adopted by the Commission has been to assess the compliance of Transparency Statement – Part A with the 1994 CoAG pricing principles, comfortable that it is a credible reflection of the information actually provided to Cabinet.

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<sup>2</sup> This publication is available from NCC's website: [www.ncc.gov.au](http://www.ncc.gov.au).

<sup>3</sup> National Competition Council, *Assessment of governments' progress in implementing the National Competition Policy and related reforms: 2004*, Volume Two: Water, October 2004.

<sup>4</sup> National Water Commission, *Water Reform Assessment Framework 2005*, August 2005, available from [www.nwc.gov.au](http://www.nwc.gov.au).

<sup>5</sup> The NWC appears to have had in mind making its assessment on the earlier 2005-06 Transparency Statement only, however, the Commission understands that the NWC may also have access to this report.

## **4.1 Operating, maintenance and administrative expenses – efficient business costs**

Operating, maintenance and administration (OMA) costs are key components of the overall cost of delivering services and have been subject to keen attention in recent years.

Business cost (including OMA expenditures) efficiency can be assessed in terms of:

- ▲ levels of expenditure;
- ▲ the creation and consumption of assets (discussed in later sections); and
- ▲ impacts on service levels.

One of the key reasons for considering the efficiency of business costs is to provide a foundation for explaining and justifying future actions and requirements. Particularly in the case of pricing proposals, it is necessary to establish a logical link between past performances, the factors influencing those performances and where the expected combination of movements in cost pressures/opportunities and management action will place the utility in the future. It is this future scenario that should be considered with regards to the level of revenue required from the pricing decisions.

The long-lived nature of the infrastructure employed in delivering water and wastewater services means that improvements in capital performance can take a long time to achieve and are seldom considerations in short-term management decisions. However, particularly as infrastructure assets age, it may be reasonable to expect to observe longer-term relationships emerging between the level of OMA expenditure and capital-based costs (reductions in service capacity).

### **4.1.1 CoAG Principles**

In relation to efficient costs, the Guidelines for the application of Section 3 of the CoAG principles state that:

*“In applying (the monopoly rent test) and (business viability test), economic regulators (or equivalent) should determine the level of revenue for a water business based on efficient resource pricing and business costs.” (Emphasis added)*

### **4.1.2 Transparency Statement – Part A Comments**

Transparency Statement – Part A addresses the issue of efficient business costs under six headings:

- ▲ competitive tendering;
- ▲ benchmarking of service performance;
- ▲ benchmarking of metropolitan service performance;
- ▲ benchmarking of regional service performance;

- ▲ benchmarking of metropolitan service costs; and
- ▲ benchmarking of regional costs.

The material in this section of Transparency Statement – Part A is supported by an extended treatment in Appendix 6 (South Australian Centre for Economics Studies report “*A Review of the Efficiency of SA Water’s Business Costs and Performance*”). The sections presented below under the headings “Benchmarking of metropolitan service performance” to “Benchmarking of regional costs”, whilst presented here from the body of Transparency Statement – Part A, are themselves direct excerpts from the Executive Summary of the South Australian Centre for Economics Studies’ report.

The key observations for these areas are:

### **Competitive tendering**

*“SA Water has contracted, by competitive tender, for services (eg electricity) or supplies (eg chemicals) in order to promote efficient business costs, where possible.*

*Approximately 71% of all SA Water’s water and wastewater OMA expenditure (excluding labour costs) are subject to competitive tendering arrangements.*

*SA Water’s most significant contract is the United Water International contract to manage Adelaide’s water and wastewater systems. This 15-year contract, which commenced on 1 January 1996 following a competitive tender process, has provision for pricing reviews to reset the fixed-price component every five years.” (p. 11-12)*

### **Benchmarking of service performance**

*“The Government sought independent advice regarding benchmarking of SA Water’s customer service standards and the efficiency of its metropolitan and regional business costs. The South Australian Centre for Economic Studies (SACES) delivered its final report entitled “A Review of the Efficiency of SA Water’s Business Costs and Performance” on 29 March 2005.*

*In undertaking its independent review, SACES noted the difficulties in undertaking performance and cost benchmarks, as follows:*

*“In an exercise like this it must be recognised that while differences in the efficiency and effectiveness of utilities’ operations can give rise to differences in benchmark indicators, there are also substantial interregional differences in the environments within which utilities must operate that also contribute to differences in benchmark indicators”. (pp. 14-15)*

### **Benchmarking of metropolitan service performance**

*“Water supply*

*The key conclusions to emerge regarding the customer service performance of SA Water's metropolitan water supply operations are:*

- *Over the five years to 2003-04, SA Water had a declining trend in water quality complaints and a reduction in the proportion of people who were dissatisfied with water quality. Water quality was improving. Although current complaint rates are below the average for Australian metropolitan water suppliers, the dissatisfaction level is significantly higher. SA Water's reliance on the River Murray as a source obviously raises particular challenges in respect of water quality*
- *The average duration of water supply interruptions has increased and is high by Australian standards, but the number of breaks per 100 km of main has fallen and is relatively low. South Australians have a lower level of dissatisfaction with supply reliability than their interstate counterparts*
- *Connect times to a telephone operator have increased because of increased enquiries as a result of water restrictions, but the average remains below 30 seconds*

*The single indicator of the environmental attributes of the metropolitan water supply system, the Infrastructure Leakage Index, shows a flat trend. It also indicates that there is less leakage in Adelaide than in other States.*

#### *Wastewater*

*The key customer service indicator for the metropolitan wastewater service, the rate of breaks and chokes in property connections, does not show a clear trend. In fact, although SA metropolitan customers have a relatively high rate of breaks and chokes in their property connection, complaint rates are not high. SA Water's approach is to minimise customer problems by responding rapidly when problems do arise, rather than extensive pipe replacement programs.*

*There have been substantial improvements in performance against a number of environmental indicators over recent years. Overflow rates have fallen, the prevalence of tertiary treatment has risen very rapidly to reach a high 91%, there has been a substantial increase in the reuse of treated effluent, and reuse of bio-solids now exceeds annual bio-solid production.*

*In the interstate comparison, SA Water performs worse than average in terms of overflows, but is a better than average performer in terms of tertiary treatment, water reuse and bio-solid reuse. It is about average for odour complaints." (pp. 13-14)*

### **Benchmarking of regional service performance**

#### *"Water Supply*

*The regional water supply system in South Australia shows an essentially flat trend on breaks per 100 km of main. There are other dimensions of the water supply service that matter to customers, but for which there is not much data, such as the quality of the water product and the ease of liaison with SA Water. SA Water E. coli testing results show a steady water quality performance in the regional system.*

*The South Australian regional water supply system's breakage rate is relatively low when compared with estimates for the other States. However, those estimates for other States are sensitive to the inclusion or exclusion of particular regional providers.*

#### *Wastewater*

*The regional sewage system in South Australia shows an essentially flat trend on breaks per 100 km of main. There are other dimensions of the wastewater service that are important, but for which there is not data, such as environmental performance. The South Australian regional wastewater system's breakage rate is relatively low when compared with estimates for the other States. However, those estimates are sensitive to the inclusion or exclusion of particular regional providers." (p. 15)*

### **Benchmarking of metropolitan service costs**

#### *"Water supply*

*SA Water's metropolitan water supply costs per property declined in real terms over the five years to 2003-04 .... This is suggestive of favourable efficiency trends, especially after taking into account an increasing level of customer satisfaction with water quality over the period.*

*SA Water's metropolitan water supply operating costs are close to the Australian median value. This is in spite of some manifest cost disadvantages for Adelaide metropolitan water supply, most obviously the need to pump water long distances and the need for relatively extensive treatment of that water to achieve drinking water standards. These disadvantages could be expected to push costs above average. Seen in this light, the fact that the SA metropolitan water supply system operating costs are below the median is suggestive of good cost performance.*

#### *Wastewater*

*SA Water's metropolitan wastewater costs per property have increased in real terms over the reporting period ..... It appears that this is largely attributable to an Environment Improvement Program, arising from requirements of the Environment Protection Authority. The impact of metropolitan wastewater operations on the physical environment has diminished.*

*Metropolitan wastewater costs remain low in comparison with costs in other metropolitan systems. The fact that SA Water operates wastewater plants at above average scale may significantly contribute to this cost effectiveness." (pp 16-17)*

### **Benchmarking of regional costs**

#### *"Water supply*

*In 2003-04 there was a decline in real operating costs per property for regional water supply in South Australia. However, the decline appears to be mainly seasonal and no upward or downward trend is apparent .... There is no evidence of any trend change in service standards although the indicators are limited in scope.*

*This is suggestive that efficiency is being maintained but is not conclusive. There are significant extraneous influences on SA Water, over and above any internal operating efficiencies, which can affect cost measures.*

*Operating costs for regional water supply are generally higher in South Australia than interstate. However, poor water accessibility and quality are factors that would lend to a higher cost structure in South Australia. It is not realistic to draw any conclusions about the relative efficiency of the South Australian regional water supply system versus those interstate.*

#### **Wastewater**

*Operating costs per property for the South Australian regional wastewater system have shown a generally flat trend in real terms over recent years although there was an increase in 2003-04 .... SA Water has advised that the 2003-04 rise is largely attributable to a change in the way indirect costs are allocated between regional water supply and wastewater (which has correspondingly had a downward effect on regional water supply cost estimates). The essentially flat trend has been achieved in spite of upward pressures from higher treatment standards.*

*There is insufficient evidence to make strong statements about the efficiency of SA Water's regional operations. However, it seems reasonable to conclude, on the basis of the time series data, that costs have been reasonably well contained over time, and that this has been achieved without adverse performance consequences. Interstate comparisons suggest that South Australia's regional water supply is relatively costly and its regional wastewater is relatively cheap, but given the importance of location specific cost drivers it is not realistic to draw any inferences about relative efficiency levels." (pp. 17-19)*

### **Transparency Statement Part A Conclusion on Benchmarking**

*"The Government's 2006-07 pricing decisions are compliant with the 1994 CoAG pricing principle that OMA expenses should be based on efficient business costs.*

*Nevertheless, the Government intends, to the extent possible, to further explore links between service/performance standards, cost and prices, including an examination of the SA Water Performance Statement and Customer Charter over the next 12 – 18 months." (p. 19)*

#### **4.1.3 The Commission's assessment**

The provision of an independent assessment of SA Water's performance is a positive step in the on-going pursuit of the CoAG pricing principles.

In general, it is not within the Commission's brief to assess the validity of the claims made in Transparency Statement – Part A with respect to the performance figures provided. However, it is appropriate to provide comment on the extent to which the approach utilised in Transparency Statement – Part A provides Cabinet with the information it requires in order to support price setting determinations.

In its final report on the 2005-06 water and wastewater pricing processes, the Commission expressed the view that the Transparency Statement should:

*“Continue to further develop the trend analysis of key cost drivers, and their likely impact in the short to medium-term; and*

*Explore the link between efficient business costs and the SA Water Performance Statement and Customer Charter, to better enable a conclusion on efficient business costs by providing more transparency of ‘value-for-money’.”*

It is noted that the Government has identified that addressing the second point is planned over the next 12-18 months. However, the Commission notes the omission of a statement on the development of ‘forward-looking’ aspects of performance.

### **Metropolitan services: historical performance**

The annual performance review of the Australian urban water industry, WSAAfacts, published by the Water Services Association of Australia, remains the principal mechanism for comparative performance assessment of metropolitan water service utilities across Australia. In assessing the efficiency and effectiveness of SA Water metropolitan activities, the Government has continued to use core performance measures used in WSAAfacts. The documentation provides comparison with a number of peer water businesses, being principally those serving the capital and major cities in the other states and territories, with the exception of Hobart in Tasmania, where participation in the WSAAfacts initiative is limited to the bulk water supply authority. In the SACES review of SA Water performance, the WSAA data has been augmented with ABS sourced data on Customer Satisfaction levels regarding water supply, and Commonwealth Grants Commission data on the relative impact of water quality, access to source water and environmental impacts on asset lives, between (major urban) drainage areas.

In so far as the WSAA performance measures presented are an agreed set of measures between the participants, with a relatively high-level of common understanding regarding definitions, the approach adopted appears a useful way to display the relative historical performance of SA Water in the provision of metropolitan water and wastewater services.

It is, however, noted that since the 2005-06 process, the use of some performance measures has been discontinued, including ‘Total Cost per Property’ (for metropolitan water supply and sewerage). As identified earlier in this section, the Total Cost per Property outcomes provide a valuable indicator of actual funding requirements, and thus, the discontinuation of the use of this measure is disappointing.

In addition, “Operating cost per ML” (for water supply) was previously provided for regional comparisons, but has not been presented this time. The use of this measure also provided value. In this context it is noted that the reduction in the OMA cost per property for metropolitan services between 2002-03 and 2003-04 is of the order of 3% and that the reduction in water delivered to Metropolitan customers was also 3% (WSAAfacts 2004, pp 94). While it is not suggested that the relationship between OMA costs and ML delivered is totally linear, it is worth recognising these factors when interpreting ‘favourable efficiency trends’ in SA Water OMA costs.

WSAAfacts is a published document that can be purchased by the general public. This gives interested parties access to a wider range of measures than published in the Transparency Statement covering a wider range of participants, which is viewed as beneficial to transparency.

### **Regional services: historical performance**

The Commission recognises that the marshalling of suitable comparative performance data for SA Water's regional undertakings is more complex than for the metropolitan case. The Commission further acknowledges that the SACES report has taken steps to improve analysis of regional outcomes, in part, incorporating the Commission’s suggestion from the 2005-06 review process.

The following issues could be addressed with respect to the information provided in Transparency Statement – Part A.

- ▲ A number of the sources used are surveys that need to compile results from between around 20 (Victoria) to around 110 (Queensland) water and wastewater utilities. As a natural consequence of the logistics of these exercises, published results will almost certainly lag at least 6 months behind the WSAA publication and SA Water’s internal performance reporting capability. This reality is reflected in the fact that few 2003-04 outcomes are reported for regional Western Australia, Victoria, New South Wales or Queensland in the SACES review.

The SACES regional review has taken the same approach as applied to the metropolitan analysis, including the calculation of the following two outcomes:

- % Change 3 years to 2003-04 (and)
- % Change 5 years to 2003-04.

Clearly, the paucity of reported outcomes for 2003-04 renders the above measures ineffective, yet for the periods ending 2002-03 there is a more useable spread of information and something along the lines of (say) “% Change 3 years to 2002-03” is considered a better compromise than a series of “not available” entries.

- ▲ Thought could be given to the inclusion of the SA Water metropolitan outcomes in the regional tables. While the reasons behind movement in interstate water businesses may sometimes be difficult to determine, those underpinning differences between metropolitan and SA regional outcomes would be known and could, over time, help in communicating the relative costs of service standards to a range of SA Water stakeholders.

### **Building a bridge from past performance to future requirements**

In the 05-06 review, the Commission noted that:

*“In general terms, a pricing process should deliver a revenue outcome that will enable the well managed utility to meet its service goals, given an articulated set of delivery challenges. The outcome sought is to fund future activities, not reward or punish past actions.*

*In the above context, the role of the historical performance reporting is to illustrate the impact of emerging trends and help explain the underlying cause-and-effect relationships that influence the utility’s resource needs.*

*The next vital step is to understand how key trends are going to impact on the utility over the next few years and the nature of the resource/revenue implications. This is an aspect on ‘internal’ benchmarking that is absent from the Transparency Statement – Part A, yet arguably should provide part of the foundation for pricing considerations.*

*There are a number of instances in the discussions on cost movements, where significant variations in cost outcomes for SA Water have been explained in terms of weather patterns or changes in service standards (particularly higher levels of sewage treatment). While the impact of climatic variation cannot be predicted, the likely impact of on-going and planned Environmental Improvement Programs (EIPs) can. It should also be possible to predict, with reasonable confidence, the underlying trends in service interruptions.*

*The Commission believes that the absence of forward projections for both costs and key service standards would need to be addressed in order to enhance the pricing process.*

The Commission continues to believe that the development of a forward looking component of analysis will be an important development. Such considerations would be fundamental to the establishment of an effective ‘price-path’ approach.

### **Comparative revenue data – value for money**

Clause 7(e) of the CoAG Framework requires:

*“that water agencies should develop individually and jointly public education programs illustrating the cause and effect relationship between infrastructure performance, standards of service and related costs, with a view to promoting levels of service that represent the best value for money to the community.”*

It is also noted that in Appendix 5 to Part A of the Transparency Statement (“Relevant clauses of the National Water Initiative”) paragraph 75 “Benchmarking Efficient Performance” states, in part, that:

*“The States and Territories will be required to report independently, publicly, and on an annual basis, benchmarking of pricing and service quality for metropolitan, non-metropolitan and rural water delivery agencies.”*

Assessment of value for money is likely to require some provision of comparative cost and income information, for example cost per customer, to supplement the service level comparisons and enable an understanding of value for money to evolve. Transparency Statement – Part A provides no such comparative information, effectively preventing it from playing a part in addressing Clause 7(e).

The data in the following two Tables is sourced from WSAAfacts 2004.

The first looks at the margins between OMA Cost and Revenue per Property and Total Cost and Revenue per Property for Water Supply, while the second Table provides the same analysis for Wastewater.

Water Supply		Revenue per Property	OMA Cost per Property	Revenue less OMA Cost		Total Cost per Property	Revenue less Total Cost	
				\$	% of Rev.		\$	% of Rev.
<b>SA Water</b>	<b>SA</b>	<b>428.35</b>	<b>165.93</b>	<b>262.42</b>	<b>61%</b>	<b>416.62</b>	<b>11.73</b>	<b>3%</b>
Power & Water	NT	741.66	385.30	356.36	48%	869.48	127.82	-17%
Brisbane City Council	Brisbane	410.76	191.20	219.56	53%	400.77	9.99	2%
Gold Coast Water	Gold Coast	395.44	179.19	216.25	55%	396.08	0.64	0%
Water Corporation	Perth	400.99	156.10	244.89	61%	451.04	50.05	-12%
Sydney Water Corp.	Sydney	351.92	215.80	136.12	39%	376.99	25.07	-7%
ACTEW Corporation	ACT	465.24	284.50	180.74	39%	498.50	33.26	-7%
Melbourne Consolidated	Melbourne	265.2	116.80	148.40	56%	319.91	54.71	-21%

Wastewater		Revenue per Property	OMA Cost per Property	Revenue less OMA Cost		Total Cost per Property	Revenue less Total Cost	
				\$	% of Rev.		\$	% of Rev.
<b>SA Water</b>	<b>SA</b>	<b>489.08</b>	<b>131.88</b>	<b>357.20</b>	<b>73%</b>	<b>379.46</b>	<b>109.62</b>	<b>22%</b>
Power & Water	NT	394.61	298.90	95.71	24%	515.87	121.26	-31%
Brisbane City Council	Brisbane	481.24	164.97	316.27	66%	415.64	65.60	14%
Gold Coast Water	Gold Coast	500.49	196.95	303.54	61%	460.57	39.92	8%
Water Corporation	Perth	645.95	161.50	484.45	75%	590.74	55.21	9%
Sydney Water Corp.	Sydney	408.37	194.10	214.27	52%	473.12	64.75	-16%
ACTEW Corporation	ACT	476.43	271.20	205.23	43%	459.81	16.62	3%
Melbourne Consolidated	Melbourne	289.92	115.07	174.85	60%	385.28	95.36	-33%

The Tables indicate that SA Water has some of the highest margins over costs in Australia.<sup>6</sup> A key driver of this observation is likely to be the difference in the

<sup>6</sup> It is the relative margins that are significant here, rather than the absolute margins. The WSAAfacts data involves some agreed assumptions to normalise and allow for reasonable comparability. For example, Total Cost per Property includes a notional return on assets of 4% to provide some accommodation for the inclusion of contributed assets in the data but could, in some cases, understate the true Total Cost per Property for a particular water utility. The Commission also recognises that, of the water utilities listed, only SA Water and the Water Corporation (Perth) have significant non-metropolitan urban and rural water businesses.

asset-bases used by other water agencies for rate-setting purposes.<sup>7</sup> As is shown in the contributed assets discussion later the Commission has concerns that the asset value used for SA Water's charges may be too high.

#### **4.1.4 The Commission's view on compliance with the CoAG principles**

**Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles requiring prices to be based on efficient costs?**

Based on the available performance comparison material, the Transparency Statement makes assertions about SA Water's OMA costs being efficient. The Commission believes that the principle of efficient costs has been considered in the Transparency Statement.

**Provision of information: Did Cabinet receive this information?**

Cabinet received the same information that was included in the Transparency Statement, with some minor additions.

**Sufficiency of information: Was the information provided sufficient to comply with the CoAG principles?**

The Commission considers that the information provided in the Transparency Statement is still lacking in detail. The Commission believes that in order to more effectively comply with the CoAG principles on efficient business costs, the Transparency Statement should:

- ▲ continue to further develop the trend analysis of key cost drivers, and their likely impact in the short to medium-term; and
- ▲ expedite its current plans to explore the link between efficient business costs and the SA Water Performance Statement and Customer Charter, to better enable a conclusion to be drawn on efficient business costs by providing more transparency on 'value-for-money'.

## **4.2 Asset valuation**

### **4.2.1 CoAG Principles**

The Guidelines for applying Section 3 of the Strategic Framework state:

*"The deprival value methodology should be used for asset valuation, unless a specific circumstance justifies another method."*

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<sup>7</sup> Of course, benchmarking will always be subject to some comparability issues, hence the Commission's interest here in the relative outcomes. Benchmarking is an area identified for improvement in the NWI. Note also that the asset values (and other parameters) used for benchmarking in WSAAfacts need not be the same as those used for rate-setting purposes.

## 4.2.2 Transparency Statement – Part A Comments

Transparency Statement – Part A identifies that:

*“In its final report on 2005-06 water and wastewater pricing processes, ESCOSA confirmed that the adoption of the fair value method of asset valuation is consistent with deprival value and hence complies with 1994 CoAG pricing principles (ESCOSA, 2005, p 23).*

*The Government continues to use the fair value method in the 2006-07 pricing decisions.”*  
(p. 20)

## 4.2.3 The Commission’s assessment

The Commission concluded in its previous inquiries that SA Water had employed an approach to establishing asset values (the fair value method) that was consistent with the requirements of the 1994 CoAG pricing principles (the deprival value method). The basis of the asset valuation has not changed on this occasion.

Of course, there may be situations where a valuation under fair value would differ from that under deprival value. However, significant differences are unlikely to arise when valuing water and wastewater assets. These assets are specialised assets which are unlikely to have observable market values (once installed). In such circumstances both fair value and deprival value should lead to a valuation based on the replacement cost of an asset’s remaining future economic benefits.

The Commission has not conducted an asset valuation of SA Water (which would be beyond the scope of this inquiry), but has satisfied itself that a valuation based on fair value should be consistent with deprival value for these asset types.

The Government will need to ensure that SA Water’s application of fair value, or any subsequent method applied, remains consistent with the 1994 CoAG pricing principles’ deprival value on an ongoing basis. This might, at some point, require the development of separate asset valuations. It is important to recognise that a valuation method used for price setting need not be the same as that used for other accounting purposes. Indeed, it is quite common in price regulation for a regulatory asset value to differ significantly from an accounting asset value.

## 4.2.4 The Commission’s view on compliance with the CoAG principles

### **Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles?**

Transparency Statement – Part A explains that the method of asset valuation is consistent with deprival value, hence complying with the 1994 CoAG pricing principles.

**Provision of information: Did Cabinet receive this information?**

The Commission is satisfied that the Cabinet submission included the necessary information about the method of asset valuation.

**Sufficiency of information: Was the information provided sufficient to comply with the CoAG principles?**

Sufficient information was provided in respect of the method of asset valuation to comply with the 1994 CoAG pricing principles.

### **4.3 Contributed assets**

#### **4.3.1 CoAG Principles**

The Guidelines for applying Section 3 of the Strategic Framework state:

*“...transparency is required in the treatment of ..., contributed assets, ...”*

#### **4.3.2 Transparency Statement – Part A Comments**

The Transparency Statement identifies that:

*“Contributed assets comprise customer contributions for provision of infrastructure, such as new mains, and subdivider contributions.*

*The CoAG guidelines require the treatment of contributed assets to be transparent when determining prices.*

*In its final report ESCOSA stated that:*

*Given that the Transparency Statement is explicit about the treatment and removal of contributed assets from the asset values used for setting prices, it is in compliance with CoAG pricing principles (ESCOSA, 2005, p 26).*

*The Government has adopted the same treatment of contributed assets as in its 2005-06 pricing decisions. It has removed post-corporatisation contributed assets from SA Water’s regulatory asset base; the associated depreciation from the maximum revenue outcome; and the annual capital contributions from the forecast target revenue.” (p. 20)*

Further:

*“With respect to the 2006-07 pricing decisions, the Government remains of the view that there is no sound information on which an estimate of contributed assets prior to 1995 can be based.” (p.21)*

#### **4.3.3 The Commission’s assessment**

Previously, contributed assets were included in the asset base for pricing considerations and this fact was made explicit. While the Commission accepted

that this might comply with the 1994 CoAG pricing principles, it also noted that it was neither a common, nor desirable, regulatory practice.

Given the predominantly long-lived nature of water and wastewater infrastructure, the on-going inclusion of contributed assets will boost depreciation expenses and the return on capital – allowing generation of significant free cash flows.

It is also significant that under the NWI, governments will be required to commit to moving toward (and probably to) maximum revenue case pricing by 2008. If the upper bound is based upon an unreasonably inflated asset base for pricing purposes then the result would be a lock-in of excessive prices.

The Government responded to the Commission's earlier suggestions by making an assessment of post-1995 contributed assets and removing them from the asset base for pricing purposes. Future contributed assets will also be tracked separately and removed. This approach is compliant with the 1994 CoAG pricing principles and is certainly more in keeping with the intent of the principles.

However, the Government has only estimated and removed contributed assets since corporatisation in 1995. It continues to argue that there is no "sound information" available prior to that time. The Commission recognises that it may be difficult to get an accurate picture of exactly which assets were contributed and that this can complicate their exclusion from pricing considerations. However, it is known that contributions of this type have been taking place for a very long time and that they possibly constitute a significant proportion of water and wastewater assets – hence having a potentially significant impact on customers' bills.

It is also possible that the removal of contributed assets would have a differential impact between water and wastewater, to the extent that contributed assets might account for a higher proportion of wastewater assets (as the Commission noted in its 2004 wastewater inquiry). This may indeed account, in part at least, for the apparent imbalance between water and wastewater prices, with wastewater near the maximum revenue case, whereas water is nearer the minimum revenue case.

The Commission therefore reasserts its view from the 2005-06 inquiry that it would be timely for the Government to seek a best estimate of contributed assets pre-1995 and remove these from the asset base. Three potential methods were proposed in that inquiry which could assist in the development of a more reasonable estimate:

1. Allotment survey-based estimation: information may be assembled to show that Adelaide has had, say, 100,000 new lots created over a particular period. Urban Development Institute of Australia data may show that the average cost per lot, in terms of water and wastewater assets handed over to SA Water, was \$X per lot, with developer charges of \$Y per lot. This would imply total non-corporation funded assets in today's terms of \$(X+Y).

2. Statistical estimation: in particular, regression techniques based on the experience of peer utilities.
3. Expenditure ratios: where the proportion of total capital investment inferred by the estimated value of contributed assets is applied to the recorded physical quantities of assets installed for that year, for relevant assets (likely to be predominately small pumping stations and small diameter water mains and sewers). These estimates would be modified and/or augmented where sufficient information is available to specifically identify contributions for major works. Once established, this approach would facilitate up-dating of estimates in line with changes in replacement costs.

The Commission is not convinced that a zero estimate reflects a best possible estimate, notwithstanding the estimation difficulties.

#### **4.3.4 The Commission's view on compliance with the CoAG principles**

##### **Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles?**

Given that the Transparency Statement is explicit about the treatment and removal of contributed assets from the asset values used for setting prices, it is in compliance with the CoAG principles.

##### **Provision of information: Did Cabinet receive this information?**

The Commission is satisfied that the Cabinet submission included the necessary information that contributed assets were estimated and that estimate removed from the asset values that were used to calculate the water and wastewater prices.

##### **Sufficiency of information: Was the information provided sufficient to comply with the CoAG principles?**

The Commission believes that fuller compliance with the 1994 CoAG pricing principles would result if an estimate of pre-1995 contributed assets was also provided, thereby enabling consistent and more transparent treatment of all contributed assets. The Commission remains concerned about the impact of the current treatment of contributed assets on SA Water's customers.

#### **4.4 Depreciation – provision for asset consumption (maximum revenue case)**

##### **4.4.1 CoAG Principles**

The Guidelines for applying Section 2 of the Strategic Framework state:

*“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 [weighted average cost of capital].”[Emphasis added]*

As the Commission explained in its previous inquiry reports, provision for the cost of asset consumption refers to depreciation.

#### **4.4.2 Transparency Statement – Part A Comments**

Key statements from Transparency Statement – Part A are:

*“The CoAG guidelines require that the maximum revenue outcome include provision for asset consumption (or depreciation).*

*In its final report ESCOSA found that:*

*The Transparency Statement is consistent with the CoAG principles in its treatment of depreciation (ESCOSA, 2005, p 27).*

*In its 2006-07 pricing decisions the Government has continued to estimate depreciation in the maximum revenue outcome using the straight-line method, based on the estimated useful lives of assets.” (p. 22)*

#### **4.4.3 The Commission’s assessment**

The straight line method is used to calculate depreciation and that amount is reported. The 1994 CoAG pricing principles require the inclusion of depreciation but do not dictate the methodology.

#### **4.4.4 The Commission’s view on compliance with the CoAG principles**

##### **Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles?**

The Transparency Statement uses a straight line depreciation methodology to calculate depreciation. This is compliant with the 1994 CoAG pricing principles, which do not dictate the depreciation methodology, except to say that an amount for depreciation should be included.

##### **Provision of information: Did Cabinet receive this information?**

The Commission is satisfied that the Cabinet submission included the fact that depreciation was included in the calculation of the maximum revenue case.

**Sufficiency of information: Was the information provided sufficient to comply with the CoAG principles?**

The Transparency Statement is consistent with the 1994 CoAG pricing principles in its treatment of depreciation. The Transparency Statement includes the actual depreciation amount, in line with the Commission's recommendation in its 2004 water inquiry.

#### **4.5 Provision for future asset refurbishment/rehabilitation (minimum revenue case)**

The CoAG framework mandates the determination of the minimum revenues required to ensure that assets/service capacity can be replaced as that need arises, for those services where there is an ongoing requirement. The depreciation expense is not automatically accepted as providing this minimum funds requirement. This is because the magnitude of the depreciation expense may well be in excess of the actual asset replacement funding requirements experienced by the utility, chiefly due to timing issues.

The CoAG guidelines identify that this cost stream should be estimated in terms of the annual amount that would need to be put away each year, over a period of (say) 20-30 years, to ensure that the costs of all rehabilitation/replacement needs over that period would be met, provided annual surpluses were accumulated and interest income applied. This is referred to as the "annuity approach". For urban water and wastewater systems, the outcomes from the annuity approach are frequently materially less than the corresponding straight-line depreciation outcomes for the same assets.

##### **4.5.1 CoAG Principles**

Guideline 3, for applying Section 3 of the Strategic Framework states that:

*"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."*

##### **4.5.2 Transparency Statement – Part A Comments**

Transparency Statement – Part A, observes:

*"The CoAG guidelines state:*

*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 (NCC, 1998, p 112).*

*In the 2005-06 water and wastewater pricing decisions, the Government used an annuity estimate for estimating the cost of asset refurbishment and replacement.*

*In its final report ESCOSA found that the Government complied with the 1994 CoAG pricing principles by including an annuity estimate in the minimum revenue outcome.” (p. 25)*

### **4.5.3 The Commission’s assessment**

The continued inclusion of an annuity estimate in the 2006-07 pricing decisions (following on from its use in the 2005-06 pricing decisions) is a considerable development over the original 2004-05 pricing decisions, which used straight-line depreciation instead of an annuity.

### **4.5.4 The Commission’s view on compliance with the CoAG principles**

#### **Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles?**

The Transparency Statement uses an annuity estimate in the calculation of the minimum revenue requirement. Hence, the Commission considers that the Transparency Statement complies with the 1994 CoAG pricing principles.

#### **Provision of information: Did the Cabinet receive this information?**

The information received by Cabinet included the annuity estimate. Hence, Cabinet did receive the relevant information.

#### **Sufficiency of information: Was the information provided sufficient to comply with the CoAG principles?**

In the Commission’s view, relevant information was provided, in terms of an annuity estimate, its derivation and implications, meaning that compliance with the 1994 CoAG pricing principles was achieved.

## **4.6 Externalities**

While issues associated with the infrastructure and operational aspects of water and wastewater service delivery dominate the text of pricing considerations, it is important to remember that water resource management is a key plank of the overall Water Reform Strategic Framework. The avenue for taking account of costs associated with the availability of the water resource, including its protection from pollution, is, in part, through the consideration of “Externalities”.

### **4.6.1 CoAG Principles**

The Guidelines for applying Section 3 of the Strategic Framework state:

*“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 [weighted average cost of capital].”[Emphasis added]*

*“Externalities ... means environmental and natural resource management costs attributable to and incurred by the water business”*

## **4.6.2 Transparency Statement – Part A Comments**

### **Water**

*“In the 2005-06 water pricing decisions the minimum and maximum revenue outcomes included externalities internalised through explicit charges to SA Water, such as payments by SA Water to the catchment water management boards. This approach has been retained in 2006-07.*

*In its inquiry into the 2005-06 water pricing processes ESCOSA stated:*

*The inclusion of externalities costs that are “both attributable to and incurred by” SA Water in the Transparency Statement is compliant with the CoAG Principles (ESCOSA, 2005, p 32).*

*Externality costs attributable to SA Water’s water business are included in operating expenditure amounts.*

### **Wastewater**

*“The independent Environment Protection Authority (EPA) is responsible for setting the environmental standards SA Water is required to meet for processing and disposing of wastewater. All environmental costs attributed to and incurred by SA Water are incorporated into the maximum and minimum revenue outcomes.” (p. 22)*

## **4.6.3 The Commission’s assessment**

### **Water**

The Commission understands that a key tenet of the CoAG water reform process was to include the true cost of resource management in water pricing. In the South Australian context this would include, for example, costs associated with some water resource management related activities of the Department of Water, Land and Biodiversity Conservation (DWLBC). As the Commission explained in its 2004 water inquiry, the NCC also supports such a view.

Further, the Expert Group recommended:

*“any ongoing costs associated with water resource management be borne by water beneficiaries/impactors, except where the broad community is identified as a beneficiary, or where the activity is clearly a government responsibility, in which situations government might pay:”(Expert Group, 1995, p 6)*

It is believed that the reference to government responsibility for payment is for activities associated with recreational use of the waterways, fishing and so on,

rather than any significant proportion of costs incurred in the management of the water resource itself.

There is also the requirement under CoAG's strategic framework 5(c) that:

*"where cross-border trading is possible, that the trading arrangements be consistent and facilitate cross-border sales where this is socially, physically and ecologically sustainable;"*

Water resource management charges would also be an important adjunct to the costs of alternate technical solutions to providing services from different water sources. This is a situation that is likely to become more prevalent as traditional sources, such as the River Murray, become more stressed and technical advances make alternate sources, such as desalination, more cost effective/practical once true extraction costs are understood and incorporated.

However, as the Commission acknowledged in its 2004 water inquiry, the Guidelines definition for 'Externalities' emphasises that the requirement is to recognise resource management costs "...both attributable to and incurred by water businesses". As DWLBC does not invoice SA Water for its water resource management costs, they should not be incorporated in the cost considerations.<sup>8</sup>

The Commission's conclusions here recognise this definition. However, the Commission also notes that under the NWI it is likely that the broader interpretation will prevail. This would require a change in approach and the eventual inclusion of extraction-based water charges.

### **Wastewater**

Both EPA licence fee and EEL revenues are identified and explained in Transparency Statement – Part A. The previous Transparency Statement provided additional information about EEL projects and expenditures, in response to Commission suggestions in its 2004 wastewater inquiry.

However, it is still not clear that EEL funded works necessarily deal with externalities any more or less than the other wastewater projects that SA Water must undertake.

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<sup>8</sup> The Commission also recognises that the definition is created, strictly, in the context of the minimum revenue case, but also has application to the maximum revenue case.

#### 4.6.4 The Commission's view on compliance with the CoAG principles

**Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles?**

The inclusion of externalities that are “both attributable to and incurred by” SA Water in the Transparency Statement is compliant with the 1994 CoAG pricing principles.

**Provision of information: Did Cabinet receive this information?**

The Commission recognises that the Cabinet submission included information about externalities and their incorporation into water and wastewater prices.

**Sufficiency of information: Was the information provided sufficient to comply with the CoAG principles?**

Sufficient information was provided in respect of externalities to comply with the 1994 CoAG pricing principles. However, the Commission notes that changes to the treatment of water resource management costs may arise from the NWI.

#### 4.7 Return on assets

Water and wastewater businesses are highly capital intensive (that is, they require investment of large amounts of capital in sunk assets). Therefore, relatively minor variations in rates of return and/or the asset values on which return is sought can have a significant impact on pricing. In addition, the inclusion or exclusion of contributed assets can also have a considerable impact.

The inclusion of a return on asset component in pricing considerations is, and will remain, a sensitive issue, in that there is the potential for inefficient asset costs or excessive returns to underpin higher prices.

The Commission understands that this requirement was included in the 1994 CoAG pricing principles to ensure that the opportunity cost of funds invested is recognised in water and wastewater pricing, leading to efficient economic outcomes.

The cost of capital relates to the opportunity cost of investment. It represents a risk adjusted return that investors demand on their investment.

Although the cost of capital is a straightforward theoretical concept, it is complex and controversial to apply. The two main reasons for this are that it:

- ▲ is impossible to determine the “true” future cost of capital for any company; and
- ▲ has one of the largest financial impacts for a regulated business.

For some Australian water utilities the issue has been confused further due to government ownership. However, ownership should have no impact in determining the cost of capital, which as mentioned, is an opportunity cost and not the accounting cost of financing.

#### 4.7.1 CoAG Principles

The Guidelines for applying Section 3 of the Strategic Framework state:

*“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 [weighted average cost of capital].”[Emphasis added]*

#### 4.7.2 Transparency Statement – Part A Comments

The Transparency Statement – Part A states:

*“The Government continues to adopt a range of pre-tax real WACC for its 2006-07 water and wastewater pricing decisions of 6–7%. The estimate is based on the evidence and precedents of jurisdictional regulators, the timing of other regulators’ decisions and the views on input values of comparable utilities presented by SA Water.*

*The Government considers that WACC issues remain an area of developing regulatory practice, particularly in respect of improving methods by which input variables are estimated. In addition, there remain a number of regulators that adopt a pre-tax, rather than a post-tax, WACC. Accordingly, the Government intends to keep differences of approach between it and ESCOSA under review as well as broader developments in regulatory practice that may arise.” (p. 21)*

#### 4.7.3 The Commission’s assessment

WACC is one of the most crucial variables in setting regulated prices. This is because the revenue recovery amount is highly sensitive to the cost of capital used (in a ‘building block’ approach<sup>9</sup>).

Transparency Statement – Part A states that SA Water’s total assets are valued at about \$6.8 bn, with water assets about \$4.4 bn and wastewater assets at \$2.4 bn. This means that a change of 0.1% in the cost of capital applied to the assets results in a revenue requirement change of \$6.8m annually for SA Water as a whole, or \$4.4m for water, \$2.4m for wastewater.

For the 2004-05 pricing decisions the Government applied a range of WACC across 2 percentage points (between 6% and 8%), reflecting a range of some \$130m annually. This is clearly a significant range and the Commission considered it inappropriate.

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<sup>9</sup> The ‘building block’ approach relates to setting the revenue target as the sum of efficient cost, including operational & maintenance cost, depreciation and a return on assets. It may also include other incentive payments, such as an efficiency carry-over amount.

For the 2005-06 and this latest pricing decision the Government has applied a narrower band (6% to 7%). As was set out in the 2005-06 Transparency Statement, this was based on analysis of various regulatory decisions, and included presentation of the various components of WACC. This addresses, in part, some of the Commission's earlier concerns, though no WACC build-up is provided in this latest Transparency Statement, with the previous outcome simply being carried forward.

However, the sole reliance on analysis of other regulatory decisions for various regulated businesses is not, in the Commission's view, a sufficient approach. Notably, it takes no account of the particulars of a sole water utility operating in South Australia, as opposed to businesses in other states operating under different regimes and facing different financial risks. The timing of other regulators' decisions also needs to be taken into account as some components of WACC will change over time.

The forecast 2006-07 target revenue for wastewater remains near to the top of the maximum revenue band. Considering the potential to further reduce asset values for price setting purposes to allow for improved treatment of contributed assets, it is possible that the SA Government is at risk of implementing charges that ultimately generate revenues in excess of the "true" maximum (allowable) revenue outcome. The NWI requirement to move toward maximum revenue (upper bound) pricing by 2008 will add to concerns here.

#### **4.7.4 The Commission's view on compliance with the CoAG principles**

**Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles?**

Opportunity cost is recognised in the Transparency Statement as required by the 1994 CoAG pricing principles.

**Provision of information: Did Cabinet receive this information?**

The Transparency Statement explains the derivation of the WACC range.

**Sufficiency of information: Was the information provided, sufficient to comply with the CoAG principles?**

The Commission believes that, although compliant with the 1994 CoAG pricing principles' requirement to include an opportunity cost, it would be preferable to determine an appropriate WACC, rather than a range.

The Commission considers that the WACC calculation should be based on an efficient supplier's benchmark, rather than actual conditions of SA Water. This

would require more than analysis of other regulators' WACC decisions, although the Commission acknowledges that such comparative analysis is relevant.

## **4.8 Dividends**

Dividend Policy relates to matters associated with the periodical returns made to the shareholders or owners of a business. Any decision on dividends to be paid is linked to the decision on the capital structure of the business. Retention of free cash flows (retained earnings) by the business increases the equity proportion of a business.

Dividend policy must be considered as a corporate-wide issue due to its corporate-wide impact. Dividends cannot be allocated to business units. This is akin to allocating shares to specific parts of the business.

### **4.8.1 CoAG Principles**

In relation to dividends, the guidelines for the application of Section 3 of the CoAG principles state that:

*“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.”*

Although the “level that reflects commercial reality” is not further explained, the NCC has previously provided some clarifying remarks<sup>10</sup>:

*“The Council considers that a reasonable upper bound limit for dividend distribution by government water service businesses is the Corporations Law requirement that dividends may be paid only out of profits (profits include accumulated retained profits as well as the current year's profit). This approach would safeguard against water and wastewater service providers having insufficient financial resources to conduct business. This approach would also be consistent with competitive neutrality objectives.”*

### **4.8.2 Transparency Statement – Part A Comments**

The previous Transparency Statement outlined the new dividend policy now applying to SA Water. The new policy treats dividends separately, rather than as part of an overall contribution as was the case previously:

*“The new policy framework for dividends incorporates the following key elements:*

- *dividends would be calculated with consideration of the capital structure targets for each PNFC [Public Non-Financial Corporations]*

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<sup>10</sup> The 2003 NCP Assessment Framework for Water Reform, NCC, February 2003.

- *dividends would be paid based on actual, rather than budgeted, outcomes*
- *dividends would be paid on after tax profit, rather than on a cash basis. Special dividends may be paid if determined to be appropriate by the Treasurer. Dividends will not exceed the accumulated surplus of the PNFC*
- *the dividend requirements of the Government as shareholder would be consistent with the approved capital structure bands for the PNFC*
- *the timing, process of payment and revision of dividends would be on a consistent basis.*

*The Government considers that dividends calculated on the basis of after tax profit and actual outcomes more closely reflect commercial realities, and provide appropriate incentives to the management and board.*

*In November 2004 the Government also approved implementation of the new ownership framework, which is expected to be budget neutral in 2005-06. The Government will make a formal decision on the individual application of the new ownership framework, including the capital structure and dividend policies, for SA Water in January 2005.” (pp. 45-46)*

The latest Transparency Statement – Part A notes that:

*“In March 2005, the Government approved a dividend payout ratio and target gearing ratio, consistent with the PNFC Ownership Framework Policy Guidelines approved in October 2004, to apply from 1 July 2005.*

*The Government’s decision provides for:*

- *a debt to total assets ratio range of 15-25% for the next 4-5 years, with a target ratio of 20%; and*
- *a dividend payout ratio of 95%, based on actual after-tax profit.*

*The target capital structure takes into account factors such as:*

- *the volatility of cash flows*
- *the characteristics of the market in which the business operates*
- *the capital intensity of the business*
- *financial flexibility to allow for approved and unexpected capital expenditure and changes in operating conditions.*

*With regard to the calculation of dividends based on after tax profit and actual outcomes, the Government considers that this more closely reflects commercial realities and provides appropriate incentives to the management and board.” (p. 26)*

### **4.8.3 The Commission’s assessment**

In its 2004 reports the Commission addressed NCC concerns about the dividend policy applied to SA Water, particularly concerns that the dividends were higher than commercial reality. The Commission provided analysis to allay those fears

and showed that the dividend policy was not being used as a “backdoor means” for capital restructuring.

The Commission previously recommended several changes to the way dividends are explained in pricing decisions. These included:

- ▲ separating dividend policy from overall contributions policy (to separate it from the tax equivalent regime);
- ▲ stating the dividend policy; and
- ▲ explaining capital structure – given its relationship with dividend policy.

The Government has implemented these changes, which were facilitated by the Government’s development of a new ownership framework for public corporations (including SA Water) which included new capital structure and dividend policies.

#### **4.8.4 The Commission’s view on compliance with the CoAG principles**

##### ***Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles?***

The new dividend policy is stated in the Transparency Statement and a best estimate of its impact included in the minimum revenue case. This complies with the 1994 CoAG pricing principles.

##### ***Provision of information: Did Cabinet receive this information?***

Cabinet received information about the dividend policy.

##### ***Sufficiency of information: Was the information provided sufficient to comply with the CoAG principles?***

The information was sufficient to comply with the 1994 CoAG pricing principles, although recognising that the final application of the new dividend policy had not been decided at the time of the decision.

#### **4.9 Tax equivalent regime**

The tax equivalent regime (TER) relates to a regime whereby government owned enterprises are subject to an equivalent taxation regime that applies to the private sector. For state-owned enterprises, tax is paid to the State government, not the Commonwealth.

##### **4.9.1 CoAG Principles**

The 1994 CoAG pricing principles require that taxes or TER payments be included in the calculation of both the maximum revenue and the minimum revenue. However, the minimum revenue requirement calculation does not require the inclusion of income tax for those organisations which do not pay income tax.

The main reason for the TER is to ensure competitive neutrality. In the absence of TER, the public sector will have a cost advantage since it would not have to incorporate the business cost of taxes into prices.

#### **4.9.2 Transparency Statement – Part A Comments**

Transparency Statement – Part A states that:

*“In the 2005-06 water and wastewater Transparency Statement the Government noted that the use of a pre-tax real rate of return on assets, using a WACC, is consistent with the CoAG guidelines and removes the need to include a separate allowance for income taxes, or TER payments, in the maximum revenue outcome.*

*In its final report ESCOSA stated:*

*In the Commission’s view, the Transparency Statement includes TER and is compliant with the CoAG Principles (ESCOSA, 2005, page 39).*

*ESCOSA also expressed the view that:*

*The TER information would be presented more transparently if a post-tax WACC were used and the taxation amount included in the cash flows (ESCOSA, 2005, page 39).*

*In its response to ESCOSA’s final report, the Government noted that a number of regulators continue to adopt a pre-tax approach and indicated it has no plans to move to a post-tax approach. However, this matter will be kept under review.” (p. 23)*

#### **4.9.3 The Commission’s assessment**

As was described in the section on dividends the Commission had previously recommended the separation of dividend and tax policy. As well as achieving 1994 CoAG pricing principle compliance, reasons for this include that taxes are paid to the government, whereas dividends are paid to shareholders. For transparency, when the two are the same, the payments should be separately identified. Taxation is an outcome, whereas the dividend policy is an internal policy of the business. The tax outcome should not be mingled with an internal policy decision.

SA Water’s inclusion of TER in the minimum revenue requirement calculation is considered to be appropriate and compliant with the 1994 CoAG pricing principles.

With regard to maximum revenue calculation, it is appropriate that where a pre-tax WACC is used, taxation amounts should not be added on to cash flows as well, since this would lead to double counting.

That the 1994 CoAG pricing principles require TERs to be included in both maximum and minimum revenue calculations implies that a post-tax WACC should be used, as it requires the taxation amount to be included in the cash flows – an

improvement in transparency. The Commission also notes that it observes a regulatory trend towards post-tax cost of capital regimes.

#### **4.9.4 The Commission's view on compliance with the CoAG principles**

##### **Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles?**

In the Commission's view, the Transparency Statement includes TER and is compliant with the 1994 CoAG pricing principles.

##### **Provision of information: Did Cabinet receive this information?**

The TER calculation was included in the Transparency Statement and made available to the Cabinet when making the pricing decision.

##### **Sufficiency of information: Was the information provided, sufficient to comply with the CoAG principles?**

The information provided was sufficient. However, in the Commission's view the TER information would be presented more transparently if a post-tax WACC were used and the taxation amount included in the cash flows.

### **4.10 Efficient Resource Pricing – Tariffs and Rates**

Tariff structure has an important role to play in achieving overall economic efficiency. Although the majority of a water utility's costs would be fixed (in the short to medium term), consumption based pricing sends a strong signal and can achieve allocative efficiencies.

A tariff structure comprising of a fixed charge and a usage (variable) charge, is referred to as a two-part tariff.

#### **4.10.1 CoAG Principles**

In the NCP water reform assessment framework, the NCC states that in setting prices for water, the water businesses are to:

*“Set prices that reflect the volume of water supplied to encourage more economical water use. Businesses should implement a two-part tariff (comprising a fixed access component and a volumetric cost component), where this is cost effective.”*

The Commission understands that the key driver for this requirement is to achieve a price signal leading to better asset utilisation, water resource conservation and overall allocative efficiency.

## 4.10.2 Transparency Statement – Part A Comments

### Water

SA Water has two-part tariffs for all non-commercial customers as set out in Table 10 of Transparency Statement – Part A. There are different supply charges to residential and non-residential customers. Its variable charges have two blocks: 47c/kL for all consumption up to 125 kL, and \$1.09/kL for all consumption greater than 125kL.

For all commercial customers, the supply charge is based on a percentage of property value (with a minimum of \$164). The usage charge is now phased in at: 47c/kL for all consumption up to 125 kL, and \$1.09/kL for all consumption greater than 125kL.

The charging structure is uniform between city and country customers, which gives rise to cross subsidy and Community Service Obligation (CSO) issues, which are addressed in section 4.11.

### Wastewater

SA Water's charges for wastewater services to all but its largest customers are on a single rate basis, where the rate is linked to the value of the property served. There is no consumption (or volumetric) component.

Separate rates are applied between metropolitan and country customers, to adjust for the generally lower property values in country areas. The general intent is that country customers should pay similar amounts to city customers.

Separate rates are also applied to residential and non-residential customers, resulting in generally higher payments by non-residential customers.

A minimum annual charge, to be \$276, also applies.

Transparency Statement – Part A (and the earlier Transparency Statements) explain that the adoption of this approach is based upon a series of premises, including the:

- ▲ impracticality (non cost-effectiveness) of metering wastewater service usage;
- ▲ observation that the volume (and pollution load) of wastewater discharged by most customers has little impact on the cost of operating the sewerage system and hence price signalling in this respect would provide little benefit;
- ▲ risk of unregulated diversions from the sewerage system if consumption based pricing were to occur; and
- ▲ link between property values and ability-to-pay for equitable charging purposes.

The adoption of this approach also provides a relatively stable revenue stream, in so far as there is little divergence between forecast and actual collections.

Transparency Statement – Part A also addresses the trade waste charging arrangements, where all but one discharger will have moved to full cost recovery, resulting in the removal of all but one of the resulting CSOs by 2006-07.

#### **4.10.3 The Commission’s assessment**

##### **Water**

SA Water uses consumption based pricing for all customers. The two-part tariffs being charged for non-commercial customers are consistent with 1994 CoAG pricing principles. The lower first block tariff for non-commercial customers is not inconsistent with the 1994 CoAG pricing principles. On the assumption that the variable charge for the second block is the true cost reflective charge, the first block may constitute a cross subsidy, which is transparent.

Cross subsidy issues are dealt with in the next section.

##### **Wastewater**

SA Water does not apply consumption based pricing, other than to the largest dischargers. The Commission acknowledges that this recognises the impracticality of metering direct usage for small customers and the minor benefit that price signals of this type would generate. Such an approach would not satisfy the “cost effectiveness” requirement set out above.

The 1994 CoAG pricing principles do not specify the approach to be used where direct consumption charges are not cost effective; hence the tariff structure adopted is not inconsistent with the 1994 CoAG pricing principles.

The Commission notes that around 50% of country residential customers, and around 30% of all customers, will pay the minimum wastewater charge (essentially a flat annual fee).

#### **4.10.4 The Commission’s view on compliance with the CoAG principles**

##### **Adequacy of information: Does the information contained in the Transparency Statement comply with CoAG principles?**

The Transparency Statement outlines the water and wastewater pricing structures and the reasons for the pricing structures. The Commission considers both the structure and the reasons to be compliant with the 1994 CoAG pricing principles.

**Provision of information: Did Cabinet receive this information?**

Cabinet received the information on pricing structures that was included in Transparency Statement – Part A and was sufficiently informed in its decision-making for water and wastewater pricing.

**Sufficiency of information: Was the information provided sufficient to comply with the CoAG principles?**

All relevant material was available to Cabinet to make an informed compliant decision on this issue.

## **4.11 Cross-Subsidies**

In a jurisdiction with the water supply logistics faced by South Australia, some cross-subsidies are inevitable under a Statewide pricing approach. The key to adherence to the 1994 CoAG pricing principles is ensuring that the cross-subsidies are transparent.

### **4.11.1 COAG Principles**

In the NCP water reform assessment framework, NCC stated that in setting prices for water, the requirements for water businesses are:

*“.. 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, ...;”*

*“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;”*

### **4.11.2 Transparency Statement – Part A**

With regards to cross-subsidies generally, the NCC noted that:

*“South Australia has adopted the Baumol Band (Figure 7), as suggested by the NCC, as the theoretical definition of cross-subsidies (NCC, 2001, p 127).”*

#### **Statewide pricing**

Transparency Statement – Part A reports:

*“SA Water provides water and wastewater services to its customers in regional areas of South Australia at prices similar to the metropolitan area, consistent with the South Australian Government’s Statewide pricing policy.*

*Statewide pricing is an important element of the Government’s equity, social justice and regional policy and has been discussed extensively in the Government’s previous water and wastewater Transparency Statements.*

*The Government provides SA Water with a CSO to ensure SA Water's rates of return are similar between Adelaide metropolitan and country areas. This recognises the extra costs of providing water and wastewater services in country areas.” (p. 33)*

### **Trade waste**

Transparency Statement – Part A reports:

*“The 2005-06 Transparency Statement outlined trade waste charges to apply to major dischargers in 3-year permits for the period July 2005 to June 2008. The charges applying in 2005-06 will be indexed to determine the level of charges to apply in 2006-07 and 2007-08.” (p. 32)*

*“The CSO paid to SA Water under the Waterworks Act 1932 to ensure that transitional discounts provided to trade waste dischargers are transparent, will be fully phased out by 2006-07. A separate CSO arises from a pre-existing agreement exempting one discharger from full trade waste charges until 2008.”(p. 43)*

### **CSOs**

Transparency Statement – Part A identifies:

*“The 2005-06 Transparency Statement contained details of the Government's new CSO policy as part of its revised ownership structure for PNFCs. The Transparency Statement also contained an extensive discussion on the nature of CSOs funded in the following categories:*

- *administration of the Save the River Murray Levy*
- *service charge exemptions/concession*
- *administration of the pensioner concession scheme*
- *statewide pricing*
- *trade waste*
- *other subsidies.*

*The most significant change arising from the implementation of the PNFC ownership policy is the revised method for calculating the return on country investments.” (p 41)*

The previous (2005-06) Transparency Statement – Part A identified:

*“The new CSO policy has adopted the following principles:*

- *a CSO arises when a government specifically requires a public enterprise to carry out activities relating to outputs or inputs which it would not elect to do on a commercial basis, and which the government does not require other businesses in the public or private sectors to generally undertake or which it would only do commercially at higher prices (Industry Commission, 1994, p xi)*
- *CSOs are to provide incentives for the business to provide CSOs efficiently*
- *CSOs are to have a minimum impact on incentives on other parts of the business*
- *CSOs are to fund only best practice costs*

- CSO payments are to be transparent and clearly reported
- performance management of the delivery of CSOs will be undertaken
- CSOs will be subject to an annual review
- CSOs will be valued on a 'cost per unit of output' approach." (p. 68)

Key guidelines from the new CSO policy<sup>11</sup> are:

1. CSO payments will be made for all non-commercial activity that PNFCs are required to undertake.
2. The funding method will aim to ensure that there are incentives for the PNFC to provide CSOs efficiently.
3. CSO payments will be structured to have a minimum impact on incentives for the PNFCs to provide commercial services.
4. Only "best practice" avoidable costs will be funded. Best practice costs will be determined based on benchmarking and market testing where possible, and will recognise service quality parameters where these can be readily measured.
5. CSO payments will be transparent and clearly reported.
6. CSO amounts will be reviewed annually as part of the Budget process." (p. 3-4)

#### *Identification and costing of CSOs*

*Affordable cost methodology will be the basis for determining the costs of CSO's. The affordable cost of providing a CSO is the sum of all the costs that could be avoided if the product or service were not provided.*

A "cost per unit of output" approach for each CSO will be determined as follows:

- a) A "cost per unit of output" will be determined for each CSO activity by the PNFC. Output units would be units of the specific CSO service that the PNFC is providing.
- b) The Government would contract to purchase a level of output and agree on a price adjustment mechanism over time.
- c) The business risks associated with variations in operational or replacement capital costs will be borne by the PNFC for the life of the contract. " (p. 4)

### **4.11.3 The Commission's assessment**

#### **Statewide pricing**

At the suggestion of the NCC, the SA Government has assessed the possible existence of cross-subsidies in water supply using the "Baumol Band" approach. The Commission notes that the Baumol Band is generally broad and may not

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<sup>11</sup> Available from: <http://www.premcab.sa.gov.au/pdf/competition/commserv96.pdf> .

reveal sufficient information about the major cost differences of serving different customers.

While the Government commitment to Statewide pricing may not merit a more in-depth understanding of the extent of customers paying less than avoidable cost, such an understanding is important in the context of recognising the recipients of any cross-subsidies and the impact on CSO requirements. Under the new CSO policy this may assist to focus the attention of existing service providers and potential competitors on those areas where innovation may achieve the greatest cost savings. This should then reduce CSOs.

The submission received by the Commission in response to the Public Notice and Issues Paper for the Inquiry discussed the prospect for alternative water supply solutions for the Eyre Peninsula. While the Commission is not investigating particular water supply solutions, the issues raised do point to the need to ensure that all options are reasonably assessed. This will provide some assurance that CSO costs are being minimised.

### **Trade waste**

The Commission recognises a very minor potential for the continued existence of cross-subsidies within trade waste. However, all but one of these CSO payments are being phased out by 2006-07.

### **CSOs**

The vast majority of the payments covered by the new CSO policy, certainly in terms of value, relate to the SA Water Statewide Pricing CSO. Effective management of this new policy is likely to require separate costing models to reflect cost differentials between county regions, noting the stated intent to benchmark performance, market test costs and seek to reduce the cost of CSOs – particularly in light of the difficulties expressed in the SACES report.

A step towards the stated intent of the CSO Policy being met is likely to require CSO costing on a rational regional and/or functional basis (in essence, for example, ring-fencing the water transmission function).

The observations in the SACES report about the on-going problems associated with drawing water from the River Murray, together with the Government's understood intention to buy water allocations and return those flows to the River Murray, may raise some queries about the potential of some private sector water supply proposals in the north and west of the State to reduce some CSOs (and reduce the stress on the River Murray) – as reflected in the submission.

The Commission notes that the revised basis for calculating the CSO has increased the payment by around \$35 million, due to the use now of a rate of

return based on the WACC estimate (using 6 per cent). This increase also has the potential to increase the interest of other potential service providers.

#### **4.11.4 The Commission's view on compliance with the COAG principles**

**Adequacy of information: *Does the information contained in the Transparency Statement comply with CoAG principles?***

The Transparency Statement addresses the issue of cross subsidies using the "Baumol Band" to define cross subsidy.

Although this complies with the 1994 CoAG pricing principles, the Commission believes that the Government will be better served if the major cost differences of serving different customers are examined further. The new CSO policy has not progressed this issue as much as might have been hoped.

**Provision of information: *Did Cabinet receive this information?***

Cabinet received information leading to the conclusion that cross-subsidies do not exist or, in the case of wastewater, are addressed through CSOs.

**Sufficiency of information: *Was the information provided sufficient to comply with the CoAG principles?***

All relevant material was available to Cabinet to make an informed compliant decision on this issue.

The Commission believes that although compliant with the 1994 CoAG pricing principles, the Transparency Statement should provide detailed analysis of cost differences between customer categories, the calculation of CSOs and assessment of CSO alternatives.



## **5 CONCLUSION**

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This is the second time that the SA Government has introduced and published a combined Transparency Statement for its water and wastewater pricing decisions. The efforts made by the Government since the previous, separate statements have represented major steps towards compliance with the CoAG water reform strategic framework (particularly the development of the annuity estimate for the minimum revenue outcome, improved WACC analysis, further cost analysis and the new PNFC framework).

This report highlights a number of issues that deserve further consideration, in common with the Commission's earlier inquiries. Most (by number) of the outstanding issues from those earlier inquiries have been substantially addressed for the 2006-07 water and wastewater pricing decision.

Overall, the Commission considers that Transparency Statement – Part A is a significant step forward in complying with the 1994 CoAG pricing principles. The changes and additions proposed in this report, if implemented in future Transparency Statements, would bring water and wastewater pricing into fuller compliance with the 1994 CoAG pricing principles and should also help to address some of the future requirements that will come out of the NWI.

With regard to the Terms of Reference:

- (1) The Commission has reviewed the processes undertaken in the preparation of advice to Cabinet and concludes general compliance with the 1994 CoAG pricing principles.
- (2) The Commission notes that Transparency Statement – Part A is a fair representation of the actual advice provided to Cabinet.

The Commission has set out in this report additional information that it believes would further demonstrate compliance with 1994 CoAG pricing principles if adopted in future price setting processes.

### **5.1 Statement of Compliance**

The Commission has concluded compliance in the following areas:

- ▲ Efficient business costs (section 4.1);
- ▲ Asset Valuation (section 4.2);
- ▲ Contributed Assets (section 4.3);
- ▲ Depreciation (section 4.4);
- ▲ Annuity (section 4.5);
- ▲ Externalities (section 4.6);



- ▲ Return on Assets (section 4.7);
- ▲ Dividends (section 4.8);
- ▲ Tax Equivalent Regime (section 4.9);
- ▲ Efficient Resource Pricing (section 4.10); and
- ▲ Cross-subsidies (section 4.11).

Notwithstanding this, the Commission has suggested improvements in some areas. In particular, the Commission has concluded a need for more development in respect of efficient business costs (section 4.1) and contributed assets (section 4.3). A revised treatment of contributed assets could have a significant effect on water and wastewater prices.

The Commission also notes that the advent of the NWI may mean that certain methods and approaches considered compliant until now may no longer be so.