



# INQUIRY INTO THE 2007-08 METROPOLITAN AND REGIONAL WATER AND WASTEWATER PRICING PROCESS FINAL REPORT

**June 2007**

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## GLOSSARY OF TERMS

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ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
CoAG	Council of Australian Governments
COMMISSION	Essential Services Commission of SA
CPA	Competition Principles Agreement
CSO	Community Service Obligation
EEL	Environment Enhancement Levy
EPA	Environment Protection Authority
ESC	Essential Services Commission, Victoria
IPART	Independent Pricing and Regulatory Tribunal (New South Wales)
LRMC	Long Run Marginal Cost
LRMCC	Long Run Marginal Capital Cost
NCC	National Competition Council
NCP	National Competition Policy
NWC	National Water Commission
NWI	National Water Initiative
OMA	Operating, Maintenance and Administration
RAB	Regulated Asset Base
SA WATER	South Australian Water Corporation
SCARM	Standing Committee on Agriculture and Resource Management
TER	Tax Equivalent Regime
WACC	Weighted Average Cost of Capital
WPA	Waterproofing Adelaide Program
WSAA	Water Services Association of Australia

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

**FROM: Paul Holloway, Acting Treasurer**

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

**RE: Water and Wastewater Prices in Metropolitan and Regional South  
Australia 1 July 2007 to June 2008 and Revenue Direction to  
June 2012**

**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 *Gazetta* notice dated 12 September 2002 (p. 3393).
3. The South Australian Government proposes to publish a Transparency Statement on SA Water's water and wastewater prices. The Government has prepared the attached Transparency Statement.
4. The Transparency Statement links Cabinet's decision on water and wastewater prices to the 1994 CoAG pricing principles and certain National Water Initiative obligations, 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. The Government has finalised the South Australian National Water Initiative Implementation Plan that has been accredited by the National Water Commission. This Transparency Statement process occurs pursuant to the 1994 CoAG pricing principles and relevant clauses of the South Australian National Water Initiative Implementation Plan.
6. SA Water is to meet the reasonable costs of the Commission in undertaking the inquiry.



## **REFERRAL:**

I, Paul Holloway, Acting 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 price setting 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 in 2007-08 and an in principle revenue direction to June 2012 having regard to:
  - a. the adequacy of the application of 1994 CoAG pricing principles taking into account the recommendations, conclusions and proposals of the National Water Commission in its 2005 NCP assessment of water reform progress;
  - b. the National Water Initiative, specifically, Clause 65 with respect to the continued application of pricing principles to urban areas, Clause 66(i) with respect to water and wastewater pricing in the metropolitan area and Clause 66(v) with respect to water and wastewater pricing in regional (urban) areas; and
  - c. the accredited South Australian National Water Initiative Implementation Plan with respect to Clauses 65, 66(i) and 66(v)
- (b) In undertaking this inquiry, the Commission is to consider the Transparency Statement Metropolitan and Regional Water and Wastewater Prices in South Australia 2007-08 (Part A) dated January 2007;
- (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 and the National Water Initiative 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 the Treasurer and the Minister for Government Enterprises by no later than three months after receipt of these Terms of Reference;

- (b) I require that the Commission submit a Final Report on the inquiry to the Treasurer and the Minister for Government Enterprises by no later than six weeks after submitting the Draft Report;
- (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 28 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, 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 inquiry the Commission must preserve the confidentiality of any information, material or documentation provided by the Government to enable the Commission to undertake its inquiry and stamped "Strictly Confidential".

**PAUL HOLLOWAY**

Acting Treasurer



## OVERVIEW

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In January 2007, the Acting 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 2007-08.

In undertaking its Inquiry, the Commission was required to consider the report: Transparency Statement Metropolitan and Regional Water and Wastewater Prices in South Australia 2007-08 (Part A), dated January 2007, which was prepared by the Department of Treasury and Finance.

This is the Commission's fifth inquiry into the South Australian Government process for setting SA Water's water and/or wastewater prices.<sup>1</sup>

Some of the analyses and conclusions from the previous water and wastewater inquiries remain relevant. However, those earlier inquiries were limited to an assessment against the 1994 Council of Australian Governments (CoAG) pricing principles – examining whether or not the pricing processes complied with those principles.

This inquiry is the first in which the Commission is considering the pricing process in the context of the National Water Initiative (NWI). The NWI, an intergovernmental agreement signed in 2004, builds on the 1994 CoAG pricing principles.

This report indicates the extent to which information provided to Cabinet adequately set out and considered the pricing principles. The Commission's observations in each area are summarised in the table below. In general, the Commission observes that the introduction of the NWI into the assessment increases the scope of water pricing reform beyond that of the 1994 CoAG pricing principles alone, with the stated intent of achieving best practice water pricing. This means that some of the approaches previously adopted now need further improvement. In some cases this requires only additional disclosure in the Transparency Statement. In other cases it will require more substantial analysis, supporting information and accompanying disclosure in the Transparency Statement.

The Commission has identified the type of improvements that should be made to the pricing process. The most significant areas for improvement are: efficient business costs (both capital and operating expenditures), contributed assets, externalities, efficient resource pricing and the treatment of CSOs. The Commission notes that it had identified potential for improvement in most of these areas in previous inquiries.

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<sup>1</sup> See <http://www.escosa.sa.gov.au/site/page.cfm?u=72>.

**Summary of Commission observations**

AREA	OBSERVATIONS
<b>AREAS FOR IMPROVEMENT (HIGH PRIORITY)</b>	
Efficient business costs (OMA)	Insufficient information to show OMA cost projections are efficient.
Capital expenditure	Insufficient information to show capex projections are efficient.
Contributed assets	Pre-1995 contributed assets not estimated, nor is the absence of an estimate explained sufficiently.
Externalities	Broader NWI approach to externalities nor adopted, nor has sufficient explanation been provided as to the derivation of costings.
Efficient resource pricing	Insufficient demonstration that the water usage component of prices is consistent with LRMC and hence that efficient resource pricing can be achieved.
Cross subsidies & CSOs	Insufficient demonstration that no cross subsidies exist; nor is evidence provided that alternative CSO arrangements have been considered.
<b>AREAS FOR MINOR IMPROVEMENT</b>	
Asset valuation	Should better explain the link between fair value and deprival value for SA Water.
Depreciation	Additional information on asset lives should be provided.
Return on Assets	The derivation of parameters should be explained.
Upper bound movement	Intention to move toward the upper bound is shown, but location of the upper bound is uncertain.
<b>LOWER REVENUE BOUND ISSUES (LOWER PRIORITY)</b>	
Annuity approach	Information about the derivation of the annuity is absent, hence unclear whether it meets requirements of lower bound.
Dividends	How the dividend allowance reflects commercial reality in the context of the lower bound is not explained.
Tax Equivalent Regime	How the TER allowance is suitable for the lower bound is not explained.

# 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 owns SA Water. The Minister for Water Security is responsible for setting the prices that SA Water charges for services provided.<sup>2</sup> In doing so, the Government has committed to set prices such that they comply with pricing principles established under the Council of Australian Governments (CoAG).

The relevant pricing principles were, originally, the 1994 CoAG pricing principles, which were incorporated into the National Competition Policy (NCP).<sup>3</sup> The 1994 CoAG pricing principles provided the framework for water and wastewater pricing reform for all jurisdictions, including South Australia.

In June 2004 a new CoAG water agreement emerged: the National Water Initiative (NWI). The NWI builds on the 1994 CoAG framework and, in matters relevant to this inquiry, impacts upon the 1994 CoAG pricing principles, requiring re-examination for the purposes of the inquiry. These impacts are discussed in more detail later but amount mostly to a change in emphasis. Accordingly, the Commission now refers only to “the pricing principles”, these being the 1994 CoAG pricing principles as impacted by the NWI.

Also arising from the NWI was the National Water Commission (NWC). The NWC is a Commonwealth statutory body with a role of driving the national water reform agenda – as encapsulated in the NWI. Amongst other things, the NWC took over the role of the National Competition Council (NCC) in respect of assessing each jurisdiction’s progress with implementing, originally, the 1994 CoAG pricing principles and now, the NWI.

## **1.1 Purpose of this paper**

The South Australian Government has prepared a report: Transparency Statement – Part A, Water and Wastewater Prices in Metropolitan and Regional South Australia 2007-08, dated January 2007, setting out the process and the matters that have been considered by the Government in setting 2007-08 water and wastewater prices (including an in-principle revenue direction to June 2012). One of the purposes of Transparency Statement – Part A is to document the extent to which the Government’s 2007-08 water and wastewater pricing decision applies the relevant pricing principles.

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<sup>2</sup> At the time of the 2007-08 pricing decisions this role resided with the Minister for Government Enterprises, as identified in the Notice of Referral. Responsibility for SA Water transferred from the Minister for Government Enterprises to the Minister for Water Security on 6 February 2007.

<sup>3</sup> See <http://www.ncc.gov.au/activity.asp?activityID=39>.



To this end, the Acting Treasurer referred to the Commission an inquiry into the process undertaken in the preparation of advice to Cabinet to approve the 2007-08 water and wastewater prices. This includes an assessment of the extent to which (in summary):

- ▲ the process resulted in Cabinet setting 2007-08 water and wastewater prices based on adequate application of the pricing principles; and
- ▲ relevant information on the 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 2007-08 water and wastewater prices apply the pricing principles. This report also comments, where possible, on the information that was made available to Cabinet in making its decision on 2007-08 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 pricing principles and whether or not information relevant to those principles was made available to Cabinet when a decision on the level and structure of SA Water’s 2007-08 water and wastewater prices was made.

In following its Terms of Reference, the Commission has not investigated water or wastewater prices themselves, and therefore offers no particular conclusions as to the merits of those prices.

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 Acting Treasurer on 30 January 2007 setting out the Terms of Reference for the Inquiry.

The Notice of Referral required the Commission to:

- ▲ advertise the Inquiry;
- ▲ provide 28 days for the lodgement of written submissions;
- ▲ provide a draft report by 30 April 2007; and
- ▲ provide a Final Report by 8 June 2007.

Pursuant to Section 36 of the *Essential Services Commission Act 2002*, a Public Notice of Inquiry was placed in *The Advertiser* on 9 February 2007, asking for written submissions by 9 March 2007. Advertisements were also placed in several regional newspapers. An Issues Paper was released at the same time.

The Commission received one submission in response to the Public Notice and Issues Paper. The Issues Paper and submission are available on the Commission website at: <http://www.escosa.sa.gov.au/site/page.cfm?u=74&c=1481>.

The very low level of stakeholder engagement that the Commission experienced is consistent with its experience in earlier water inquiries. This low level of interest is not reflective of the apparently high degree of public interest in water matters more generally.

The low level of interest also does not reflect regulatory experience elsewhere. For example, the Victorian Essential Services Commission and the NSW Independent Pricing and Regulatory Tribunal (IPART) receive numerous submissions and representations in relation to their various water pricing reviews. However, the Commission notes that these organisations' experiences reflect different regulatory processes and frequencies.

The Commission notes that the NWC, in its *2005 NCP assessment of water reform progress* (the 2005 NCP Assessment) commented: "it is not clear to the [NWC] that adequate public consultation is taking place regarding the [Commission's] pricing inquiries." The Commission observes that the current form of inquiry, being a retrospective inquiry into processes for establishing prices, is not conducive to meaningful public consultation.

In conducting this Inquiry the Commission is principally informed by Transparency Statement – Part A and associated information provided. The Commission also sought and received some additional information from the South Australian Government in order to clarify its understanding of the processes surrounding the Cabinet approval of 2007-08 water and wastewater prices.

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

In 2004 and 2005 the Commission undertook similar inquiries into the processes for determining the 2004-05, 2005-06 and 2006-07 water and wastewater prices. Some of the analyses and conclusions arising from those previous inquiries are relevant to this one. As a result, this report makes reference to the Commission's earlier reports.

The Commission's previous reports are available from its website at: <http://www.escosa.sa.gov.au/site/page.cfm?u=74>.



## 2 THE PRICING PRINCIPLES

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### 2.1 1994 CoAG pricing principles

The Commission's assessment in this inquiry includes the 1994 CoAG pricing principles for water. These principles were developed for application to water (including wastewater) by Australia's State, Territory 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 NCP 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.*

## **2.2 The National Water Initiative**

The Commission is also required to have regard to the NWI in this Inquiry. Signed in June 2004, the NWI builds on and expands the 1994 CoAG Strategic Framework and pricing principles. The NWI includes clauses that establish commitments in relation to urban water and wastewater pricing (particularly clauses 64 to 77 inclusive). It should be noted that the NWI also deals with many other aspects of water management. The full text is available from the website of the National Water Commission (NWC) ([www.nwc.gov.au](http://www.nwc.gov.au)).

The overarching policy objective of the NWI is set out in clause 5:

*The Parties agree to implement this National Water Initiative (NWI) in recognition of the continuing national imperative to increase the productivity and efficiency of Australia's water use, the need to service rural and urban communities, and to ensure the health of river and groundwater systems by establishing clear pathways to return all systems to environmentally sustainable levels of extraction. The objective of the Parties in implementing this Agreement is to provide greater certainty for investment and the environment, and underpin the capacity of Australia's water management regimes to deal with change responsively and fairly (refer paragraph 23).*

The Terms of Reference for this inquiry identify several specific clauses for assessment by the Commission:

### **Clause 65**

*In accordance with National Competition Policy (NCP) commitments, the States and Territories agree to bring into effect pricing policies for water storage and delivery in rural and urban systems that facilitate efficient water use and trade in water entitlements, including through the use of:*

- i) consumption based pricing*
- ii) full cost recovery for water services to ensure business viability and avoid monopoly rents, including recovery of environmental externalities, where feasible and practical*
- iii) consistency in pricing policies across sectors and jurisdictions where entitlements are able to be traded.*

### **Clause 66**

*In particular, States and Territories agree to the following pricing actions:*

*Metropolitan*

- (i): continued movement towards upper bound pricing by 2008.*

*Rural and Regional*

*...*

*(v) full cost recovery for all rural surface and groundwater based systems, recognising that there will be some small community services that will never be economically viable but will need to be maintained to meet social and public health obligations:*

- a) achievement of lower bound pricing for all rural systems in line with existing NCP commitments*
- b) continued movement towards upper bound pricing for all rural systems, where practical*
- c) where full cost recovery is unlikely to be achieved in the long term and a CSO is deemed necessary, the size of the subsidy is to be reported publicly and, where practicable, jurisdictions to consider alternative management arrangements aimed at removing the need for an ongoing CSO.*

As is explained in Transparency Statement – Part A, the Commission’s task derives from clause 77 of the NWI:<sup>4</sup>

*The Parties agree to use independent bodies to:*

- (i) set or review prices or price setting processes, for water storage and delivery by government water service providers, on a case-by-case basis, consistent with the principles in paragraphs 65 to 68; and*
- (ii) publicly review and report on pricing in government and private water service providers to ensure that the principles in paragraphs 65 to 68 are met.*

The Commission observes that its task, as set out in the Terms of Reference, is to review price-setting processes only. Therefore, the Commission stresses that its report should not be construed or represented as relating to clause 77(ii). Further, the Terms of Reference require the Commission to have regard specifically to clauses 65, 66(i) and 66(v) only – a narrower range than that set out in clause 77(i).

### **2.3 Other relevant documents**

The Terms of Reference also requires the Commission to have regard to the *South Australian National Water Initiative Implementation Plan* (the Implementation Plan) and the conclusions of the NWC in the 2005 NCP Assessment. These provide further guidance for the Commission’s assessment. Both documents can be found on the NWC website.<sup>5</sup>

The Commission notes that both documents refer to and, in part, rely upon conclusions drawn by the Commission in its earlier inquiries. Those earlier conclusions were based on an assessment against the 1994 CoAG pricing principles only and therefore do not incorporate NWI considerations.

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<sup>4</sup> See in particular pages 3 and 7 of Transparency Statement – Part A, which explanations underlie the SA Government’s *Statement of Compliance 1* as set out on its page 4.

<sup>5</sup> See in particular pages 37-44 of the Implementation Plan and pages 6.24 to 6.30 of the NWC 2005 NCP assessment.

## **2.4 Interpreting the Terms of Reference**

One of the initial tasks for the Commission, as in any inquiry, is to interpret its Terms of Reference. The Terms of Reference is substantially different to previous inquiries – not only does it introduce the NWI and the other documents noted above, but it requires that the Commission have regard to each of these when inquiring into the price setting process – no particular weighting is implied for any of these documents. Therefore, the Commission commenced its assessment by examining each of the 1994 CoAG pricing principles, the 2005 NCP Assessment, the NWI and the Implementation Plan.

However, upon inspection of the documents it became apparent to the Commission that the key issue for this inquiry is the interpretation to be placed on the combination of the 1994 CoAG pricing principles and the NWI, particularly the specific clauses identified (NWI clauses 65, 66(i) and 66(v)). The Commission's careful consideration of this difficult matter is set out below.

### **2.4.1 The pricing principles**

As noted in section 2.1, the 1994 CoAG pricing principles are part of “a strategic framework to achieve an efficient and sustainable water industry”. Clause 3 of the framework relates to pricing, and is supplemented by the Expert Group Guidelines. Clause 3 and the Guidelines together constitute the 1994 CoAG pricing principles. Implementation of the strategic framework (including the pricing principles) was subsequently incorporated into the 1995 National Competition Policy (NCP) commitments.

The principles are expressed as a set of high level outcomes (e.g. full cost recovery, consumption-based pricing, transparency of cross-subsidies) and specific requirements or agreed actions (e.g. efficient costs, appropriate rate of return) that underpin the outcomes. For example, the Guidelines deal with a further set of principles that jurisdictional price setting bodies should have regard to in considering full cost recovery.

The NWI, endorsed by CoAG in June 2004, is a commitment to various reforms, based upon “a continuing national imperative of increasing the productivity and efficiency of Australia's water use”. It includes a series of actions to be adopted by jurisdictions focussed on greater compatibility and best practice approaches to water management. The NWI pricing principles are specified at clauses 64 – 77 of the NWI (headed Best Practice Water Pricing and Institutional Arrangements). The Terms of Reference for the current Inquiry direct the Commission's attention specifically to clauses 65, 66(i) and 66(v).

The NWI pricing principles build on and incorporate the 1994 CoAG principles. Clause 65 begins with the words “In accordance with NCP commitments...”. Clauses 65 and 66 are grouped together under the heading “Water Storage and Delivery Pricing”. Clause 65 specifies a general commitment to outcomes to

achieve the NWI objectives, including through consumption based pricing and full cost recovery. Clause 66 outlines specific agreed actions to achieve those outcomes).

There are at least two areas in which the NWI explicitly modifies the 1994 CoAG principles. These are the requirements of:

- ▲ clause 66(i), for continued movement towards upper bound pricing by 2008; and
- ▲ clause 66(v), for jurisdictions to consider alternative management arrangements aimed at removing the need for ongoing CSOs.

Discussions with the NWC also confirmed the view that the definition of externalities, which in the 1994 CoAG pricing principles is limited to costs that arise from and are directly incurred by the water business, is expanded by the NWI to also include costs that are not directly incurred by the business.

The Commission observes that the NWI pricing principles have a more explicit outcomes focus than the 1994 CoAG pricing principles, as evidenced by the statements of clause 65.

This is also confirmed by inspection of, in accordance with the Terms of Reference, the Implementation Plan. In addressing clauses 65 and 66 (and many other NWI clauses), the Implementation Plan includes in each instance a discussion about the “Link to outcomes in the NWI” and points to NWI clause 64 as being relevant to the understanding of clauses 65 and 66. Clause 64 is focussed entirely on outcomes.<sup>6</sup>

The Commission also sought some advice from the NWC on the interaction between the 1994 CoAG pricing principles and the NWI. The NWC confirmed that the NWI “builds on” the 1994 principles – that is, it does not delete the 1994 CoAG pricing principles but neither is it a mere static restatement of them. The NWC also noted that the inter-jurisdictional Steering Group on Water Charging (the Steering Group), which it chairs, would be further exploring some of these interactions in its work. The Steering Group will, at some point, provide guidance that would, presumably, be of relevance to a future inquiry of this type.<sup>7</sup>

Therefore, the Commission’s view for this Inquiry is that the NWI, and particularly NWI clauses 65, 66(i) and 66(v), increase the scope of water pricing reform beyond that of the 1994 CoAG pricing principles, with the stated intent of achieving best practice water pricing.

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<sup>6</sup> The Commission observes that it is not making an assessment in this Inquiry of performance against clause 64.

<sup>7</sup> The Steering Group is referred to on page 7 of Transparency Statement – Part A.

## 2.4.2 The assessment process

In its previous Inquiries, the Commission was essentially required to assess the extent to which the process undertaken in the preparation of advice to Cabinet to approve water and wastewater prices resulted in Cabinet setting such prices based on an adequate application of the 1994 CoAG principles. This assessment was carried out primarily through reviewing information presented in the applicable Transparency Statement – Part A document.

The present Inquiry is of a similar nature (though noting that the Terms of Reference are considerably different on this occasion), requiring consideration of adequacy of application of the 1994 CoAG principles having regard to any modifications of those principles as effected by the NWI – specifically clauses 65, 66(i) and 66(v). Transparency Statement – Part A forms the basis for this assessment.

Both the high level outcomes and the specific requirements of the principles are relevant to such an assessment by the Commission. In the Commission's view, the assessment should consider whether or not the specific requirements are being dealt with and presented to Cabinet:

- (a) in a transparent manner (i.e. was the matter addressed, was it shown to have been addressed); and
- (b) in such a way as to have reasonably enabled Cabinet to make pricing decisions consistent with the high level outcomes (i.e. was it addressed in an appropriate manner).

The Commission's approach in conducting such assessments prior to the present Inquiry (as reflected in previous Inquiry reports) was focused largely on the first of these matters, since this was the primary requirement in the early stages of the water reform process.

However, for the present Inquiry, the Commission has determined that, having regard to all of the material identified in the Terms of Reference, it is appropriate to give greater emphasis than in previous inquiries to the second of these matters. That is, whether or not Cabinet could, based on the information presented to it in each area (e.g. efficient business costs), reasonably have made a pricing decision consistent with the stated outcomes (e.g. full cost recovery, avoid monopoly rents).

This shift is a change in emphasis only, reflecting the maturing of the water reform process through the NWI, the greater emphasis given to outcomes within the NWI, and the increased scope of the reforms within the NWI. These factors all indicate to the Commission the need to be more demanding in the assessment of water pricing processes.

The shift in emphasis means that methods and approaches considered acceptable in previous inquiries may no longer be so. The Commission identified this possibility in its previous two inquiries, stating, for example:

*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.<sup>8</sup>*

Further, in earlier inquiries the Commission regularly noted deficiencies in the pricing process (these were described as areas in which “fuller” compliance could be achieved), even though it may have concluded that a particular approach was compliant with the 1994 CoAG pricing principles overall. The change in emphasis means that what was earlier noted as a deficiency could now become cause for a change in the Commission’s conclusion.

While this involves some change to the Commission’s assessment, it is not a wholesale change in approach. The Commission is still assessing the same cost categories and the change does not, of itself, imply any particular changes to the resultant cost, revenue or pricing outcomes. However, it will tend to require more (and more relevant) supporting analysis and information for a pricing decision, which is, by its nature, forward looking. The deficiencies identified are generally of this nature.

Therefore, for this Inquiry the Commission reaches conclusions (in Chapter 4) on whether the information in Transparency Statement – Part A allows for adequate application of the pricing principles. In this context the terms “adequate” or “inadequate”, with associated explanation in each section, are sometimes used to provide the Commission’s conclusion as to whether or not a particular matter is dealt with (in Transparency Statement – Part A):

- (a) in a transparent manner; and
- (b) in such a way as to have reasonably enabled Cabinet to make pricing decisions consistent with the high level outcomes.

Finally, the Commission notes that this Inquiry is still focussed on the pricing process, not prices themselves. Therefore, conclusions as to whether or not the chosen prices achieve any particular outcomes remain beyond the scope of the Commission’s inquiry.

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<sup>8</sup> Final Report: Inquiry into the 2006-07 metropolitan and regional water and wastewater pricing process (page 50). An equivalent statement appeared at page 48 of the 2005-06 Final Report.

## 3 THE PRICE SETTING PROCESS

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The 2007-08 water and wastewater pricing decision affecting most customers was gazetted on 7 December 2006, with commercial rates to be gazetted in June 2007, in accordance with the *Waterworks Act 1932*. Wastewater rates will also be gazetted in June 2007, in accordance with the *Sewerage Act 1929*. The June 2007 dates arise because those charges utilise property values, which are not available until that time.

The pricing decisions are described in Chapter 8 of Transparency Statement – Part A.

The in principle revenue direction to 2011-12 is not a binding decision in the manner of the 2007-08 pricing decisions. Separate and subsequent pricing decisions will be required for each of those years. However, the direction provides some guidance in respect of those later decisions.

### 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 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, the decision making process for water and wastewater prices involved a sequence of Cabinet submissions. The general nature of the sequence covers approval of pricing methodologies and then approval of actual prices or price movements (and, in this case, the in principle revenue direction).

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 relating to the setting of SA Water's water and wastewater prices for 2007-08. 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 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 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.

For the 2005-06 pricing decision most of Transparency Statement – Part A was presented to Cabinet for approval at or around the same time as the pricing decisions. On this occasion Transparency Statement – Part A was prepared after the pricing decisions.

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

Notwithstanding the introduction of NWI issues for the first time, this Transparency Statement – Part A remains a largely 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 recognises the considerable repetition that would arise in respect of some elements of Transparency Statement – Part A, given that some methods and practices have not changed from year to year. As a result of this, the Commission sometimes refers in the next chapter to 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.

Of course, the longer the incremental approach is applied the further back a reader must look to find relevant explanations. Over time, this will tend to reduce transparency as it makes it increasingly difficult to find, let alone understand, the derivation of various elements of a pricing decision.

The Commission also observes that, with the introduction of NWI principles for the first time, there would have been merit in the Government adopting a “clean sheet” approach to show how the pricing process picks up the NWI and to clearly demonstrate how the approaches taken (whether new or not) apply the pricing principles.

## 4 APPLICATION OF THE PRICING PRINCIPLES

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This chapter considers the adequacy of the pricing processes undertaken in the preparation of advice to Cabinet with respect to the pricing principles, as set out in earlier chapters.

In line with earlier inquiries the Commission has assessed the adequacy of Transparency Statement – Part A with the pricing principles, generally comfortable that it is a credible reflection of the information actually provided to Cabinet.

### 4.1 *Comment on upper and lower bound pricing*

The various elements of the pricing principles revolve around the concepts of upper and lower bound pricing. These concepts warrant clarification to provide context to the later discussions in this chapter.

Clause 66(i) of the NWI requires there be “continued movement towards upper bound pricing by 2008” for metropolitan services. Clause 66(v) requires that rural and regional systems at least achieve “lower bound pricing”.

The terms upper and lower bound pricing are defined in Schedule B(i) of the NWI respectively as:

*“the level at which, to avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or tax equivalent regimes (TERs), provision for the cost of asset consumption and cost of capital, the latter being calculated using a weighted average cost of capital WACC”*

and

*“the level at which, 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. Dividends should be set at a level that reflects commercial realities and stimulates [sic] a competitive market outcome”.*

The definitions are closely aligned with the words from the 1994 CoAG pricing principles.

While both terms close with the word “pricing”, the concepts more closely describe a revenue outcome. That is, the upper or lower bound is the amount of revenue required – the actual pricing flows from that revenue target.

The definition of the upper bound is introduced with the term “to avoid monopoly rents”. Consistent with the application of this concept in other regulated industries, and the terms used in clause 65 as discussed in earlier chapters, the Commission interprets this outcome as requiring that:

- ▲ prices must reflect reasonable and efficient forecasts of operational, maintenance and administrative costs;

- ▲ prices must reflect forecasts of reasonable and efficient capital expenditure;
- ▲ costs must be tied to an identifiable and preferably supportable level of service provision;
- ▲ forecast revenue must be based on best available estimates of demand for services, including customer numbers and water sales;
- ▲ capital costs must not be double-recovered through the asset base – for example, capital contributions must be treated appropriately (not just transparently); and
- ▲ asset sales and redundant assets must be removed from the asset base.

The key focus of the lower bound is on business viability, generally implying a business generating at least sufficient revenue to meet its minimum efficient obligations (on a sustainable basis, given the provision for asset replacement). Movement to the lower bound is more commonly an issue for rural water services, which in some jurisdictions operate at revenue levels below commercial viability. While this report addresses lower bound matters as required, the lower bound case is less of an issue in South Australia. Therefore, the inadequacies reported in respect of lower bound matters are of lesser order significance than those relating to the upper bound.

Some elements of the upper and lower bounds involve costs that should be about the same. For example, efficient operational, maintenance and administrative costs should be no different as between the upper or lower bound. Other costs are accounted for differently, or should differ in any case. For example, an allowance for dividends in the upper bound appears through the WACC, whereas in the lower bound a specific provision is made. However, one might expect actual dividends in the lower bound case to be lower (or zero), to the extent that a business at the lower bound is just able to meet its obligations (i.e. little profit should be available for distribution as dividends).

## **4.2 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).

Performance comparison of the achievements by peer water service providers in recent years can provide useful insight into what constitutes efficient business costs. It is also important to recognise that performance comparison and benchmarking can assist in identifying possible future cost pressures. In the context of pricing proposals, it is important to establish a logical link between past performances, the factors that have influenced those performances, emerging cost pressures, management opportunities and the consequent need for funding. It is this future scenario that should be considered with regards to the level of revenue required from the pricing decisions.

#### 4.2.1 Pricing Principles

In relation to efficient costs, the 1994 CoAG pricing principles state that:

##### **Expert Group Report Recommendation 4**

*"To avoid monopoly rents, a water business should recover no more than ... the operational, maintenance and administrative costs..."*

##### **Expert Group Report Recommendation 5**

*"To be viable, a water business should recover, at least, the operational, maintenance and administrative costs ..."*

##### **Expert Group Report Recommendation 6**

*"In applying (4) and (5) above, economic regulators (or equivalent) should determine the level of revenue for a water business based on efficient ... business costs."*

In respect of these earlier requirements the NWC stated in its 2005 NCP Assessment that:

*"South Australia has demonstrated that it has implemented the recommendations of the Essential Services Commission in the area of efficient business costs. ...*

*South Australia has demonstrated that it has estimated efficient business costs; and, has explored the link between efficient business costs and the SA Water performance statement and customer charter, thereby providing greater transparency on the 'value-for-money' issue." (p. 6-29)*

*"The Commission notes that currently the performance of regional businesses in South Australia is not reported separately and so it may be difficult for South Australia to report on cost recovery for*

*these businesses. Even so, the Commission recommends that South Australia continue to seek improvement in the reporting and analysis of data at a regional level, including through benchmarking efficient performance as required under the National Water Initiative.” (p. 6-33)*

The 1994 principles included a clear statement on the need to demonstrate efficient business costs. Added to this, clause 65 of the NWI reaffirms the aim that water pricing should achieve various outcomes such as avoiding monopoly rents. This informs the Commission that it is critical that the information presented to Cabinet on efficient business costs not only address these costs but do so sufficiently to enable Cabinet to conclude that the costs so included are efficient.

The Commission also observes with interest that clause 75 of the NWI speaks to the benchmarking of efficient performance.

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

Statements are presented under the following headings:

- ▲ Competitive tendering;
- ▲ Performance benchmarking: trend analysis of key cost drivers;
- ▲ WPA initiatives; and
- ▲ Value for money.

In addition, the SA Water 2004/05 Annual Efficiency Report, was provided as Appendix 4 to Transparency Statement – Part A.

The key observations for these topics are:

##### **Competitive tendering**

*“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.*

*This outsourcing contract has been identified by the Commonwealth Government as a case study to illustrate the potential for private sector participation in an urban water supply context.”*

...

*“SA Water has contracted, by competitive tender, for services (e.g. electricity) or supplies (e.g. chemicals) in order to promote efficient business costs, where possible. Approximately 75% of all SA Water’s water and wastewater OMA expenditures (excluding labour costs) are subject to competitive tendering arrangements.” (Appendix 4, p. 9)*

##### **Performance benchmarking: trend analysis of key cost drivers**

*“The South Australian Government has been working collaboratively with the Commonwealth Government (with NWC officers as Chair), other State Governments, Territories and interstate regulators (Roundtable Group) over 2006, to develop a national framework for benchmarking of*

*pricing and service quality for urban water and wastewater delivery agencies. Nationally consistent performance indicators, which include key cost drivers and definitions, have been finalised." (p. 10)*

Part A also goes on to identify that the national performance data for 2005-06 is currently being collected and is expected to be publicly available in April 2007, full performance reporting of 2006-07 data will be undertaken in 2007-08 and South Australian reporting will be as follows:

- ▲ Adelaide Metropolitan (financial and service performance indicators);
- ▲ Non-Metropolitan (financial indicators); and
- ▲ Pt Pirie, Pt Lincoln, Pt Augusta, Murray Bridge, Mt Gambier and Whyalla (individual service performance indicators).

### **WPA initiatives**

*"Best estimates currently available of WPA operating costs have been included in the regulatory model." (p. 11)*

### **Value for money**

*"Pending the first national performance benchmarking report, based on 2005-06 data, SA Water has produced its 2004-05 Annual Efficiency Report (Appendix 4). In terms of 'value-for-money', this report indicates that SA Water's customers are generally satisfied with the range and quality of services provided by SA Water." (p. 11)*

Transparency Statement – Part A then provides the following conclusions on efficient business costs:

#### ***Statement of Compliance 2***

*"The Government's 2007-08 pricing decisions are compliant with 1994 CoAG pricing principles that OMA expenses should be based on efficient business costs.*

*Significant progress has been achieved in meeting the NWI obligation to report independently, publicly and annually, benchmarking of pricing and service quality for metropolitan and non-metropolitan delivery agencies in a new national report." (p. 11)*

## **4.2.3 The Commission's assessment**

The on-going evolution of the independent assessment of SA Water performance, particularly the inclusion of aspects of 'value for money', is a positive step in the on-going pursuit of the 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 to enable appropriate pricing decisions to be made. This requirement is further strengthened by the NWI focus on outcomes.

In the final report on the 06-07 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*

*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 on efficient business costs by providing more transparency of 'value-for-money'." (page 23)*

The introduction of the 'value for money' component of the 2004-05 Annual Efficiency Report and the Customer Satisfaction Survey conducted by SA Water in 2006 represents a significant step towards addressing the second point above. The process will be even more robust when it is clear that satisfaction surveys explicitly incorporate comparative pricing information.

Regarding the trend-analysis of key cost drivers, however, there has been little, if any observable progress in Transparency Statement - Part A.

### Metropolitan services

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, as in previous years, the Government has employed core performance measures used in WSAAfacts. The documentation provides comparison with a number of peer water businesses, being principally those serving the capital cities in the other states and territories, with the exception of Tasmania, which does not have a participant in the WSAAfacts initiative. In the review of SA Water performance, the WSAA data has been augmented with some Commonwealth Grants Commission measures on the relative impact of water quality and access to source water.

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 has been an appropriate means of displaying the relative historical performance of SA Water in the provision of metropolitan water and wastewater services.

It is, again, noted that since the 2005-06 pricing process, the use of some performance measures has been discontinued, including 'Total Cost per Property' (for metropolitan water supply and sewerage). Total Cost per property outcomes provide a far closer indication of actual funding requirements than OMA costs; consequently, the non-use of this measure remains disappointing,

notwithstanding the difficulties presented by potential variation in approaches to asset valuation. As stated on a number of occasions in past Transparency Statements there is significant value in looking at trends over time in the comparative benchmarking, as well as inter-utility comparisons in any given year.

As noted above, work has been proceeding at the national level on the establishment of “a national framework for benchmarking of pricing and service quality for urban water and wastewater delivery agencies”. This work has led to a delay in the issuing of WSAAfacts 2006, which is being held back to allow the analysis to be presented on the basis of the definitions adopted by the national framework. The new framework will be applied to both major urban and larger regional water undertakings on a consistent basis and will clearly be a major advance in the comparative benchmarking environment across Australia.

Notwithstanding the understandable delay in issuing WSAAfacts 2006, the inclusion of 2005/06 outcomes from SA Water in Transparency Statement – Part A would have still had value in showing emerging trends.

WSAAfacts has been, and remains 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 Transparency Statement – Part A, covering a wider range of participants.

Further, WSAA recently announced a joint launch with the NWC of an annual series of National Performance Reports, which will provide further relevant public information. The free availability of the National Performance Report data will be a major step forward in increasing the general public’s awareness of the performance, cost and pricing issues facing the Australian water industry.

### Country services

The data compiled for benchmarking regional performance has necessarily been compiled from a number of State-based publications that are non-homogeneous and not subject to the same degree of rigour as the processes underpinning the production of the WSAAfacts publications. While not ideal, the comparisons presented in the 2006-07 and 2007-08 Transparency Statements are useful. The National Performance Report should provide better information for non-metropolitan benchmarking over the next two to three years.

In the final report on the 2006-07 water and wastewater pricing processes, the Commission expressed the view that:

*“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.”*

It is noted that no such steps were taken.

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

In the 2005-06 inquiry, and again in that for 2006-07, 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.*

*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 is important. Such considerations are fundamental to the establishment of any effective pricing decision and/or 'price-path' approach.

In other industries there are a number of ways in which regulators typically examine whether forward looking costs are efficient. These include:

- ▲ benchmarking of costs against peers, both at an aggregate level (e.g. operating cost per property) and at a more micro ('partial productivity') level (e.g. IT cost/employee);
- ▲ reviewing whether appropriate operational (and capital) plans are in place and that appropriate management controls (e.g. capital evaluation guidelines, opex/capex trade-off decision tools) are in place and are followed;
- ▲ reviewing whether expenditure is market tested; and
- ▲ more sophisticated techniques such as DEA and TFP analysis (which combine both operating and capital cost efficiency).

While the information presented in Appendix 4 is valuable in the context of historical costs, it has limitations in the context of assessing whether forward-looking costs are efficient:

- ▲ the cost information provided is only at an aggregate level (e.g. operating cost per property);
- ▲ data only relates to operating costs, not capital costs;
- ▲ data is provided only to 2004/05; and
- ▲ no information on trends in forecast unit operating costs is provided.

Some elements of this type of information may be confidential (and could be provided to Cabinet on that basis), although this is rarely the case in other regulatory price setting exercises where transparency is of paramount concern.

Further, it stands to reason that a pricing decision consistent with the NWI could not be made without suitably supported, forward looking cost information.

#### 4.2.4 The Commission's view on application of the pricing principles

##### ***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

Based on the available performance comparison material, Transparency Statement – Part A makes assertions about SA Water's OMA costs being efficient. This shows that the principle of efficient costs has been considered. However, Transparency Statement – Part A does not contain information that would have reasonably enabled Cabinet to make pricing decisions consistent with the high level outcomes. The inadequacy relates primarily to showing that the forward-looking costs, upon which a pricing decision must rely, are efficient.

Minimum steps to adequacy include:

- ▲ provision of disaggregated forward-looking cost information; and
- ▲ reasonable evidence for the proposition that the costs are efficient.

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

Cabinet received the same information that was included in the Transparency Statement, with some additions relating to forward OMA cost trends.

### **4.3 Capital Expenditure**

Capital expenditure has not been separately assessed in previous inquiries. However, funding capital expenditure is a basic element of any pricing decision and therefore warrants separate assessment.

#### **4.3.1 Pricing Principles**

In relation to efficient capital costs, Expert Group Report Recommendation 6 states that:

*"In applying (4) and (5) above, economic regulators (or equivalent) should determine the level of revenue for a water business based on efficient ... business costs."*

Add to this the NWI clause 65 outcomes. As was the case in the previous section this informs the Commission that it is critical that the information presented to Cabinet addresses capital expenditure, and does so sufficiently to enable Cabinet to conclude that the capital expenditure is efficient.

### 4.3.2 Transparency Statement – Part A Comments

Transparency Statement – Part A provides limited discussion on capital expenditure. However, it notes that increased expenditure is anticipated due to the Waterproofing Adelaide (WPA) program.

*“Using best estimates currently available, WPA initiatives are expected to result in significant capital expenditures up to a total of \$245 million over the next 20 years with a significant proportion expended over the next 5 years. However, some WPA projects may not proceed without Commonwealth funding support, which is currently estimated at \$46.4 million over the next 5 years.”*  
(p. 13)

Table 10 in Transparency Statement – Part A sets out the proposed capital expenditure as applied in the asset roll forward, summarised in Table 1 below.

**Table 1: SA Water forecast capital expenditure (\$m nominal)**

	2006-07	2007-08	2008-09	2009-10
Water	108	135	90	46
Wastewater	37	58	59	97
Total	145	193	149	143

Table 18 of Transparency Statement – Part A sets out the projected capital expenditure for 2006/07 as shown in the State Budget and is summarised in Table 2 below.

**Table 2: SA Water forecast capital expenditure (\$m nominal)**

SA WATER	PROPOSED EXPENDITURE 2006-07
Christies Beach WWTP Capacity Upgrade	3
Environment Projects	15
Eyre Peninsula Water Supply Upgrade	30
Improve Business Projects	7
Information Technology Projects	15
Maintain Business Projects	41
Meter Replacement Stage 2	3
Middle River WTP – MIEX®	3
Millbrook Dam Safety	3
Safety Projects	5
Security Projects	5
Strategic Accommodation	5
System Growth Projects	19
Torrens System Upgrade	3
Water Quality Projects	9
Total	165

### 4.3.3 The Commission's assessment

Under the upper bound pricing model capital expenditure is either recovered upfront (in the form of capital contributions from customers or government) or it is included in the regulatory asset base and recovered through prices over the life of the asset via a return on assets and depreciation.

Aside from implications for prices (through depreciation and the return on capital), capital expenditure has implications for levels of customer service as well as OMA expenditure.

In terms of demonstrating whether forecast capital expenditure represents 'efficient business costs', matters that are examined typically include whether or not:

- ▲ there is evidence of, and consistency with, well developed asset management planning and processes;
- ▲ the actual delivery of the capital program is market tested;
- ▲ projects are efficient and least cost solutions;
- ▲ proposed expenditure is consistent with trends in historical expenditure, the reasons underpinning any difference in the expected level from those trends and other relevant factors (such as changes in the asset age profiles or in service levels);
- ▲ unit rates (for example, the per metre cost of installing water mains) are consistent with external benchmarks;
- ▲ the capital program is consistent with customer requirements or regulatory (e.g. EPA) obligations; and
- ▲ the proposed expenditure program is deliverable.

The Commission notes that while Transparency Statement – Part A provides information on SA Water's capital program, little or no information is provided to demonstrate that forecast capital costs are efficient. This is of particular concern given that the capital expenditure forecasts represent a substantial increase in expenditure compared to historic levels – mainly related to the WPA program – therefore having a significant impact on the prices and the upper bound revenue.

Some of the WPA expenditure appears to be related to projects with externality benefits to the community. However, no information is provided on the nature or approximate value of these benefits. It is therefore not possible, on the information presented, to assess whether or not the projects are efficient.

The Commission also notes that Transparency Statement – Part A suggests that there is substantial uncertainty regarding the cost of the WPA program over the next 5 years, and the level of external funding available for the scheme.

The Commission understands that SA Water contracts out the construction of its major capital projects under competitive tendering arrangements. However, Transparency Statement – Part A provides no information to demonstrate that the projects themselves are necessary and ‘least cost’ solutions, or that appropriate capital planning processes are in place.

#### 4.3.4 The Commission’s view on application of the pricing principles

***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

The information provided sets out the proposed capital expenditure program and shows that capital expenditure is included in the upper bound revenue calculation. However, Transparency Statement – Part A does not contain information that would have reasonably enabled Cabinet to make pricing decisions consistent with the high level outcomes. The inadequacy relates primarily to showing whether or not the proposed capital expenditure is efficient.

Minimum steps to achieving adequacy include providing information to demonstrate that:

- ▲ well developed asset management planning and processes are in place and being followed;
- ▲ projects, including projected WPA expenditure, are efficient and least cost solutions;
- ▲ unit rates are consistent with efficient external benchmarks;
- ▲ the capital program is consistent with customer requirements or regulatory obligations; and
- ▲ the proposed expenditure program is deliverable in the timeframes proposed.

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

The Commission is satisfied that the Cabinet submission included information about capital expenditure, subject to the limitations noted above.

## 4.4 Asset Valuation

### 4.4.1 Pricing 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.”*

NWI Clause 66(i) states:

*Metropolitan*

*“Continued movement towards upper bound pricing by 2008”*

Added to this are the clause 65 outcomes, particularly the outcome “avoid monopoly rents”, which inform the Commission that the asset valuation information presented to Cabinet should address the deprival value methodology or the reasons for departure from that.

#### 4.4.2 Transparency Statement – Part A Comments

Transparency Statement – Part A identifies continued use of the fair value method of asset valuation:

*“In its 2006-07 Final Report, 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 24)*

*The fair value method is also generally consistent with the depreciated replacement cost valuation. It represents the efficient replacement cost of infrastructure and the service potential of SA Water’s assets. The national performance benchmark report adopts written down replacement cost for comparisons of financial performance.” (pp. 12-13)*

#### 4.4.3 The Commission’s assessment

##### Previous Compliance

In previous reports the Commission has agreed that a valuation based on fair value should be consistent with deprival value for SA Water’s assets but noted that there may be situations where a valuation under fair value would differ from that under deprival value.

Transparency Statement – Part A makes clear the continued use of fair value. The use of fair value has been previously attributed to the application of South Australia Government Accounting Policy Statement, APS 3, which picks up Australian Accounting Standard AASB 1041. The Commission also acknowledges that the fair value asset valuation derives originally from a deprival value based valuation conducted in 2002 (as reported in the Transparency Statement for 2004-05 water prices).

The Commission acknowledges the requirements of accounting standards, which are relevant to financial reporting obligations. However, it is not necessary for an asset base developed for pricing purposes (sometimes called a regulatory asset base) to equate with that used for financial reporting purposes. Indeed, in other regulated industries it is uncommon for these to equate. While the use of fair value may be convenient, and for practical purposes consistent with the pricing principles, Transparency Statement – Part A could better explain the departure from deprival value.

**Table 3: Asset valuation approaches**

AUTHORITY	ASSET VALUATION APPROACH
Regulated NSW entities (incl. Sydney Water)	NPV of free cash flows
Victorian urban water businesses	Line in the sand approach reflecting current prices, expenditure programs, forecast price increases and need to send incentives for conservation
Queensland water businesses	QCA has recommended DORC, however businesses are not required to follow the QCA recommendation
ACTEW	RA (Recoverable Amounts) Test approach (cash flows based on current prices and no additional investment)
WA Watercorp	Deprival value
Tasmanian water businesses	Larger businesses have used DORC – smaller councils use 'fair value'.
Northern Territory (Power and Water)	DORC approach

Source: Urban Water Charging Stocktake, NWI Steering Group on Water Charges, February 2007.

The Commission also notes that other jurisdictions have adopted a variety of approaches to asset valuation for water pricing, many of which do not appear to align with the pricing principles (see Table 3 above). However, this does not necessarily justify similar treatment in South Australia.

#### 4.4.4 The Commission's view on application of the pricing principles

***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

Transparency Statement – Part A notes that the fair value method of asset valuation is consistent with deprival value. The Commission acknowledges that this is likely to remain the case. It has previously judged this approach to be adequate and considers the current information to be adequate.

However, the Commission observes that Transparency Statement – Part A should better explain the link between deprival value and fair value for SA Water.

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

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

## 4.5 Contributed Assets

### 4.5.1 Pricing Principles

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

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

NWI clause 65 specifies certain outcomes, particularly “avoid monopoly rents”.

#### 4.5.2 Transparency Statement – Part A Comments

Transparency Statement – Part A identifies that the South Australian Government has not changed its approach to the treatment of contributed assets, which is:

- ▲ the removal of post-1995 contributed assets; and
- ▲ the non-removal of pre-1995 contributed assets (equivalently, their estimation at zero).

On this occasion Transparency Statement - Part A refers to the approached adopted in other states:

*“It has become apparent that interstate regulatory practices have implicitly adopted a substantially different treatment of contributed assets. This is apparent from the ‘line in the sand’ method of estimating the regulatory asset base.*

*The ‘line in the sand’ method applied by most interstate regulators starts with a desired outcome for a utility’s future revenue (and charges) and then ‘reverse engineers’ the utility’s asset values to be consistent with that desired revenue outcome.*

*The future revenue estimates do not distinguish revenues earned from a utility’s existing assets i.e. regardless of whether those assets were originally funded by utility charges or borrowings or arise from customer and developer contributions.*

*Earnings on existing assets are effectively ‘locked in’ as a legacy issue. The estimation and deduction of the value of past contributed assets from the regulatory asset base is overtaken by this approach.*

*In common with other jurisdictions, the South Australian Government regards earnings on existing assets (whether contributed assets or otherwise) as a legacy issue.” (p. 13)*

Further:

*“Further, there are major data deficiencies in estimating pre-corporatisation contributed assets.*

*After carefully considering these matters, the previous approach to contributed assets has continued to be adopted in the 2007-08 pricing decisions i.e. post corporatisation and new contributed assets are deducted from the regulatory asset base. For example, Commonwealth funding in relation to WPA projects will be treated as contributed assets.*

*Further guidance may be available when the NWC’s national stocktake of urban water storage and delivery pricing is completed by early 2007 and an associated position paper is available. The outcomes will be reviewed to assess whether South Australia is able to adopt any effective and practical solutions that will help achieve national consistency.” (p. 14)*

#### 4.5.3 The Commission’s assessment

The Commission has addressed this matter at some length in every past inquiry. It is apparent to the Commission that the Government has taken little or no effective action in response to its previous comments other than to state, on page 14 of

Transparency Statement – Part A, that it had “carefully” considered the matter. The Government has stated in prior Transparency Statements that it considered there to be no sound information on which to estimate contributed assets prior to 1995.

The discussion in Transparency Statement – Part A of the actions of other jurisdictions in relation to contributed assets concludes with the statement that they are a “legacy issue”. The Commission is unable to reconcile this concept with the pricing principles, which do not refer at all to “legacy issues”.

As the Commission has explained in previous inquiries, the inclusion of contributed assets is likely to result in a significantly over-inflated asset base and therefore an artificially high upper bound. Resultant prices will then also be over inflated and monopoly rents will be locked in, not avoided. This is clearly at odds with the pricing principles.

Further, inclusion of capital contributions means that customers will be paying for infrastructure twice.

In past inquiries the Commission accepted that the adopted approach might comply with the 1994 CoAG pricing principles, in so far as it was at least transparent (in the sense that the implied value of pre-1995 contributed assets is zero). However, even this view is no longer tenable. The Commission has presented clear advice in the past on ways in which a reasonable estimate of pre-1995 contributed assets might be developed:

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 from 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 predominantly 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.

These methods are intended to deal with the challenges presented by the limitations of historical records. Transparency Statement – Part A provides no particular indication that any of these suggestions has been addressed.

Transparency is not demonstrated by a failure to address the challenge of pre-1995 contributed assets in any meaningful way.

#### 4.5.4 The Commission's view on application of the pricing principles

**Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?**

The treatment of contributed assets described in Transparency Statement – Part A is inadequate, in so far as no reasonable estimate of pre-1995 contributed assets has been generated, nor is information presented to reasonably explain the position on contributed assets. Therefore, Transparency Statement – Part A does not contain information that would have reasonably enabled Cabinet to make pricing decisions consistent with the high level outcomes.

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

The Commission is satisfied that the Cabinet submission included information about contributed assets, subject to the limitations noted above.

## 4.6 Depreciation

### 4.6.1 Pricing 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.

NWI Clause 66(i) states:

*Metropolitan*

*"Continued movement towards upper bound pricing by 2008"*

Add to this the clause 65 outcomes, particularly "avoid monopoly rents".

### 4.6.2 Transparency Statement – Part A Comments

Transparency Statement – Part A explains that the Government has continued to estimate depreciation in the upper bound using the straight-line method, based on the estimated useful lives of the assets. Transparency Statement – Part A does not specify the asset lives used.

### 4.6.3 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.

The NWI requires no particular change to the obligations for depreciation.

The Commission notes that Transparency Statement – Part A would be improved were information provided on the asset lives adopted for depreciation purposes.

### 4.6.4 The Commission's view on application of the pricing principles

***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

Transparency Statement – Part A shows a straight-line depreciation methodology to calculate depreciation. This has been considered adequate in the past and remains adequate now.

Transparency Statement – Part A would be improved were information provided on the asset lives adopted for depreciation purposes

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

The Commission is satisfied that the Cabinet submission included information about depreciation, with some additions relating to asset lives and subject to the limitations noted above.

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

### 4.7.1 Pricing 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."*

NWI Clause 66(v) states:

*Rural and Regional*

*"achievement of lower bound pricing for all rural systems ..."*

## 4.7.2 Transparency Statement – Part A Comments

Transparency Statement – Part A, observes:

*"In its 2006-07 Final Report, ESCOSA found that the Government complied with the 1994 CoAG pricing principles by including an annuity estimate in the lower revenue bound. (ESCOSA, 2005, p 30)*

*In its 2007-08 pricing decisions, the Government continued to include an annuity estimate of the cost of future asset refurbishment and replacement, to SA Water, in the lower revenue bound." (p. 22)*

## 4.7.3 The Commission's Assessment

The lower bound is to include an amount of revenue that allows for the replacement of assets or service capacity as the need arises. The depreciation expense is not automatically accepted as providing this minimum requirement. This is because, at certain times, a depreciation allowance can be in excess of a utility's actual funding requirements.<sup>9</sup>

The CoAG guidelines identified that this cost stream should be estimated in terms of the annual amount that would need to be put away each year to ensure that the costs of all rehabilitation/replacement needs over an extended 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.

The annuity amount represents \$44m in 2007/08. This is only 6-7% of the total lower bound revenue, and is about 30 per cent of the depreciation estimate included in the upper bound calculation.

An annuity amount is typically sensitive to three key variables:

- ▲ the assets included in the calculation (the pricing principles require that only asset replacement and refurbishment be included);
- ▲ the annuity term (in theory the term should capture a full asset cycle); and
- ▲ the discount rate adopted.

Transparency Statement - Part A provides no information on the construction of the annuity or the assumptions used. Therefore it is not possible to determine whether the annuity meets the requirements of the lower bound (refer section 4.1).

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<sup>9</sup> Of course, there may also be times when depreciation is insufficient.

#### 4.7.4 The Commission's view on application of the pricing principles

**Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?**

Transparency Statement – Part A presents an annuity as required. The Commission has previously judged this approach to be adequate and the annuity itself probably remains adequate. However, Transparency Statement – Part A contains no information about the derivation of the annuity and it is not possible to determine whether the annuity would meet the requirements of the lower bound.

Minimum steps to adequacy include providing information to explain the derivation of the annuity in the context of the lower bound. It is not clear that this need result in a significant change to the reported annuity.

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

The Commission is satisfied that the Cabinet submission included information about the annuity, subject to the limitations noted above.

### 4.8 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”.

#### 4.8.1 Pricing 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]*

*“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 ... .” [Emphasis added]*

*“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 ...”*

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

*NWI Clause 65(ii)*

*".. full cost recovery for water services to ensure business viability and avoid monopoly rents, including recovery of environmental externalities where feasible and practical".*

The Commission also observes with interest that clause 73 of the NWI speaks further to commitments about environmental externalities. The NWC pointed the Commission to this additional clause, which suggests that the NWI takes a broader (and arguably better) view of externalities than the narrow "costs attributable to and incurred by" applied under the 1994 principles.

The NWC also addressed externalities in its 2005 NCP Assessment, requiring, amongst other things:

*"The Commission will look for South Australia to:*

- report the extent to which they are identifying and recovering environmental costs through their pricing regime;*
- provide evidence that environmental costs imposed on and incurred by water businesses are transparently passed on through prices charged to water users;*
- where externalities are not included in pricing regimes, demonstrate price paths that will more [sic] towards achieving full cost recovery within a reasonable timeframe, and*
- where not transparently incorporated into pricing regimes, show that they have identified externalities and, after examination, have concluded that inclusion of an externality in pricing is not feasible or practical." (pp. 6-40 to 6-41)*

## 4.8.2 Transparency Statement – Part A Comments

Transparency Statement – Part A explains that the Government has continued to apply the previous, narrow definition of externalities. In respect of moving to a broader reading Transparency Statement – Part A states:

*"The NWI requires states and territories to implement pricing that includes externalities where found to be feasible (clause 73(iii)). Environmental externalities should be included in full cost recovery where feasible and practical on a nationally consistent basis (clause 65(ii) and (iii)).*

*The NWC, in its 2005 NCP Assessment, concluded:*

The Commission considers that South Australia has not undertaken systematic examination of externalities and pricing to meet this commitment. (NWC, 2006, p 6.43)

*The Steering Group on Water Charging, chaired by the NWC, has commenced planning for a national stocktake of the treatment across jurisdictions of externalities. It is considered more appropriate to await the outcomes of this stocktake and guidance is available on nationally consistent principles. These outcomes will be reviewed to assess whether South Australia is able to adopt any effective and practical solutions that will help achieve national consistency.*

*There are also significant inter-connections and overlap between externalities and water planning and management costs (section 4.6).*

*One possible future approach may be to examine the impact of environmental externalities on an incremental basis as specific environmental studies become available, e.g. the impact of wastewater outfalls in St Vincent's Gulf is the subject of a current study that is expected to be available shortly." (p. 15)*

### 4.8.3 The Commission's Assessment

While Transparency Statement – Part A continues the narrow approach adopted earlier it does present additional information on the included externalities, for example on licence fees, levies to Natural Resource Management Boards, the Environment Enhancement Levy (EEL) and the Save the River Murray Levy, in accordance with a request by the NWC in its 2005 NCP Assessment.

In part, the NWC's requests for additional information reflected earlier Commission concerns. For example, the Commission had flagged its concern that the works funded by the EEL appeared to deal with externalities no more nor less than any other SA wastewater projects.<sup>10</sup> While Transparency Statement – Part A includes some additional information, for example it lists various "externality" related projects and programmes, it lacks any substantive explanation of how these externalities are derived, costed, justified, etc.

The Commission acknowledges that externalities are inherently difficult matters to explain and cost. However, the absence of meaningful explanation leaves it unable to be satisfied that a decision-maker could accept with any confidence that the externality costs included are a suitable inclusion in either the lower or upper bound. That is not to say the inclusions are necessarily invalid, but rather that the supporting information is not presented.

Further, Transparency Statement – Part A does not address the broader view of externalities that the NWI introduces, awaiting instead the outcome of the work of the Steering Group in relation to both externalities (and the related water planning and management costs). The broadening effect of the NWI in this area is evident irrespective of what guidance the Steering Group might provide. While the Steering Group may provide further insight on this matter at some point in the future, it should be possible for the Government to at least progress the identification of relevant externalities for inclusion in pricing decisions.

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<sup>10</sup> Or even whether the EEL is more accurately a capital contribution.

#### 4.8.4 The Commission's view on application of the pricing principles

***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

Transparency Statement – Part A presents some information about externalities, although limited to the narrow definition that previously applied. The general lack of information about the derivation and costing of the listed externalities and the continued restriction to the narrow definition of externalities means that it is not possible to determine whether or not they warrant inclusion in the revenue bounds. Therefore, Transparency Statement – Part A does not contain information that would have reasonably enabled Cabinet to make pricing decisions consistent with the high level outcomes. At a minimum, the inadequacy should be addressed by commencing identification of relevant externalities.

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

The Commission is satisfied that the Cabinet submission included information about externalities, with some additional detail provided.

### 4.9 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 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 and lock in monopoly rents.

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.

#### 4.9.1 CoAG Principles

Clause 3 of the CoAG Strategic Framework provides:

*... "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"*

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]*

NWI Clause 66(i)

*“Continued movement towards upper bound pricing by 2008”*

## 4.9.2 Transparency Statement – Part A Comments

Transparency Statement – Part A states:

*The Government adopted a pre-tax real WACC of 6% for its 2007-08 pricing decisions. This value reflects the risk free rate of interest, which is based on the 20-day average of the yield on 10-year Government Bonds as at 30 June 2006, and the market risk premium, which is based on the evidence and precedents of jurisdictional regulators and recent market data. Details of the values of the WACC input parameters are included in Table 1.*

## 4.9.3 The Commission’s Assessment

In earlier decisions the Government adopted a WACC range. In response to the Commission’s preference that a point estimate be developed the Government has on this occasion chosen a point estimate from within a range, being a real pre-tax WACC of 6%.

The Commission has not reviewed the WACC parameters in detail (this being a review of process only) but notes that the non-directly observable parameters appear to be broadly consistent with those adopted by other regulators including the ESC (Victoria) and IPART. It would be helpful if more detailed information were presented to explain the derivation of each parameter.

The Commission notes that the WACC estimate is based on a risk free rate at 30 June 2006. In general, good regulatory practice is to calculate the WACC as close as possible to the commencement of the pricing period to which it applies. In the case of a water pricing decision this could be no later than the December of the preceding year, due to the nature of the pricing process.

The Commission notes that it has previously stated a preference for a post-tax WACC, rather than the pre-tax WACC adopted. This is based primarily on the treatment of tax and is therefore noted in the discussion on taxation below.

## 4.9.4 The Commission’s view on application of the pricing principles

***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

Transparency Statement – Part A presents a WACC, including information about its derivation. This has been considered adequate in the past and remains so

now. However, Transparency Statement – Part A would be improved were more detailed information presented to explain the derivation of each WACC parameter.

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

The Commission is satisfied that the Cabinet submission included information about WACC.

## **4.10 Dividends**

Dividend Policy relates to matters associated with the periodic 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.

### **4.10.1 Pricing 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 [sic] a competitive market outcome.”*

Although the “level that reflects commercial reality” is not further explained, the NCC has previously provided some clarifying remarks:<sup>11</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.”*

In the upper bound case the dividend allowance is reflected through the WACC.

NWI Clause 65 “avoid monopoly rents” and the upper and lower bound concepts are relevant to the dividend allowance.

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

Transparency Statement – Part A states:

*SA Water's expected dividend payment is included in the 2007-08 estimated lower revenue bound.*

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<sup>11</sup> The 2003 NCP Assessment Framework for Water Reform, NCC, February 2003.

### 4.10.3 The Commission's Assessment

The inclusion of a separately identified dividend continues an earlier practice previously adjudged to have been in accordance with the 1994 CoAG pricing principles.

Pursuant to the consideration of the lower bound as presented in section 4.1, the Commission notes that the inclusion of a dividend allowance as per the SA Government's dividend policy, which provides for a dividend payout ratio of 95 per cent, is reasonable.

However, the payout is a payout from profit. In the case of a business at the lower bound (that is, a business with actual revenue at the lower bound), and noting the meaning of the lower bound, it seems curious that any profit would be available to provide a dividend – other than retained profit.

Table 12 of Transparency Statement – Part A shows that the lower bound dividend represents around \$201m in 2006/07, 30 per cent of the total lower bound revenue. Transparency Statement – Part A makes clear that this is the expected normal dividend payout for the year. This is not reflective of a business at the lower bound.

The extract from the CoAG principles above shows that dividends are not a mandatory element of the lower bound calculation, and that dividends should be set at a level that reflects commercial realities. Commercial reality is unlikely to have a business that is barely paying its way making otherwise “normal” dividend payments (assuming that a 95 per cent ratio even continued to apply).

Notably, there is insufficient information provided in Transparency Statement – Part A to determine whether or not the dividend (as calculated under the lower bound) could be paid from profits (annual or accumulated) in the lower bound case.<sup>12</sup>

Given these uncertainties, it is difficult to determine whether or not the dividend payment under the lower bound is compliant with NWI requirements.

### 4.10.4 The Commission's view on application of the pricing principles

***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

While a dividend allowance is shown, insufficient information is provided to demonstrate that it is suitable for the lower bound case.

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<sup>12</sup> To an extent this would depend on how depreciation is calculated for the purposes of determining profit.

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

The Commission is satisfied that the Cabinet submission included information about the dividend.

## **4.11 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.

### **4.11.1 Pricing 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.

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

*"To avoid monopoly rents, a water business should not recover more than the ... taxes or Tax Equivalent Regime"*

*"To be viable, a water business should recover, at least, ... taxes or TERs (not including income tax)"*

*"In determining prices, transparency is required in ... tax equivalent regimes"*

The outcomes of NWI Clause 65 are relevant to this issue, especially the avoidance of monopoly rents.

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

Transparency Statement – Part A states that:

*"SA Water's Tax Equivalent Regime payment is included in the lower revenue bound. ESCOSA's 2006-07 Final Report considered that this was appropriate." (p. 22)*

### **4.11.3 The Commission's Assessment**

The inclusion of a separately identified tax allowance in the lower bound continues earlier practice previously adjudged to have been in accordance with the 1994 CoAG pricing principles.

Pursuant to the consideration of the lower bound as presented in section 4.1, the Commission notes that the inclusion of a tax allowance is reasonable. However, as

was the case with the dividend allowance it is unclear why the allowance should reflect a “normal” tax liability (that is, a liability applicable to a business well above the lower bound) for a business assumed to be at or near zero profit (that is, a business at the lower bound).

Further to this, the actual income tax expense for SA Water in 2005/06 was \$98m, which is not substantially more than the lower bound taxation estimate for 2006/07 of \$92m. It is surprising that these amounts are so close given the meaning of the lower bound.

In addition, Transparency Statement – Part A provides no information about the derivation of the tax estimate.

For the upper bound, tax is included implicitly within the pre-tax WACC. The Commission has previously argued, and continues to hold the view, that a post-tax WACC assessment would be superior in that it requires that tax liabilities be calculated as separate items in the cash flow. This makes the tax treatment far more transparent (and accurate).

The Commission notes that regulators have adopted both approaches in different jurisdictions, as shown in Table 4 below. However, given the lack of specificity in the pricing principles, the Commission does not view this point as a cause for a conclusion of inadequacy.

**Table 4: Approach to the WACC in the water industry**

STATE	WACC APPROACH
NSW	Pre tax
Victoria	Post tax
Queensland	Post tax
ACT	Pre-tax
WA	Post-tax
Tasmania	Pre-tax

Source: Urban Water Charging Stocktake, NWI Steering Group on Water Charges, February 2007.

#### 4.11.4 The Commission’s view on application of the pricing principles

***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

Insufficient information is provided to demonstrate that the lower bound tax amount is suitable for the lower bound case.

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

The Commission is satisfied that the Cabinet submission included information about tax liability.

## **4.12 Efficient Resource Pricing**

Tariff structure has an important role to play in achieving overall economic efficiency. Although the majority of a water utility's costs may be fixed (in the short to medium term), consumption based pricing sends a strong signal and can achieve allocative efficiencies. This is of particular concern at present in much of Australia as capital augmentations are clearly on the agenda (e.g. desalination plants, new dams, pipelines, aquifers, etc).

### **4.12.1 Pricing Principles**

The CoAG Strategic Framework requires "the adoption of pricing based on the principles of consumption based pricing". Specifically, urban water providers are required to adopt prices "comprising of an access or connection component together with an additional component or components to reflect usage where this is cost effective."

The CoAG Expert Group recommended "economic regulators ... should determine the level of revenue for a water business based on efficient resource pricing".

"Efficient resource pricing" is defined in the CoAG strategic framework as including "the need to use pricing to send the correct economic signals to consumers on the high cost of augmenting water supply systems... 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."

Clause 65(i) of the NWI requires "... efficient pricing policies for water storage and delivery... that facilitate efficient water use ... including through the use of (i) consumption based pricing...".

Finally, the Commission observes with interest that Clause 64 of the NWI states "the Parties agree to implement water pricing and institutional arrangements which (i) promote economically efficient and sustainable use of (a) water resources (b) water infrastructure assets."

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

Transparency Statement – Part A sets out the proposed tariff structure in Table 7. The tariff structure proposed for 2007/08 is unchanged from that in 2006/07.

#### **Water**

SA Water has two-part tariffs for all non-commercial customers. Its variable charges have two blocks: the proposed price in 2007/08 is 50c/kL for all consumption up to 125kL, and \$1.16/kL for all consumption greater than 125kL. Transparency Statement – Part A notes that the lower priced block "is intended to facilitate affordability of an essential service".

Transparency Statement – Part A notes that water charges should be based on long run marginal cost (LRMC – which signals to users the cost of the next augmentation) but that:

*“LRMC is difficult to quantify and is contingent on assumptions about sourcing of future supplies, and in particular whether these will be from the River Murray, less traditional potential potable water substitutes such as stormwater reuse and effluent recycling or alternatively desalination. The latter of these might imply LRMC higher than the current second water usage tier. However, on the basis that desalination is not required to meet future Adelaide water requirements in the near term, the current second tier water usage price is reasonably consistent with the upper end of the range of indicative estimates for LRMC, including water resource costs, for South Australia’s primary urban water demands.” (p. 29)*

There are different supply charges to residential and non-residential customers. For all commercial customers, the proposed fixed charge is based on a percentage of property value (with a minimum of \$174.60). For non-commercial charges the fixed charge is proposed to be \$157.40 for residential customers and \$174.60 for other customers.

The charging structure is uniform between Adelaide and regional customers, which gives rise to cross subsidy and Community Service Obligation (CSO) issues, which are addressed in the next section.

### 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) wastewater 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, proposed to be \$284, also applies. Transparency Statement – Part A (and previous Transparency Statements) have noted that this approach is based on 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; and
- ▲ risk of unregulated diversions from the sewerage system if consumption based pricing were to occur.

Trade waste customers face separate trade waste charges. Transparency Statement – Part A notes that these were set for a three-year period commencing in July 2005 and hence they have not been reconsidered as part of the 2007/08 pricing decision.

#### 4.12.3 The Commission's Assessment

##### Water

As Transparency Statement – Part A notes, the CoAG principles require efficient resource pricing. This suggests that prices should be consistent with LRMC. LRMC pricing supports efficient decision making by both water suppliers and customers by encouraging:

- ▲ efficient investment decisions by water businesses (such as investment in transportation, treatment and storage infrastructure) and households (such as investment in water efficient appliances or designs);
- ▲ efficient procurement and provision decisions (such as when to pump water and when to use stored water); and
- ▲ consumers to match the marginal benefits from an additional kL of water consumed with the costs of providing the water, and hence provides appropriate incentives to encourage the sustainable use of resources.

As the Essential Services Commission of Victoria has noted, LRMC is the sum of long run marginal operating cost and long run marginal capital cost (LRMCC). The estimation of marginal operating cost is relatively straightforward. However, LRMCC – the change in the costs of future capital works programs caused by anticipated changes in demand – is more difficult to calculate.

Transparency Statement – Part A does not provide an estimate of LRMC but notes that it is likely to be lower for a Murray-supply augmentation option than alternatives such as desalination. On the assumption that “desalination is not required to meet future Adelaide water requirements in the near term” Transparency Statement – Part A suggests that “the current second tier water usage price is reasonably consistent with the upper end of the range of indicative estimates for LRMC”.

The Commission notes that it is likely that the LRMC of water supply has increased recently. The current shortage of water suggests that South Australia could be close to an augmentation of supply and that the previously assumed source of that supply – the Murray River – may not be a viable option. If this is the case then the directly incurred LRMC (leaving aside externalities) is likely to be in the range of \$1.00 to \$3.00/kL. Even if desalination or similar cost augmentation options are not required in the short term, they may well be long-term options.

Even if the second tier water price is, as suggested, consistent with LRMC, this implies that the first tier charge is not consistent with efficient resource pricing. Whether this materially impacts resource use depends on how many consumers have levels of consumption at the first tier – such that it is the effective price they face. This is not disclosed in Transparency Statement – Part A. However, it is likely that a substantial volume of water is sold at this low price.

The Commission notes that Transparency Statement – Part A suggests that the first tier is intended to facilitate affordability. However, Transparency Statement – Part A does not demonstrate why this provides sufficient justification to move away from efficient resource pricing or how this concept of affordability is relevant for SA Water's commercial customers. It also does not indicate why 125kL is the best point to change the marginal price.

The Commission, therefore, does not believe that sufficient information has been provided to demonstrate that volumetric prices are consistent with the LRMC of supply and hence efficient resource pricing.

In addition the Commission notes that SA Water's first tier volumetric charges are, along with WA Watercorp, substantially lower than those in other jurisdictions (see Table 5 below).

**Table 5: Urban water volumetric prices for 2006/07**

AUTHORITY	CONSUMPTION RANGE (KL PER ANNUM)	PRICE \$
SA Water	<125	0.47
	125+	1.09
Yarra Valley Water	<160	0.82
	160-320	0.96
	+320	1.42
Sydney Water	<400	1.26
	400+	1.63
ACTEW (includes Water Abstraction Charge)	<100	1.21
	100-300	1.84
	300+	2.29
Brisbane Water	<200	0.91
	200-300	0.94
	300+	1.20
Hunter Water	<1000	1.14
	1000+	1.10
WA Watercorp	<150	0.49
	150-350	0.73
	350-550	0.95
	550-950	1.27
	950+	1.59

Source: Urban Water Charging Stocktake, NWI Steering Group on Water Charges, February 2007.

As a consequence of the low first block price, SA Water's volumetric charges will make up a smaller proportion of customers' bills than almost all other major water authorities.

The Commission also observed a lack of information about consumption forecasts in Transparency Statement – Part A. It is not possible to generate meaningful tariffs from a revenue requirement without at least making assumptions about expected consumption. This implies that such forecasts or assumptions must somewhere underlie the pricing decisions. The Commission notes that it is not provided with the regulatory models underpinning the pricing process. However, the existence of such models is referred to in Transparency Statement – Part A.

### 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 (and hence implications for efficient resource use) that price signals of this type would generate.

The pricing principles do not specify the approach to be used where direct consumption charges are not cost effective; hence the Commission believes that the tariff structure adopted is not inconsistent with the pricing principles. In relation to fixed wastewater charges (and fixed water charges for commercial customers) the Commission notes that the vast majority of urban water businesses in Australia have moved away from charging based on property values in recent years. Reasons for this include cost, equity and tariff understandability.

The Commission has also previously commented that the equity explanation for this approach to wastewater charges is likely to be undermined by the high proportion of households paying the minimum charge, such that the effective rate per dollar of property value for low value properties is significantly higher than for high value properties. This seems at odds with the equity intention.

While property based charges are not necessarily inconsistent with the pricing principles, the Commission suggests that it would be opportune to review the approach to the fixed charge.

#### 4.12.4 The Commission's view on application of the pricing principles

**Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?**

Transparency Statement – Part A presents some information about water pricing, including the proposed price structure. However, for the reasons set out in the above discussion, the Commission does not consider that the information presented is sufficient to demonstrate that prices meet the requirements of the pricing principles – in particular how the volumetric prices are consistent with LRMC. Therefore, Transparency Statement – Part A is inadequate in that it does not contain information that would have reasonably enabled Cabinet to make pricing decisions consistent with the high level outcomes.

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

The Commission is satisfied that the Cabinet submission included information about pricing.

### 4.13 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 and community service obligations (CSOs) are transparent.

The NWI requirements go further than the CoAG requirements in relation to CSOs in that they specifically require alternative arrangements to CSOs to be considered.

#### 4.13.1 Pricing Principles

In relation to cross-subsidies, the CoAG Principles require:

*“ 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.”*

In relation to CSOs the CoAG Principles require:

*“ that where service deliverers are required to provide water services to classes of customers 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”*

The COAG Expert Group also recommended “in determining prices transparency is required in the treatment of community service obligations ...”

Finally, clause 66(v)(c) of the NWI requires that:

*"where full cost recovery is unlikely to be achieved in the long term and a Community Service Obligation (CSO) is deemed necessary, the size of the subsidy is to be reported publicly and, where practicable, jurisdictions consider alternative management arrangements aimed at removing the need for an ongoing CSO."*

#### 4.13.2 Transparency Statement – Part A Comments

In relation to cross-subsidies, Transparency Statement – Part A states that:

*"In summary, to avoid cross subsidies based on the Baumol Band definition, pricing of the relevant service is required to ensure that all customers at least meet their marginal or avoidable costs, while the joint fixed costs are spread among the pool of customers by mechanisms (e.g. access charges) that take account of the value of benefits." Based on the Baumol Band, there are unlikely to be any significant cross subsidies." (p30)*

Transparency Statement – Part A then discusses two areas where customers pay different charges, but for which it is argued that cross-subsidies (using the Baumol Band) do not exist. These are:

- ▲ statewide uniform pricing – SA Water provides water and wastewater services to customers in regional areas at prices similar to the metropolitan area, consistent with the Government's Statewide uniform pricing policy. The Government then makes a CSO payment (at an estimated cost of \$118.9m in 2007-08) to recover the shortfall; and
- ▲ access charges for water (commercial) and wastewater (all) customers which are based on property values.

In relation to CSOs, Transparency Statement – Part A identifies a number of existing CSOs. These are:

- ▲ administration of the Save the Murray Levy;
- ▲ service charge exemptions/concessions;
- ▲ administration of the pensioner concession scheme;
- ▲ statewide uniform pricing;
- ▲ trade waste; and
- ▲ contractual arrangements for the Government Radio Network.

Two new CSOs are also identified:

- ▲ Waterproofing Adelaide – "While the Government is still working through the impacts and capital expenditure requirements arising from WPA, the Government has decided to allocate a small CSO to SA Water to compensate for the non-commercial activities that SA Water is likely to be required to undertake. Further details on the CSO will be developed as the planning process is progressed."

- ▲ Rain water tank rebate – “As part of the WPA strategy, the South Australian Government introduced, from July 2006, a rainwater tank plumbing rebate scheme. The CSO payment would be \$500,000 a year for four years. Rebates of up to \$400 will be offered to plumb new or existing rainwater tanks into existing homes. It is expected that plumbed rainwater tanks will save 4GL a year by 2025. SA Water costs incurred to administer the scheme (approximately \$40,000-\$50,000 per year) are also to be funded from the CSO amount.”

Expenditure on CSOs is set out in Transparency Statement – Part A, as shown in Table 6 below.

**Table 6: Estimated CSO payments to SA Water (\$m nominal)**

CSO PAYMENT	2006-07	2007-08
Statewide uniform pricing		
- Water business	123.52	118.87
- Wastewater business	20.05	20.38
Exemptions and Concessions		
- Commonwealth Government	0.53	0.55
- State Government	0.76	0.79
- Local Government	5.35	5.57
- Swimming Pools	0.13	0.15
- Places of Worship/Charitable	2.43	2.52
- Sporting Clubs	0.48	0.50
WPA (new)	-	0.94
Trade Waste	1.84	-
Rain Water Tank Rebate	0.06	0.04
River Murray Levy Administration	0.06	0.06
Government Radio Network	0.40	0.41
Administration of Pensioner Concessions	0.52	0.52
<b>Total CSO Payments</b>	<b>156.13</b>	<b>151.30</b>

Source: Transparency Statement – Part A, p.36.

#### 4.13.3 The Commission’s assessment

##### Cross-subsidies

The CoAG requirement is that cross subsidies be made transparent and those not consistent with efficient and effective service use and provision should (desirably) be removed. There is no obligation to remove them.

The CoAG Principles provide no guidance on how to decide whether or not a cross-subsidy exists. The Commission understands that while NSW and South Australia both use the Baumol approach, an approach that has been supported previously by the NCC, other jurisdictions appear to take different approaches.

The Baumol Band provides that a cross-subsidy does not exist when the price is above the incremental (or avoidable) cost of supply and below stand-alone cost. This provides a relatively broad range in which prices can lie and still not be considered to represent a cross-subsidy.

Consequently, Transparency Statement – Part A provides quantitative data showing the incremental and stand-alone costs of supply, and then asserts that no cross-subsidies are in place. This is despite the Commission's suggestion in its 2006/07 report that the major cost differences of serving different customers be examined further. While the 2007/08 Transparency Statement provides slightly more information than the 2006/07 Transparency Statement, it does not indicate that any additional work has been done to understand the major cost differences of serving different customers.

The Commission therefore observes that it has not been provided with sufficient information to conclude that any cross-subsidies have been made transparent, and therefore that the pricing principles are being satisfied.

### *Community Service Obligations*

Clause 66(v)(c) of the NWI requirement goes further than the CoAG requirement in that it requires not only transparency in CSOs, but requires that States, where practicable, consider alternative management arrangements aimed at removing the need for an ongoing CSO.

In South Australia the statewide uniform pricing CSO dominates payments. Transparency Statement – Part A indicates that it is calculated as the shortfall between revenue able to be charged under the uniform pricing policy and the 'avoidable cost' of providing services. The size of the payment is dependent upon the Government's view on the revenue able to be charged to regional customers under the uniform pricing policy. To the extent that this increases, then the size of the CSO will fall (although SA Water's total revenue will remain unchanged). This is the case in 2007/08 where the payment for this CSO will fall by around \$5m with the increase in regional wastewater charges.

In its 2006/07 report the Commission suggested that the Transparency Statement should "provide detailed analysis of ... the calculation of CSOs and assessment of CSO alternatives". In its 2005 review the NWC agreed that South Australia had made some progress towards meeting its CoAG commitments, but indicated that it was difficult to determine whether or not the current CSO payment is appropriate as it is not possible to identify cost differences between

customer categories and SA Water's cost recoveries. The NWC supported the Commission's call for more information on the calculation of CSOs.

Government CSO policy was set out in the 2005/06 Transparency Statement and this document indicated that performance management of the delivery of CSOs will be undertaken and that CSOs will be subject to annual review. However Transparency Statement – Part A provides no reference to a review and provides no additional information compared to 2006/07 in relation to the calculation of the CSO amount. It remains unclear to the Commission, for example, how assets and operating costs have been allocated to regional versus metropolitan customers. These decisions will have a significant effect on the size of the CSO. Further, Transparency Statement – Part A does not indicate if the Government intends to consider alternative management arrangements aimed at removing the need for an ongoing CSO (for example through additional increases in relative regional prices or considering alternative delivery options through market testing of some CSOs) as required by the NWI.

The Commission is not suggesting that the Government should remove CSOs or require alternative delivery mechanisms – rather the NWI simply requires them to be considered.

#### 4.13.4 The Commission's view on application of the pricing principles

***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

Transparency Statement – Part A presents some information about cross-subsidies and CSOs. However, for the reasons set out above, the information provided in Transparency Statement – Part A is inadequate, in that:

- ▲ insufficient information has been provided to demonstrate that no cross-subsidies are in place; and
- ▲ no evidence is provided to suggest that alternative management arrangements for CSOs have been examined.

Accordingly, Transparency Statement – Part A does not contain information that would have reasonably enabled Cabinet to make pricing decisions consistent with the high level outcomes.

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

The Commission is satisfied that the Cabinet submission included information about cross-subsidies and CSOs.

## **4.14 Movement towards the upper bound**

### **4.14.1 Pricing Principles**

NWI Clause 66(i) states:

*Metropolitan*

*"Continued movement towards upper bound pricing by 2008"*

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

The pricing decisions set out in Transparency Statement – Part A and the four year revenue direction are part of an intention to move toward the upper bound as required in NWI clause 66(i).

### **4.14.3 The Commission's assessment**

The Commission recognises that the pricing decision involves a movement toward the upper bound – as understood. Of course, it is difficult to characterise a pricing trajectory in an annual pricing process given that any decision only applies to a single year. However, the context provided in Transparency Statement – Part A indicates an intention to meet the requirements of 66(i).

The Commission also notes that the requirement of 66(i) is only for movement "toward" the upper bound by 2008. It is not clear when the upper bound should be met, although the Commission assumes that such movement should at least continue beyond 2008.

The Commission's main concern in this matter relates more to the upper bound itself, in so far as the issues raised earlier in this report, especially around efficient costs, contributed assets and externalities, mean that some doubt must exist about the location of the upper bound. Setting a pathway toward the upper bound presupposes that the upper bound has been identified satisfactorily. The NWC noted its concerns about movement toward an ill-defined upper bound, particularly in relation to contributed assets, in its 2005 NCP Assessment (see page 6.29).

### **4.14.4 The Commission's view on application of the pricing principles**

***Adequacy of information: Does the information contained in the Transparency Statement allow for adequate application of the pricing principles?***

Transparency Statement – Part A shows an intention to move towards an upper bound, which appears to be consistent with NWI clause 66(i). Whilst this is adequate against a strict reading of the NWI obligation, the Commission is not confident that the upper bound has been identified satisfactorily.



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

The Commission is satisfied that the Cabinet submission included information about movement towards the upper bound, subject to the limitations around the upper bound noted above.

## 5 FOUR-YEAR REVENUE DIRECTION

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Transparency Statement – Part A includes within it an in principle revenue direction to June 2012. This is not a pricing decision *per se*. It is not binding, but rather an indication of intended movements over that period.

As the revenue direction is not a pricing decision, no compliance conclusions are offered. However, it is identified in the Terms of Reference and therefore the Commission provides the following comments in relation to it.

The Commission has previously indicated support for a move to longer term pricing decisions as this can provide appropriate incentives and certainty to SA Water. The revenue direction does not achieve this, given its nature, but the Commission sees it as a first step in a positive direction.

However, moving to a longer term pricing profile poses some challenges (as acknowledged in Transparency Statement – Part A). In particular, longer term pricing decisions will tend to exacerbate the effect of any deficiencies in the pricing process as the effects of error can accumulate across the pricing period.

A longer period also places a far greater emphasis on the quality and reliability of forecasts of costs and demand. Again, any deficiencies in these, or indeed the absence of rational forecasts, will tend to introduce cumulative uncertainty into the pricing process.

However, these problems are faced regularly and successfully in other regulated industries and in water price setting and regulation in other jurisdictions.

Longer-term decisions also introduce a greater focus on performance monitoring, in part to assist tracking and managing some of the challenges outlined above. Monitoring of costs, revenues, prices and service standards allows for better decision making at each pricing decision as it allows the decision maker to be better informed about the reasonableness of forward forecasts, and also allows for rational adjustments in relation to service standards. This also calls into question the setting of appropriate service standards.

In this respect the Commission notes that the Transparency Statements have generally provided very little historical outturn information (other than through the recently introduced benchmarking material), thus making difficult an informed assessment of forecasts. This difficulty will increase for longer period decisions.