

# INQUIRY INTO THE 2010-11 METROPOLITAN AND REGIONAL POTABLE WATER AND SEWERAGE PRICING PROCESS FINAL REPORT

**OCTOBER 2010**



***Public Information about the Commission's activities***

Information about the role and activities of the Commission, including copies of latest reports and submissions, can be found on its website at [www.escosa.sa.gov.au](http://www.escosa.sa.gov.au).

## TABLE OF CONTENTS

---

Glossary of Terms	ii
Overview	1
<b>1 Introduction</b>	<b>5</b>
1.1 The Price Setting Process	5
1.2 Conduct of the Inquiry	7
<b>2 The pricing principles</b>	<b>9</b>
2.1 1994 CoAG pricing principles	9
2.2 The National Water Initiative	11
2.3 NWI Pricing Principles	13
2.4 NWC Assessment of NWI Progress	17
2.5 The Commission's assessment method	18
<b>3 Application of the pricing principles</b>	<b>20</b>
3.1 Comment on upper and lower bound pricing	20
3.2 Efficient business costs	21
3.3 Capital Expenditure	33
3.4 Asset Valuation	38
3.5 Contributed Assets	40
3.6 Depreciation	42
3.7 Externalities	43
3.8 Return on Assets	46
3.9 Tax Equivalent Regime	50
3.10 Efficient Resource Pricing	51
3.11 Cross-subsidies	61
3.12 Movement towards the upper bound	64



## GLOSSARY OF TERMS

---

ADP	Adelaide Desalination Plant
AER	Australian Energy Regulator
CoAG	Council of Australian Governments
COMMISSION	Essential Services Commission of South Australia
CSO	Community Service Obligation
DORC	Depreciated Optimised Replacement Cost
DRC	Depreciated Replacement Cost
DTF	Department of Treasury and Finance
ESC	Essential Services Commission, Victoria
GFFCR	Go Forward Full Cost Recovery
GL	Gigalitre
IPART	Independent Pricing and Regulatory Tribunal (New South Wales)
KL	Kilolitre
LRMC	Long Run Marginal Cost
NCC	National Competition Council
NCP	National Competition Policy
NPR	National Performance Report [Urban Water Utilities]
NWC	National Water Commission
NWI	National Water Initiative
ODV	Optimised Deprival Value
OMA	Operating, Maintenance and Administration
ORC	Optimised Replacement Cost
RAB	Regulated Asset Base
SA WATER	South Australian Water Corporation
TER	Tax Equivalent Regime
URB	Upper Revenue Bound
WACC	Weighted Average Cost of Capital

**NOTICE OF REFERRAL FOR AN INQUIRY INTO POTABLE WATER  
AND SEWERAGE PRICING IN SOUTH AUSTRALIA**

**PURSUANT TO PART 7 OF THE ESSENTIAL SERVICES  
COMMISSION ACT 2002**

**FROM:** Kevin Foley, Treasurer

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

**RE:** Potable water and sewerage prices in South Australia from July 2010 to June 2011.

**BACKGROUND:**

1. Pursuant to section 35(1) of the *Essential Services Commission Act, 2002* (**the Act**), the Commission must conduct an Inquiry into any matter that the Minister, by written notice, refers to the Commission.
2. The Act is committed to the Treasurer by way of *Gazettal* notice dated 12 September 2002 (p. 3384).
3. The South Australian Government proposes to publish the attached Transparency Statement on SA Water's potable water and sewerage prices.
4. The Transparency Statement links the South Australian Government's decision on potable water and sewerage prices to the National Water Initiative Pricing Principles. It also provides information on SA Water's financial and operating performance, expenditure, revenue, community service obligations, capital expenditure program, profit and its distribution.

**REFERRAL:**

I, Kevin Foley, Treasurer, refer to the Commission the matter described in paragraph (a) of the Terms of Reference for Inquiry, in accordance with those matters in paragraphs (b), (c) and (d) 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 2010-11 potable water and sewerage prices having regard to the adequacy of the application of:
  - a. the 1994 CoAG pricing principles;
  - b. the National Water Initiative, specifically, Clause 65 on pricing principles for urban areas, Clause 66(i) on pricing in the metropolitan area and Clause 66(v) on pricing in regional areas; and
  - c. the National Water Initiative Pricing Principles for the recovery of capital expenditure and urban water tariffs.
- b) In undertaking this Inquiry, the Commission is to take into account:
  - a. the National Water Commission *Second Biennial Assessment of Progress in Implementation* with respect to Clauses 65, 66(i) and 66(v); and
  - b. the attached *Transparency Statement - Part A - 2010-11 Potable Water and Sewerage Prices South Australia* dated May 2010.
- 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, the National Water Initiative and the National Water Initiative Pricing Principles was made available to Cabinet.
- d) These terms of reference specifically do not extend to additional information on alternative approaches to setting prices.

## **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 Water 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 Water 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; and
- d) SA Water is to meet the reasonable costs of the Commission in undertaking the Inquiry

If the Commission requires further information in relation to this Inquiry, it may contact the Director, Regulatory Policy, Revenue and Economics Branch, Department of Treasury and Finance.

## **DIRECTIONS:**

The following directions are 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 to that end must enter into a Deed of Non-Disclosure with the Crown in right of the State of South Australia. I hereby authorise the Under Treasurer to act as agent for and on behalf of the Crown for that purpose. Further, the Commission must require any consultant firm or person providing consultancy services to the Commission in relation to the Inquiry to be made a party to that Deed. A copy of the Deed will be made available to the Commission for comment.





## OVERVIEW

---

In June 2010, pursuant to section 35(1) of the *Essential Services Commission Act 2002*, the Treasurer directed that the Essential Services Commission of South Australia (the Commission) undertake an Inquiry into the price setting processes in the preparation of advice to Cabinet, resulting in Cabinet's decision on the level and structure of SA Water's 2010-11 potable water and sewerage prices in South Australia.

In undertaking its Inquiry, the Commission is to advise on the extent to which information relevant to certain nationally agreed urban water pricing principles was made available to Cabinet. The key question for this Inquiry is whether or not this information was sufficient to enable Cabinet to reach a pricing decision that is consistent with the relevant principles. In considering this matter, the Commission has reviewed all information presented to Cabinet as part of the 2010-11 potable water and sewerage pricing process, which is summarised in the May 2010 report prepared by the Department of Treasury and Finance: *Transparency Statement – Part A 2010-11 Potable Water and Sewerage Prices in South Australia*.

This is the Commission's eighth Inquiry into the South Australian Government's process for setting SA Water's potable water and/or sewerage prices, and the fourth Inquiry that has been conducted in the context of the National Water Initiative (NWI).<sup>1</sup>

Cabinet approved an increase in potable water charges in 2010-11 on average by 21.7% in real terms. In 2010-11, metropolitan and regional sewerage charges are to increase by 0.8% and 1.3% respectively in real terms.

The major driver of the announced increase in potable water charges is the expansion of the capacity of the Adelaide Desalination Plant from 50GL to 100GL per year. These substantial increases in potable water prices were previously foreshadowed by the Government in 2008, when the following projects and initiatives (aimed at providing South Australian customers with a sustainable and secure water supply in the longer term) were outlined:

- ▲ the construction of the Adelaide Desalination Plant (ADP) at Pt. Stanvac,
- ▲ the implementation of the Network Water Security Program, designed to improve the connectivity between the northern and southern water supply systems,
- ▲ purchases of River Murray water, ensuring a sufficient quantity of water is available for critical human needs, and
- ▲ the provision of rebates, designed to encourage the public to use water conservation products.

---

<sup>1</sup> Refer to the Commission's website: <http://www.escosa.sa.gov.au/water-overview/inquiries.aspx>.



The magnitude of the proposed capital expenditure, and the resulting increases in potable water charges, provide an important context to the current Inquiry and accentuate the need to ensure that the pricing process is robust and can deliver on the NWI best practice pricing principles.

Table 1 provides a summary of the increases in potable water prices, and associated impact on average customer bills, resulting from the South Australian Governments water sustainability and security strategy from 2008.

**Table 1: Summary of Potable Water Prices and Customer Bill Impact**

	2008-09	2009-10	2010-11	TOTAL
Increase in Potable Water Prices (\$Real)	12.7%	17.9%	21.7%	61.7% <sup>2</sup>
Increase in Annual Average Customer Bill from previous year	\$57.10	\$46.90 <sup>3</sup>	\$84.00	\$188.00 <sup>4</sup>

Consistent with the approach taken in previous inquiries, the Commission has identified the types of improvements that should be made to the pricing process in order to achieve greater consistency with the relevant pricing principles.

It is noted that price setting processes for 2011-12 and beyond will change under the new regulatory arrangement announced in the South Australian Government's Water for Good<sup>5</sup> plan of June 2009. Part C of the 2009-10 Transparency Statement commented on the Commission's future regulatory role under Water for Good, and observed that:

*The Government recently published its water security plan, Water for Good, and endorsed the appointment of ESCOSA as the independent economic regulator for monopoly suppliers of urban and regional water and wastewater services in South Australia. A number of the issues raised in the [Commission's 2009-10] Final Report will be addressed more appropriately in the transition to independent economic regulation.<sup>6</sup>*

While there is scope for possible broad reform of the pricing arrangements for water and sewerage under the Water for Good plan, the Commission notes that, consistent with previous Inquiries, its current Inquiry into the Government's process for setting 2010-11 water and sewerage charges is based on limited terms of reference. The Inquiry examines processes, not prices, and it does so only in respect of a specific set of principles under the NWI. The Commission's recommendations in this Inquiry are, therefore, likely to cover

<sup>2</sup> Total increase in Potable Water Prices is calculated as a cumulative growth amount

<sup>3</sup> As outlined in previous Transparency Statements, the calculation of the customer bill impact for 2008-09 onward is based on a reduced average consumption figure (191kL) than that used in preceding years (250kL).

<sup>4</sup> Total increase Annual Average Customer Bill is calculated as a sum of the impact for each year i.e. not taking into account changes to assumption regarding average consumption figures as outlined in footnote 3.

<sup>5</sup> Refer to the Water for Good website: <http://www.waterforgood.sa.gov.au/water-planning/the-plan/summary/>

<sup>6</sup> Refer 2009-10 Transparency Statement on Wastewater Prices in South Australia (Part C) : [http://www.treasury.sa.gov.au/df/infrastucture\\_support/water.jsp](http://www.treasury.sa.gov.au/df/infrastucture_support/water.jsp)

a relatively narrow set of issues compared to those that are expected to be dealt with under the broader reform. Any areas for improvement identified by the Commission in this Inquiry should therefore be considered within this particular context.

The Commission notes that there have been several improvements in the provision of information for the 2010-11 price setting process, particularly in relation to:

- ▲ efficient business costs, primarily in the areas of planning, approval and procurement processes for capital expenditure, and further scrutiny of operating expenditure, including reasons for increases experienced in 2008-09;
- ▲ performance comparisons, including both internal indicators and National Performance Reporting (NPR) indicators;
- ▲ the Weighted Average Cost of Capital (WACC), including a discussion of the rate of return on legacy water and sewerage assets; and
- ▲ SA Water's Community Service Obligations.

Notwithstanding these improvements, the Commission notes that many of the suggested areas for improvement for the 2010-11 Inquiry process are similar to those raised in previous Inquiries, regarding the level of information provided for:

- ▲ targets and projections for performance;
- ▲ forward-looking cost information; and
- ▲ full disclosure of project costs and progress.

The Commission remains concerned that the level of information presented to Cabinet does not demonstrate that forward-looking prices are based on prudent and efficient forecast costs. This deficiency is particularly significant, given the impact of the proposed major capital projects on future water prices.



# 1 INTRODUCTION

---

Pursuant to section 35(1) of the *Essential Services Commission Act 2002*, the Treasurer of South Australia has referred to the Commission an Inquiry into the processes followed in the development of advice to Cabinet in late 2009, to be used by Cabinet in setting potable water and sewerage prices for South Australia for 2010-11. The Commission is required to assess whether or not the pricing processes complied with the relevant principles established through the 1994 Council of Australian Governments (CoAG) pricing principles, certain clauses of the National Water Initiative (NWI), and the National Water Initiative Pricing Principles.

Since 2004-05, the Commission has, at the direction of the Treasurer, conducted inquiries into the annual processes for setting potable water and sewerage prices. These previous Inquiry reports and associated documents are available on the water section of the Commission's website.<sup>7</sup>

As with the past several inquiries, the Commission's consideration of the potable water and sewerage pricing processes are again combined. Accordingly, the issues that the Commission will examine in this Inquiry are similar to those examined previously.

The Commission's Inquiry into the processes for setting 2010-11 potable water and sewerage prices must take into account the significance of the Government's future water security investments (including the construction of the desalination plant at Pt. Stanvac) and the substantial price increases that have been announced. The manner in which the CoAG pricing principles, relevant NWI objectives and NWI pricing principles were taken into account in preparing advice to Cabinet, which were subsequently used to reach its decision to increase water prices, is therefore a major focus of this current Inquiry.

## 1.1 The Price Setting Process

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 services to approximately 1.5 million domestic, commercial and industrial customers throughout South Australia, and sewerage services to around 1.2 million customers.

The Government owns SA Water. The Minister for Water is responsible for setting the prices that SA Water charges for services provided.<sup>8</sup> In doing so, the Government has committed to set prices such that they comply with agreed pricing principles. These principles include the 1994 CoAG pricing principles and the principles contained in the NWI, an agreement entered into by all jurisdictions in June 2004. These principles are discussed further in Chapter 2 of this report.

---

<sup>7</sup> Refer to the Commission's website: <http://www.escosa.sa.gov.au/water-overview/inquiries.aspx>.

<sup>8</sup> Refer Section 65C of the Waterworks Act 1932 available at the following website: [www.legislation.sa.gov.au](http://www.legislation.sa.gov.au)

### 1.1.1 Cabinet decision

The decision on urban water and wastewater prices to apply in 2010-11 was taken by Cabinet in November 2009. The water prices that will apply to most customers in 2010-11 were gazetted on 4 December 2009, with commercial rates gazetted on 24 June 2010, in accordance with the *Waterworks Act 1932*. Wastewater rates were also gazetted on 24 June 2010, in accordance with the *Sewerage Act 1929*. The June 2010 dates arose because those charges utilise property values, which are not available until that time.

The business and decision making of Cabinet is 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 potable water and sewerage prices for 2010-11. These documents are classified "Strictly Confidential" and the Commission is required to preserve the confidentiality of such documents.

### 1.1.2 Preparation of Transparency Statement – Part A

Subsequent to making its decision on 2010-11 potable water and sewerage prices, the Department of Treasury and Finance (DTF) prepared the Transparency Statement – Part A, 2010-11 Potable Water and Sewerage Prices in South Australia, dated May 2010 on behalf of the Treasurer. This document sets out the process and the matters that were considered by Cabinet in setting 2010-11 potable water and sewerage prices. One of the purposes of Transparency Statement – Part A is to document the extent to which the Government's pricing decision applied the relevant pricing principles.

Whilst the Transparency Statement – Part A outlines the Government's annual decision making process for 2010-11 potable water and sewerage prices, the Commission notes that some methods and practices have not changed from year to year. Consequently, to avoid repetition in this report, the Commission has focused on areas of change or new information, rather than repeating all relevant details from earlier reports. As a result of this, the Commission sometimes refers in later chapters 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.

This report utilises Transparency Statement – Part A as an explanation of the price setting process and justification that the 2010-11 potable water and sewerage prices apply the pricing principles. It also comments, where possible, on the information that was made available to Cabinet in making its decision on 2010-11 potable water and sewerage prices (but is restricted given the confidential nature of Cabinet determinations). Where relevant, the report also refers to comments made by the Government in responding to the Commission's 2009-10 Inquiry final report.

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

## **1.2 Conduct of the Inquiry**

The Commission received the Notice of Referral of an Inquiry from the Treasurer on 16 June 2010 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 16 September 2010; and
- ▲ provide a Final Report by 28 October 2010.

Pursuant to section 36 of the *Essential Services Commission Act 2002*, a Public Notice of Inquiry was placed in *The Advertiser* on 2 July 2010, asking for written submissions by 28 July 2010. An Issues Paper was released at the same time.

The Commission did not receive any submissions in response to the Public Notice and Issues Paper. As a result, in conducting this Inquiry the Commission is principally informed by Transparency Statement – Part A and associated information provided.

In its response to the 2009-10 Inquiry process the Government advised,

*The issue of stakeholder engagement and public consultation will be addressed in the transition to independent economic regulation.<sup>9</sup>*

The Commission agrees that the proposed pricing reforms set out in Water for Good are more likely to encourage stakeholder engagement than the current Inquiry process.

---

<sup>9</sup> Refer 2009-10 Transparency Statement on Wastewater Prices in South Australia (Part C) : [http://www.treasury.sa.gov.au/dtf/infrastructure\\_support/water.jsp](http://www.treasury.sa.gov.au/dtf/infrastructure_support/water.jsp)





## 2 THE PRICING PRINCIPLES

---

### 2.1 1994 CoAG pricing principles

The 1994 CoAG pricing principles provided the framework for water and wastewater pricing reform for all jurisdictions, including South Australia, and were incorporated into the National Competition Policy (NCP) Agreement.

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).<sup>10</sup>

Section 3 of the Strategic Framework is dedicated specifically to pricing issues. However, it is a very broad pricing policy statement and does not provide specific operational 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 –*

- i. *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;*
- ii. *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*
- iii. *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, through the Agriculture and Resource Management Council of Australia and New Zealand, provided a detailed set of guidelines. This detailed set of guidelines, in

---

<sup>10</sup> This Agreement is available from the National Competition Policy website: <http://ncp.ncc.gov.au/docs/PIAg-001.pdf>.

combination with the relevant pricing issues contained in the Strategic Framework, 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 (these guidelines form part of the CoAG Strategic Framework, pp. 112-113) 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, pp. 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. The NWI builds on and expands the 1994 CoAG Strategic Framework and pricing principles. The Commission's Inquiry into the 2007-08 water and wastewater price setting process was the first to consider the 1994 CoAG pricing principles, as impacted by the NWI. In its Final Report under that Inquiry, the Commission observed that the NWI objectives, which include the pursuit of "best practice" pricing, required the Commission to become more demanding in its assessment of the Government's water and wastewater pricing process.

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 assessing each jurisdiction's progress with implementing, originally, the 1994 CoAG pricing principles and, now the NWI.

The NWC's first biennial assessment of progress made by jurisdictions against the NWI occurred in 2007.<sup>11</sup> The NWC subsequently released an update of progress in water reform in February 2008.<sup>12</sup> In October 2009, the NWC released its second biennial assessment of progress made in implementing the NWI.<sup>13</sup>

The terms of reference for this Inquiry require the Commission to take into account the NWC Second Biennial Assessment of Progress in Implementation with respect to Clauses 65, 66 (i) and 66 (v) of the NWI.

The NWI includes clauses that establish commitments concerning 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 NWC website ([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).*

---

<sup>11</sup> Refer to the NWC website: <http://www.nwc.gov.au/www/html/2453-biennial-assessment-2007.asp?intSiteID=1>.

<sup>12</sup> Refer to the NWC website: <http://www.nwc.gov.au/www/html/692-coag-update-report-on-water-reform.asp?intSiteID=1>.

<sup>13</sup> Refer to the NWC website: <http://www.nwc.gov.au/www/html/147-introduction---2009-biennial-assessments.asp>.



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.*

The Commission's task in conducting this and earlier inquiries derives from NWI obligations and earlier NCP obligations. For example, clause 77 of the NWI states that:

*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. Further, the Terms of Reference require the Commission to have regard specifically to clauses 65 on pricing principles for urban areas, clause 66(i) on pricing principles in metropolitan areas and clause 66(v) on pricing principles in regional areas – a narrower range than that set out in clause 77.

Nevertheless, the Commission notes that the NWC, in its submission to the Commission's Issues Paper for the Inquiry into the 2008-09 pricing process, made reference to the clause 77 obligations and stated that the Commission's Inquiry process accords with the NWI commitments.

## 2.3 NWI Pricing Principles

The Terms of Reference refer to the NWI Pricing Principles, which were endorsed by the Natural Resource Management Ministerial Council on 23 April 2010.<sup>14</sup> Transparency Statement – Part A indicates that these pricing principles “*build on and incorporate the 1994 COAG Strategic Framework and the NWI*”<sup>15</sup>. The NWI pricing principles consist of principles for:

- ▲ Recovery of capital expenditure;
- ▲ Setting urban water tariffs;
- ▲ Recovering the costs of water planning and management activities; and
- ▲ Recycled water and stormwater use.

Transparency Statement – Part A states that:

*The South Australian Government adopted these pricing principles for its 2008-09 and 2009-10 pricing decisions. The Australian Government, in collaboration with State and Territory governments, recently released these NWI Pricing Principles together with a regulation impact statement for public consultation. These NWI Pricing Principles were endorsed by the Natural Resource Management Ministerial Council on 23 April 2010.*

*The South Australian Government's water pricing methodology for 2010-11 continued to adopt these NWI Pricing Principles.*<sup>16</sup>

For the purposes of the current Inquiry, the Commission is only required to take into account the NWI pricing principles relating to the recovery of capital expenditure and the setting of urban water tariffs.

### 2.3.1 Recovery of capital expenditure

Section 1 of the NWI Pricing Principles relates to the treatment of new and existing assets. In summary, the principles require:

- ▲ full cost recovery for new and replacement capital expenditure following a “legacy date” (in the case of South Australia, the legacy date referred to in Transparency Statement – Part A is 30 June 2006<sup>17</sup>);

---

<sup>14</sup> Endorsed NWI Pricing Principles available on the following website:  
<http://www.environment.gov.au/water/publications/action/pubs/nwi-pricing-principles.pdf>

<sup>15</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 8

<sup>16</sup> Ibid, pg 9

<sup>17</sup> Ibid, pg 38

- ▲ new and replacement assets should initially be valued at efficient actual cost;
- ▲ existing assets (assets that existed as at the legacy date) should be valued based on a recognized valuation method, such as Depreciated Replacement Cost (DRC), Depreciated Optimised Replacement Cost (DORC), Optimised Replacement Cost (ORC), indexed actual cost, Optimised Deprival Value (ODV), or another recognised valuation method;
- ▲ cost recovery for legacy assets should be achieved by way of a depreciation charge or annuity charge and a positive return on an asset value used for price setting purposes as at the legacy date. If assets are to be sold then they are to be valued at their net realisable value;
- ▲ the regulatory asset base (RAB) should be rolled forward (in either nominal or real terms) by including prudent capital expenditure and deducting depreciation and asset disposals. Where a renewals annuity is used, asset values should not also be depreciated; and
- ▲ new contributed assets (i.e. grants/gifts from governments and contributions from customers (e.g. developer charges)) should be excluded or deducted from the RAB or offset using other mechanisms so that a return on and of the contributed capital is not recovered from customers. If a renewals annuity is used, it should include provision for replacement of contributed assets.

One of the key aspects of the NWI Pricing Principles<sup>18</sup> is that for investments made prior to the legacy date, the rate of return is allowed to continue (which maybe above or below the WACC). A rate of return equivalent to the Government's calculated WACC of 6% (pre-tax, real) is only sought in relation to new and replacement capital investments incurred following the legacy date (30 June 2006). As the legacy assets get replaced over time, the rate of return on the regulatory asset base is expected to approach the WACC of 6% (pre-tax, real).

Transparency Statement – Part A calls this approach “Go-Forward-Full-Cost-Recovery” (GFFCR). It notes that in the long-run, as existing assets are replaced, GFFCR will gradually tend towards the upper revenue bound until eventually the full WACC is earned on all assets. The application of the GFFCR approach to SA Water's water and wastewater revenues is discussed in Transparency Statement – Part A. It observes that the historical returns on water assets have been 3.1% (i.e. below the upper bound) and that the historical returns on wastewater assets have been 7.2% (i.e. above the upper bound). Under the GFFCR approach, these historical returns on assets that existed as at 30 June 2006 would effectively be maintained until the assets are replaced. However the Commission acknowledges that the Transparency Statement indicates that *‘as part of the transition to independent economic regulation, the rate of return on metropolitan sewerage*

---

<sup>18</sup> The Principles only apply to capital expenditure incurred for the provision of water services, i.e. they do not cover wastewater or stormwater services.

*legacy assets is being reduced to, and is expected to achieve in 2010-11, the current estimate of WACC*.<sup>19</sup>

### 2.3.2 Urban Water Tariffs

Section 2 of the NWI Pricing Principles sets out the following relevant principles for the design of urban water tariffs:

- ▲ Water tariffs should recover efficient costs consistent with the NWI definition of Upper Revenue Bound (to “avoid monopoly rents”);
- ▲ Two-part tariffs, comprising a service availability charge and a water usage charge, should be used to recover the revenue requirement from retail residential, non-residential and bulk customers;
- ▲ The water usage charge should have regard to the long run marginal cost of supply of additional water<sup>20</sup>;
- ▲ The revenue from the service availability charge should be calculated as the difference between the total revenue required, and the revenue recovered through water usage charges and developer charges;
- ▲ Urban water tariffs should be set using a transparent methodology, through a process which seeks and takes into account public comment, or which is subject to public scrutiny;
- ▲ Where water usage charges lead to revenue recovery in excess of the upper bound revenue requirement in respect of new investments, the over recovery is to be addressed by jurisdictions via redistribution to customers as soon as practicable;
- ▲ Water charges should differentiate between the cost of servicing different customers where the benefits of doing so outweigh the costs of identifying the differences and the equity advantages of alternatives;
- ▲ Developer charges should reflect the investment in both new and existing assets required to serve a new development and have regard to the manner in which ongoing water usage and service availability charges are set;
- ▲ Developer charges should not exceed the costs of serving new developments which includes investment in both new and existing assets required to serve a new development; and
- ▲ Revenue from developer charges should be offset against the total revenue requirement either by deducting the contributions from the RAB, or through some other offset mechanism.

---

<sup>19</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia, pg 40

<sup>20</sup> NWI Section 2, Principle 3 note outlines: “...water charges should comprise only a single water usage charge. However governments may decide on more than one charge for policy reasons eg sending a strong pricing signal ....”

### 2.3.3 The Combined Pricing Principles

The 1994 CoAG pricing principles are expressed as a set of high level outcomes (e.g. full cost recovery, consumption-based pricing, and transparency of cross-subsidies) and specific requirements or agreed actions (e.g. efficient costs, appropriate rate of return) that underpin the outcomes.

The NWI, as agreed in 2004, is a commitment by each jurisdiction 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 commitments are specified at clauses 64 – 77 of the NWI (under the header “Best Practice Water Pricing and Institutional Arrangements”).

These commitments 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.

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

The NWI pricing principles as endorsed on 23 April 2010, provide further clarification of the way in which the outcomes discussed in clauses 65 and 66 of the NWI could be achieved. For example, while there is a general NWI requirement to move towards upper bound pricing, the pricing principles recognise the practical limitations in doing so, given the varying historical returns that have been earned by water and wastewater utilities. The pricing principles also provide clarification on how consumption based pricing can be achieved through tariff design.



## 2.4 NWC Assessment of NWI Progress

The Terms of Reference require the Commission to take into account the NWC's October 2009 report *Second Biennial Assessment of Progress in Implementation*, and in particular with respect to relevant Clauses 65, 66(i) and 66(v). The Commission notes that the NWC's Second Biennial Assessment was developed based on draft NWI pricing principles, which were subsequently endorsed on 23 April 2010.

The Commission notes that the NWC assessments provide a high level summary of progress by each jurisdiction in addressing NWI commitments. The nature of the assessments are fundamentally different to that undertaken by the Commission in the current Inquiry, which is concerned with processes that can enable the achievement of relevant NWI objectives, rather than the achievement of the objectives themselves.

In its previous Inquiry report, the Commission noted that the 2007 Biennial Assessment provided general support for the progress being made in South Australia on many of the pricing related elements under the NWI. The NWC's February 2008 update likewise supported South Australia's progress, with the NWC concluding that across a number of pricing related areas, South Australia had made further progress relative to the 2007 assessment (for example, in relation to the development of policies for pricing of recycled water and stormwater, and in benchmarking efficient performance).

The NWC's 2009 Second Biennial Assessment of Progress in NWI Implementation was somewhat more critical on the level of progress made in South Australia on many of the pricing related elements under the NWI than previous reviews. Whilst the NWC acknowledged that good progress has been made, it identified and provided recommendations for further action in areas of reform where progress has been viewed as slow or inadequate.

In respect of the Second Biennial Assessment, the Commission has identified the following key findings and recommendations in pricing related areas that relate specifically to South Australia:

- ▲ Finding 8.1, notes that South Australia has achieved lower-bound pricing and that its price setting processes are consistent with, or moving towards being consistent with upper bound pricing for metropolitan water storage and delivery;<sup>21</sup>
- ▲ Finding 8.4, acknowledges that, while some progress has been made in South Australia with respect to the recent announcement of the Commission's future role in water, South Australia does not yet benefit from fully independent regulation;<sup>22</sup>
- ▲ Box 38 recommends that South Australia should move away from property-value based pricing for setting the fixed component of the two-part tariff for commercial customers. In addition the NWC recommends that inclining block tariffs should be

---

<sup>21</sup> Refer: <http://www.nwc.gov.au/www/html/147-introduction---2009-biennial-assessments.asp> pg 165

<sup>22</sup> Ibid pg 169

removed in SA (along with other jurisdictions), in the interests of developing efficient and equitable tariff structures;<sup>23</sup> and

- ▲ Statements that the link between levies and the cost of water planning and management is not clear, and neither is the attribution of costs between water users and government.<sup>24</sup>

## **2.5 The Commission's assessment method**

The Terms of Reference require the Commission to inquire into the processes used in the setting of potable water and sewerage prices for 2010-11, having regard to the application of certain combined pricing principles. The Commission is required to advise on the extent to which information relevant to those principles was made available to Cabinet. In undertaking the Inquiry and preparing the advice, the Commission is to take into account relevant matters outlined in certain documents.

*The Commission interprets its task as assessing the extent to which the price setting processes facilitate pricing decisions that are consistent with the pricing principles.*

Consistent with the approach used in previous Inquiry reports, the Commission's assessment takes into account both the high level outcomes and the specific requirements of the combined pricing principles, as outlined in Chapter 2 of the current report.

The assessment of the application of each pricing principle considers whether or not the specific requirements were 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 principle (i.e. was it addressed in an appropriate manner?).

The Commission's assessment of whether or not the pricing process is likely to achieve the NWI "best practice" pricing principles is a key factor in this current Inquiry. This will require the Commission to review the analysis and information that supported Cabinet's pricing decision to assess if it was sufficient to enable a decision to be reached that was consistent with the relevant principles. Given the decision by Cabinet to approve an increase in water prices in 2010-11 on average by 21.7% in real terms, which followed a 17.9% real terms increase in average water prices in 2009-10, having a robust decision making process which can achieve the best practice pricing principles takes on even greater importance.

---

<sup>23</sup> Ibid pg 170

<sup>24</sup> Ibid pg 178

In this Inquiry, the Commission reaches conclusions (in Chapter 4) on whether the information presented to Cabinet as part of the price-setting process allows for adequate application of the combined 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:

- (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 emphasises that this Inquiry is focussed on the pricing process, not prices themselves. Therefore, conclusions as to whether or not the chosen prices achieve any particular outcomes are beyond the scope of the present Inquiry.

### 3 APPLICATION OF THE PRICING PRINCIPLES

---

This chapter considers the adequacy of the pricing processes undertaken in the preparation of advice to Cabinet with respect to the combined pricing principles.

In line with earlier inquiries, the Commission has assessed the adequacy of Transparency Statement – Part A with the combined pricing principles, and has concluded that it represents an adequate reflection of the information actually provided to Cabinet.

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

The combined pricing principles are underpinned by the concepts of upper and lower bound pricing. These concepts, which are defined in Schedule B(i) of the NWI and are discussed more fully in previous Inquiry reports, relate to the achievement of the ongoing viability of the water business (achievement of the lower revenue bound) while also ensuring that the business does not earn monopoly rents (revenue is below the upper bound).

A further concept is introduced through the NWI Pricing Principles for the recovery of capital expenditure. This concept, which Transparency Statement – Part A calls the GFFCR approach, provides a transition path to full cost recovery (upper bound) in recognition of the fact that many water utilities are pricing at well below full cost recovery, and it would take some time to achieve this outcome. Notwithstanding this new concept, the lower and upper revenue bound still form the limits between which prices should sit.

The Commission notes that the 2010-11 Transparency Statement does not specifically discuss the achievement of the lower revenue bound. While in recent years, the achievement of the lower bound has not been of a concern to SA Water in formulating its pricing decisions (as revenue has comfortably exceeded this minimum), the Commission must still have regard to the applicable pricing principle as outlined in the Terms of Reference.

The description of the pricing process, as reflected in Transparency Statement – Part A, has therefore placed greater emphasis on upper bound issues than on lower bound issues. The Commission accepts this approach, noting that its previous Inquiry reports have mainly focussed on issues associated with the upper revenue bound rather than having any concerns over the achievement of the lower bound.

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 forecasts of efficient operational, maintenance and administrative (OMA) costs;
- ▲ prices must reflect forecasts of reasonable and efficient capital expenditure;

- ▲ costs must be tied to an identifiable and 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);
- ▲ asset sales and redundant assets must be removed from the asset base; and
- ▲ prices should allow for the recovery of a reasonable return on assets.

The extent to which the current pricing process is able to provide for a decision that avoids monopoly rents is considered in subsequent sections of this chapter.

### **3.2 Efficient business costs**

Efficient business costs are described in the CoAG Strategic Framework 1994 as being:

*... 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.<sup>25</sup>*

The efficiency of business costs (including both operating and capital expenditure) 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 performance, the factors influencing that performance 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 when assessing the level of revenue required from the pricing decisions.

The long asset life 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 operational expenditure and capital-based costs.

Performance comparison of the achievements by peer water service providers in recent years (both in terms of absolute cost levels as well as changes in costs) can provide

---

<sup>25</sup> Refer to NCC website: <http://ncp.ncc.gov.au/docs/PIAg-001.pdf> pg 113



useful insight into what constitutes efficient business costs. Performance comparison and benchmarking can also assist in identifying possible future cost pressures.

### 3.2.1 Pricing Principles

In relation to efficient costs, the 1994 CoAG pricing principles Expert Group Report Recommendations state that:

4. *To avoid monopoly rents, a water business should recover no more than ... the operational, maintenance and administrative costs...;*
5. *To be viable, a water business should recover, at least, the operational, maintenance and administrative costs ; and*
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.<sup>26</sup>*

In respect of these earlier requirements the NWC stated in its 2005 NCP Assessment that:<sup>27</sup>

*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. (pg. 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. (pg. 6-33)*

Principle 1 of the NWI principles for urban water tariffs relates to efficient levels of cost recovery and associated tariff structures. Paragraph 9 states that:

*Water business should moving to recover efficient costs consistent with the National Water Initiative (NWI) definition of the upper revenue bound: 'to avoid monopoly rents, a water business should not recover more than the operational, maintenance and administrative costs, externalities, taxes or tax equivalent regimes, provision for the cost of asset consumption and cost of capital, the later being calculated using a Weighted Average Cost of Capital (WACC)'.<sup>28</sup>*

The 1994 principles included a clear statement of the need to demonstrate efficient business costs. Added to this, clause 65 of the NWI, and Principle 1 for Urban Water Tariffs reaffirm the aim that water pricing should achieve various outcomes such as avoiding monopoly rents. It is thus important that the information presented to Cabinet on efficient business costs not only addresses these costs but does so in a manner which enables Cabinet to conclude that the costs so included are efficient.

---

<sup>26</sup> Ibid

<sup>27</sup> Refer to NWC website: <http://www.nwc.gov.au/resources/documents/2005-NCP-SA-PUB-200406.pdf>

<sup>28</sup> Refer endorsed NWI Pricing Principles available on the following website: <http://www.environment.gov.au/water/publications/action/pubs/nwi-pricing-principles.pdf> pg 10

The Commission also notes that clause 75 of the NWI requires jurisdictions to report independently, publicly and on an annual basis, benchmarking of pricing and service quality for urban water and wastewater service providers.

### 3.2.2 Transparency Statement – Part A Comments

Transparency Statement – Part A includes the following sections that deal with efficient business costs:

- ▲ capital planning, approval and procurement (section 4.2);
- ▲ operating expenditure scrutiny and approval (section 4.3); and
- ▲ public reporting of SA Water’s performance and benchmarking against other utilities (section 5).

As was the case for the 2009-10 Transparency Statement – Part A, the 2010-11 Transparency Statement – Part A includes SA Water’s Annual Efficiency Report, dated November 2009, as an Appendix.

In its 2009-10 Inquiry, the Commission stated that it considered that there had not been sufficient information concerning the efficiency of forward looking costs.

Transparency Statement – Part A sets out the following response from the Government:

*The Government is satisfied that Cabinet has received sufficient information in relation to efficient business costs and capital expenditure. Cabinet decisions in respect of the base efficient business costs and capital expenditure of SA Water are taken separately from the annual pricing decision. They are consolidated and reconfirmed each year in the context of the Budget process preceding the annual pricing decision, updated by various Cabinet decisions made throughout the year. Additional operating and capital expenditure included in Cabinet Submissions outside the Budget process is subject to Cabinet Approval, with submissions including detailed analyses of costs and commercial justification, not only for the forward estimates but for the life of a project.*

*SA Water’s forward estimates are reviewed by the Department of Treasury and Finance on an ongoing basis. Not all of this information relating to operating and capital project approvals is forwarded to ESCOSA for review in connection with the annual pricing decision. Market testing is one means used to ensure that the projected costs of the various proposals are efficient.*

*Procurement information is typically included in the material provided to Cabinet as it makes each decision.<sup>29</sup>*

---

<sup>29</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pp 36-37

### ***Capital planning, approval and procurement***

The inclusion of information on SA Water's capital planning and approval processes represents an improvement in disclosure from the 2009-10 Transparency Statement – Part A. Transparency Statement – Part A describes four key elements of these arrangements:

- ▲ SA Water's asset management and approval process;
- ▲ Government approval processes for large projects recommended by SA Water;
- ▲ Parliamentary scrutiny of major projects approved by SA Water; and
- ▲ Government procurement policies.

Transparency Statement – Part A states that these arrangements promote prudent and efficient capital expenditure.

### ***Asset management and approval***

The asset management process is described in the Annual Efficiency Report, which broadly illustrates the categorisation of asset programs into the following categories:

- ▲ Strategic drivers – including customer service standards, regulatory mandates, and specific corporate/owner objectives (e.g. water security);
- ▲ Condition and performance – of existing infrastructure; and
- ▲ Demand growth – to determine the scope and timing of planned capacity augmentations (for treatment plants and networks).

The Annual Efficiency Report also indicates that asset management planning is focused on one, five and 25 year horizons, with the forward capital plan matched to the same periods.

In terms of project approvals, the Annual Efficiency Report notes that capital projects at SA Water are managed via the Corporate Project Management Methodology, which includes steps for the consideration of project costs, risks, financial impacts and business benefits. Projects are reviewed either by the SA Water estimating team or external consultants (depending on scale and complexity).<sup>30</sup>

### ***Government approval processes***

In relation to Government approval, Transparency Statement – Part A states that outputs of SA Water's asset management process are maintenance and capital investment plans, which are submitted to the Government as part of the State

---

<sup>30</sup> Refer SA Water Annual Efficiency Report, November 2009, pp.69-70.



Budget Process. This is documented in the State Budget Papers – Capital Investment Statement.

Transparency Statement – Part A outlines the requirement for SA Water to comply with applicable Treasurer’s Instructions for the approval of projects exceeding \$1.1 million (GST Inclusive).<sup>31</sup> The Commission notes that the Minister for Water has delegated authority for purchases not exceeding \$4.4 million (GST inclusive) to SA Water’s Board.

### ***Parliamentary scrutiny***

In relation to Parliamentary scrutiny, Transparency Statement – Part A states that SA Water’s capital projects are also subject to the scrutiny of the South Australian Parliament’s Public Works Committee where the total cost exceeds \$4.0 million.

However, Transparency Statement – Part A also notes that the Public Works Committee is not empowered to prevent any of SA Water’s capital projects from proceeding.

### ***Procurement***

In relation to procurement, Transparency Statement – Part A states that, where possible, SA Water is required by its Procurement Policy to seek competitive offers for procurements greater than \$5,000.

The Annual Efficiency Report states that projects are required to gain approval for the procurement of services such as design or construction, with engagements generally via a tender process.<sup>32</sup>

### ***Operating expenditure scrutiny and approval***

While SA Water cannot receive appropriations directly from the government’s consolidated account, it does receive monies from government by way of CSOs, subsidies and grants.<sup>33</sup>

Transparency Statement – Part A notes the following processes for the approval of operating expenditure:

- ▲ SA Water must submit its operating expenditure budget to the Department of Treasury and Finance for the financial year and forward estimates period, which is scrutinised by Cabinet as part of the State Budget process; and
- ▲ SA Water’s performance against budget is subject to scrutiny by the Board and the Department of Treasury and Finance. The Mid-Year Budget Review provides an opportunity for changes to the budget.

---

<sup>31</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 14

<sup>32</sup> Refer SA Water Annual Efficiency Report, November 2009, pg 70.

<sup>33</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 16

The Procurement Policy outlined above also applies to operating expenditure. Approximately 60% of operating supplies or services in 2007-08 were procured outside of SA Water. This percentage is expected to increase to around 70% by 2012-13, as the Adelaide Desalination Plant (ADP) becomes fully operational.<sup>34</sup>

Transparency Statement – Part A states that these arrangements promote efficient operating expenditure.

### ***Operating costs going forward***

The reporting of whole of corporation operating costs for SA Water in the 2009 Annual Efficiency Report has changed from the previous year.

Appendix 1 of the 2010-11 Transparency Statement – Part A includes estimates for SA Water's operating and maintenance costs for 2009-10 to 2013-14. However, it is difficult to relate these estimates to the commentary on operating costs going forward in section 5.1.3 in the 2009 Annual Efficiency Report, (which is very broad).

As was the case for the 2008 Annual Efficiency Report, section 5.1 of the 2009 Annual Efficiency Report provides a breakdown of whole of corporation operating costs into key cost components and brief commentary on the reasons for cost increases.<sup>35</sup> However, the Commission notes that this data is provided only for 2006-07, 2007-08 and 2008-09, with no forward projections for costs beyond general statements about whether costs in key business segments are expected to increase, decrease, or remain stable.<sup>36</sup> This is a departure from the 2008 Annual Efficiency Report, which provided actuals and forecasts for whole of business operating costs from 2006-07 to 2012-13.<sup>37</sup>

The Commission has been advised by the Department of Treasury and Finance that as part of the Government's budgetary process, Cabinet is provided with additional information considered commercial in confidence regarding SA Water's forward looking operating expenditure. However based in the information provided to the Commission within the Terms of Reference for review, which is understood to be consistent with Cabinet advice, the Commission is unable to comment on the extent to which this information has impacted on pricing decisions.

### ***Performance reporting***

Transparency Statement – Part A sets out details of SA Water's performance in comparison to a range of other water utilities, as reported in the 2008-09 National

---

<sup>34</sup> Refer SA Water Annual Efficiency Report, November 2009, pp. 50 - 51.

<sup>35</sup> Ibid pp.46-50

<sup>36</sup> Ibid pg 62

<sup>37</sup> Refer SA Water Annual Efficiency Report, November 2008, pg 55

Performance Report (NPR).<sup>38</sup> Further details are provided in the Annual Efficiency Report, which also includes the results of SA Water's internal performance reporting.

The 2009 Annual Efficiency Report reports on the same internal performance indicators as the 2008 Annual Efficiency Report. While SA Water's performance for internal indicators in 2008-09 is generally consistent with that of previous years, the Commission notes the following:

- ▲ Compliance with Draft Customer Charter – regional water and sewer service<sup>39</sup> improved from 22 of 33 internal targets to 31 of 33, and therefore met overarching targets in respect of compliance with the Draft Customer Charter target;
- ▲ Compliance with Draft Customer Charter – customer contact fell from three of six criteria meeting internal targets to two of six criteria meeting internal targets, including:
  1. Percentage of complaints responded to within 5 working days; (Achieved)
  2. Percentage of applications to discharge trade waste into the sewer system processed within 10 working days (Achieved);
  3. Average time to answer a telephone call (target 20 seconds) to the Corporation's Customer Contact Centre (Not Achieved – 28 seconds<sup>40</sup>);
  4. Percentage of all routine written enquiries responded to within 10 working days (Not Achieved);
  5. Percentage of all investigative correspondence resolved within 20 working days (Not Achieved); and
  6. Percentage of enquiries resolved at first point of contact face to face or via the telephone (Not Achieved).
- ▲ Compliance with draft customer charter – new connections remained at zero of two criteria meeting internal targets for the second consecutive year, including:
  1. Percentage of standard water connections installed within 15 working days of processing the application and receiving the fees; and

---

<sup>38</sup> The NPR data in the Annual Efficiency Report is largely based on the data from the 2007-08 NPR as the 2008-09 NPR had not been released at the time of compiling the report.

<sup>39</sup> Refer SA Water Annual Efficiency Report, November 2009, pg 5, includes restoration of unplanned water supply interruptions, restoration of unplanned sewer interruptions and attendance and clean up times of sewer overflows.

<sup>40</sup> Refer SA Water Annual Efficiency Report, November 2009, pg 6 that indicates this target was not achieved primarily due to the relocation of the Customer Contact Centre to Victoria Square and notes that by February call waiting times were back down around 20 seconds.

2. Percentage of properties with a standard connection to sewer within 20 working days of processing the application and receiving the fees.
  - ▲ Number of properties per year with a sewer overflow caused by a sewer mains choke (inside a building) nearly doubled in the metropolitan region (from 52 in 2007/08 to 99 in 2008/09 – target 80).

The NPR indicators provided by SA Water demonstrate that its performance is broadly comparable to other metropolitan and regional utilities (for Mt Gambier and Whyalla) and its own past performance. However, the Commission notes the following:

- ▲ Water quality complaints rose substantially in Mt Gambier between 2006-07 and 2007-08, and are expected to remain high in 2008-09 due to pumping modifications;<sup>41</sup>
- ▲ The 2008-09 figures for sewer main breaks per 100km in Adelaide are the highest for any large metropolitan utility (although a high level of caution should be used in comparing utilities for this indicator).<sup>42</sup> SA Water has reported only the data up to 2007-08, which also show a relatively high level of breaks and chokes (3rd highest);
- ▲ Percentage of water recycled (% of effluent recycled) in Adelaide is the highest of any large metropolitan utility; and
- ▲ Net greenhouse gas emissions increased substantially between 2006-07 and 2007-08 (from 845 tonnes of CO<sub>2</sub>-e per 1,000 properties to 994), however, the internal indicator reported by SA Water reduced from 2006-07 to 2007-08, due to the purchase of carbon offset credits.

In terms of costs, Transparency Statement – Part A notes that while SA Water's operating costs are relatively low compared to other metropolitan and regional utilities in Australia (particularly for Adelaide), costs increased in 2008-09 due to costs associated with temporary water purchases, water saving product rebates, the introduction of quarterly billing and the relocation of the head office.<sup>43</sup>

Transparency Statement – Part A notes that benchmarking of performance and costs across utilities is limited due to differences in market conditions and operating environments, and conclusions based on this data should be treated with care.<sup>44</sup>

---

<sup>41</sup> Refer SA Water Annual Efficiency Report, November 2009, pg 15

<sup>42</sup> The 2008-09 NPR warns that a high level of caution should be used in comparing utilities for this indicator. The definition was amended in 2008-09 to include all breaks and chokes reported in the property connection sewer if owned or maintained by the utility. The 2008-09 NPR notes that there are differences in the way that utilities report this indicator, with some utilities continuing to report only mains breaks and chokes.

<sup>43</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia, pg 31

<sup>44</sup> Ibid, pg 19

Notwithstanding this caveat, Transparency Statement – Part A goes on to conclude that SA Water's operating costs and standard of service indicate that its business costs are efficient.<sup>45</sup>

### 3.2.3 The Commission's assessment

In its 2009-10 Inquiry the Commission noted that improvements in disclosure had been made in the 2009-10 Transparency statement and 2008 Annual Efficiency Report, particularly in terms of the inclusion of:

- ▲ internal performance information in addition to NPR information;
- ▲ a broad discussion of trends in future operating costs; and
- ▲ information on total costs (OMA plus depreciation, which is an NPR performance indicator).

However, the Commission also identified the following issues with disclosure in its 2009-10 Inquiry:

- ▲ as in previous years, there was still insufficient forward-looking cost information;
- ▲ no targets or forward projections were provided for NPR information;
- ▲ NPR information provided was limited in comparison with the previous year in terms of representation of different SA Water regions (which was limited to Mt Gambier, Whyalla and Adelaide) and customer feedback information (which did not allow for comparison of results across years). The Commission notes that the NPR reporting requirements only relates to regional centres with more than 10,000 connections, and that Mt Gambier, Whyalla and Adelaide are the only regions that meet this definition in South Australia; and
- ▲ targets for internal performance indicators were provided for 2007-08 and 2012-13, but not the intervening years.

The Commission notes that further improvements in disclosure have been made in relation to information on efficient business costs. This is primarily in the areas of:

- ▲ additional information on the planning, approval and procurement processes for capital expenditure; and
- ▲ additional information on Government scrutiny of operating expenditure and some detail on reasons for increases in 2008-09.

The data provided in the NPR continue to show that SA Water has provided metropolitan services at a relatively low cost per property in comparison with other water utilities (although it no longer has the lowest costs per property). For regional

---

<sup>45</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 35

water and sewerage, operating costs per property have increased substantially from 2006-07 to 2007-08 and again to 2008-09. These cost increases have occurred despite very little change in key statistics (specifically: water pumped from the Murray; total water supplied; and customer growth/connected properties), driven largely by water security measures in the context of the drought conditions experienced.

Notwithstanding the abovementioned improvements in disclosure, the Commission maintains a number of concerns about the level of disclosure relating to the efficiency of SA Water's (in Transparency Statement – Part A and Annual Efficiency Report). In particular, these relate to limited information on:

- ▲ targets and projections for performance; and
- ▲ forward looking information on costs.

### ***Performance reporting***

One of the key issues with the reporting of NPR indicators is that, while SA Water provides occasional commentary on expectations of future trends in performance, it does not provide any forecasts regarding future performance targets.

This observation also applies to SA Water's reporting of internal performance indicators. In the 2009 Final Report, the Commission noted that the 2008 Annual Efficiency Report provided internal performance information for 2006-07 and 2007-08 and targets for 2012-13, but no targets for intervening years. In the 2009 Annual Efficiency Report, SA Water has again provided a future target, but this time for 2013-14 rather than 2012-13. The Commission notes that in the majority of cases the new 2013-14 target are set at the same level as previously reported for the 2012-13 targets.

In addition, for a number of internal performance indicators, SA Water's current performance is significantly better than target. However, the future targets generally remain unchanged from current levels, and are occasionally worse than current performance. In particular, this observation applies to the following indicators:

- ▲ Number of properties with  $\geq 3$  unplanned water interruptions per year;
- ▲ Number of properties with a sewer overflow caused by a sewer mains choke; and
- ▲ Number of type 1 & 2 wastewater notifications<sup>46</sup>.

Without clear meaningful targets, which are reflective of customers' desired level of performance for future years, it is difficult to make an assessment as to whether or

---

<sup>46</sup> Type 1 incidents are those that are causing or threatening to cause serious or material environmental harm. Type 2 incidents are those that are causing or that could cause environmental harm but are not of a high impact or on a wide scale.

not costs are efficient, and increases or decreases in costs are justified. On the basis that water prices are reflective of SA Water's performance, the Commission notes there may be justification for adjusting the targets. Alternatively, if the targets are consistent with consumer preferences, it could be argued that SA Water is performing at a level that is greater than that which customers are willing to pay for. Based on the material presented to the Commission, Cabinet was not presented with any information on consumer preferences and extent to which an appropriate balance has been struck between customer service standards and prices.

### **Forward looking costs**

The Commission's key concern with respect to the information provided by SA Water on the efficiency of business costs is the limited information on forward looking costs.

The provision of forward looking operating cost information is limited to the estimates provided for 2009-10 to 2013-14 in Appendix 1 of Transparency Statement – Part A and the broad descriptions of future expectations in the Annual Efficiency Report.

In its 2009-10 Inquiry, the Commission repeated its previously stated view that:

*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... 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. (p.23)*

The Commission considers that this comment still applies.

In addition, the Commission notes that the operating cost forecasts provided for 2010-11 and future years have changed since the 2009-10 Transparency Statement – Part A.

Table 2 sets out the forecasts for whole of business operating costs provided in the 2009-10 Transparency Statement – Part A and the 2010-11 Transparency Statement – Part A. These figures show a significant increase in operating expenditure in the 2010-11 forward estimates.

*Table 2: SA Water forecasts of OMA costs (2007-08 dollars)*

\$M	2008-09	2009-10	2010-11	2011-12	2012-13	TOTAL
2009-10 Transparency Statement	344	334	346	368	377	1,769
2010-11 Transparency Statement <sup>47</sup>	376 (actual)	388	427	403	446	2,040
<i>Difference</i>	<i>32</i>	<i>54</i>	<i>81</i>	<i>35</i>	<i>69</i>	<i>271</i>

The 2010-11 Transparency Statement – Part A indicates that 2008-09 increases in operating costs per property are due to temporary water purchases, water security measures, and relocation of the head office to Victoria Square.<sup>48</sup>

However, while the 2009 Annual Efficiency Report goes into detail as to why costs are increasing over time, there is no clear explanation of why cost forecasts have increased so substantially from previous estimates.

The Commission has been advised by the Department of Treasury and Finance that as part of the Government’s budgetary process, Cabinet is provided with additional information relating to a number of pricing pressures that have led to changes in SA Water’s forecasts of operating expenditures. However based in the information provided to the Commission within the Terms of Reference for review, which is understood to be consistent with Cabinet advice, the Commission is unable to comment on the extent to which this information has impacted on pricing decisions.

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

***Adequacy of information: Did Cabinet receive information that would 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 operating, maintenance and administrative costs being efficient. This shows that the principle of efficient costs has been considered by Cabinet. However, in the material provided to Cabinet and to the Commission for review, there is insufficient information that would have

<sup>47</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia, pg 37

<sup>48</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 31



reasonably enabled Cabinet to make pricing decisions consistent with the relevant pricing principles. The inadequacy relates primarily to showing that the forward looking costs, upon which a pricing decision must rely, are efficient.

The Commission has been advised by the Department of Treasury and Finance that as part of the Government's budgetary process, Cabinet is provided with additional information considered commercial in confidence. However based in the information provided to the Commission within the Terms of Reference for review, which is understood to be consistent with Cabinet advice, the Commission is unable to comment on the extent to which this information has impacted on pricing decisions.

***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

Transparency Statement – Part A summarises the information received by Cabinet, although some additional information was provided to Cabinet that was not included in Transparency Statement – Part A

### **3.3 Capital Expenditure**

Capital expenditure is a key driver of increases in SA Water's prices.

#### **3.3.1 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<sup>49</sup>.*

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.

The NWI pricing principles for recovering capital expenditure do not directly address the issue of the efficiency of capital expenditure forecasts, other than in paragraph 19 which provides that the RAB should only reflect "prudent" capital expenditure:

*The RAB comprising prudent new investments and legacy investments should be rolled forward each year in accordance with the following formula, which can be expressed in nominal or real terms:*

$$RAB_t = (RAB_{t-1} + \text{Prudent Capital Expenditure}_t - \text{Depreciation}_t - \text{Disposal}_t \text{ (discarded assets)}).$$
*(Where  $t$  = the year under consideration).<sup>50</sup>*

<sup>49</sup> Refer to the NCC website: <http://ncp.ncc.gov.au/docs/PIAg-001.pdf> pg 112

<sup>50</sup> Refer endorsed NWI Pricing Principles available on the following website: <http://www.environment.gov.au/water/publications/action/pubs/nwi-pricing-principles.pdf> pg 8

### 3.3.2 Transparency Statement – Part A Comments

Table 3 sets out the proposed capital expenditure in the roll-forward estimate in Appendix 1 as provided in the 2009-10 Transparency Statement – Part A and the 2010-11 Transparency Statement – Part A.

**Table 3: SA Water forecast capital expenditure (\$m nominal)**

\$M	2008-09	2009-10	2010-11	2011-12	2012-13	TOTAL
<b>2009-10 Transparency Statement<sup>51</sup></b>						
Water	530	728	476	212	491	2,436
Wastewater	115	187	176	124	57	659
<b>Total</b>	<b>645</b>	<b>914</b>	<b>652</b>	<b>336</b>	<b>548</b>	<b>3,096</b>
<b>2010-11 Transparency Statement</b>						
Water	537 (actual)	932	564	187	163	2383
Wastewater	113 (actual)	181	238	176	61	769
<b>Total</b>	<b>650 (actual)</b>	<b>1,113</b>	<b>802</b>	<b>363</b>	<b>224</b>	<b>3,152</b>
<i>Difference</i>	<i>5</i>	<i>199</i>	<i>150</i>	<i>27</i>	<i>(324)</i>	<i>56</i>

The Commission notes that the capital cost forecasts provided for 2010-11 and future years have changed since the 2009-10 Transparency Statement – Part A. The 2009 Annual Efficiency Report contains commentary concerning future capital expenditure, including the following:

- ▲ the Adelaide Desalination Plant (ADP), which dominates the capital expenditure program, will begin delivering water (approximately 15 millions litres per day) by April 2011<sup>52</sup> progressing to 50GL capacity by the end August 2011 and full 100GL capacity by the end of December 2012<sup>53</sup>. The Government's decision to expand the ADP from the originally planned 50GL to 100GL is reflected in a significant increase in capital expenditure in 2009-10 and 2010-11 in comparison with the estimates provided in the 2009-10 Transparency Statement – Part A<sup>54</sup>;
- ▲ metropolitan sewerage capital expenditure is set to increase significantly above 2008-09 levels in 2009-10 and 2010-11 to meet demand growth. Key

<sup>51</sup> Note, the 2009-10 capital expenditure (as outlined in the 2009-10 Transparency Statement – Part A) has been inflated by 2.5% in line with SA Water assumptions

<sup>52</sup> The Commission notes that on page 79 of the 2009-10 SA Water Annual Efficiency Report, SA Water indicates that the project has been fast tracked, with the delivery of 'first water' from the ADP in December 2010, with capacity reached in late 2012. Subsequent to the provision of that Report, the timing on the delivery of 'first water' has been revised to April 2011.

<sup>53</sup> Further information regarding the Desalination Project is available on the SA Water website: [http://www.sawater.com.au/SAWater/WhatsNew/MajorProjects/ADP\\_ProjectInfo.htm](http://www.sawater.com.au/SAWater/WhatsNew/MajorProjects/ADP_ProjectInfo.htm)

<sup>54</sup> Refer, 2009-10 Transparency Statement – Part A, pg 44 and, 2010-11 Transparency Statement – Part A, p.60

projects are the capacity upgrades to Christies Beach and Aldinga Wastewater Treatment Plants;

- ▲ regional water capital expenditure is expected to decline from 2010-11 to 2012-13 before increasing again in 2013-14 due to upgrades to treatment plants driven by growth; and
- ▲ regional sewerage capital expenditure is expected to decline from 2011-12 to 2012-13 before increasing again in 2013-14 due to upgrades to treatment plants driven by growth.<sup>55</sup>

Transparency Statement – Part A also includes proposed expenditure for SA Water’s capital program for 2009-10, an estimated total cost and an estimated completion date for each project (noting that costs provided include Government funding and contributed assets).<sup>56</sup> Table 4 provides a summary of the top five projects (by estimated total cost).

**Table 4: SA Water key capital expenditure projects (\$m nominal)**

PROJECT	EXPECTED COMPLETION	2009-10 EXPENDITURE	ESTIMATED TOTAL COST <sup>57</sup>
Adelaide Desalination Plant	December 2012 <sup>58</sup>	832.8	1,824.0
Christies Beach Wastewater Treatment Plant Upgrade	Early 2012	80.0	272.0
Glenelg to Adelaide Parklands Park Lands Recycled Water Project	December 2009	17.2	74.9
Southern Urban Re-use Project	December 2010	35.5	62.6
Bird in Hand Wastewater Treatment Plant Nutrient Reduction	December 2012	10.3	38.5

In its 2009-10 Inquiry, the Commission noted that it considered that the escalation factor of 6% applied by SA Water to capital project costs was likely to overstate the level of efficient capital costs. In its response to the 2009-10 Inquiry, the Government noted that it would address this issue when making its 2010-11 pricing decision.

The Government has adopted an escalation factor of 3.5% for the 2010-11 pricing decision. This assumption applies to the escalation of new capital expenditure from

<sup>55</sup> Refer SA Water Annual Efficiency Report, November 2009, pp 78-79

<sup>56</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia Appendix 1, pg 67

<sup>57</sup> Capital expenditure provided includes Federal Government funding and contributed assets. Estimated completion date is when final expenditure occurs, and may not coincide with assets becoming operational. Refer SA Water, 2009-10 Transparency Statement – Part A, Appendix 1, pg 68

<sup>58</sup> The Commission notes that the 2009/10 SA Water capital budget (as provided to Cabinet) outlines the expected completion date for the ADP as December 2012. As outlined in section 3.3.2, “first” water is projected to be delivered by April 2011.

2010-11 onwards. This escalation factor only applies to projects that do not have full financial approval.<sup>59</sup>

Transparency Statement – Part A indicates that forecast capital expenditure on the ADP would not be subject to escalation, as it is subject to a contract established by competitive tendering processes.

### 3.3.3 The Commission’s assessment

In previous inquiries, the Commission commented that Transparency Statement – Part A provided limited or, in some cases, no information regarding whether:

- ▲ well developed asset management planning and processes are in place and being followed;
- ▲ projects, including projected water security 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.

The Commission notes that improvements in disclosure have been made in the 2010-2011 Transparency Statement – Part A in relation to providing an overview of the capital planning framework (as outlined in section 3.2.2 above), total project costs for the ADP and expected completion dates for key projects.

However, the Commission considers that the above observations continue to apply, particularly in relation to the lack of full disclosure of project costs and progress.

While total capital expenditure has not changed substantially from the previous year, there has been some increase from previous forecasts and a substantial bring-forward of the capital program again. As noted above, Transparency Statement – Part A indicates that this is largely due to bringing forward of the ADP and an expansion in its capacity from 50GL to 100GL.

The Commission notes that the Government has revised its assumption of 6% escalation to forecast capital expenditure not subject to full financial approval down to 3.5%. It is argued that this is the inflation forecast used in the WACC calculation and is consistent with financial market expectations. However, the inflation forecast for the purposes of calculating the WACC was made in 2007. It may be more appropriate to base the escalation rate on a more recent forecast if the intention is to escalate forward capital expenditure assumptions consistent with market

---

<sup>59</sup> Full Financial Approval means those Projects that have been approved via appropriate financial authorisation delegations.

expectations. In the material provided to the Commission for review, understood to be consistent with Cabinet advice, projects with full financial approval will still be escalated at 6% per annum.

The Commission notes that more information on changes to capital costs since 2009-10 was provided to Cabinet than is contained in Transparency Statement – Part A. While this information does not provide specific capital costs for each project, it does provide some detail on cost pressures faced by SA Water in 2010-11.

The Commission acknowledges the Cabinet documents do provide additional information on capital expenditure, particularly concerning updates to the capital expenditure program in 2010-11. However, these details are extremely limited, with the result that little clarity is added to the issue of the prudence and efficiency of the capital expenditure program.

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

#### ***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

Based on the material provided to the Commission, there does not appear to be sufficient information that would have reasonably enabled Cabinet to make pricing decisions consistent with the relevant pricing principles. The inadequacy relates primarily to showing whether or not the proposed capital expenditure is prudent and efficient and, therefore, whether or not the proposed prices are reflective of forecast efficient costs.

The Commission notes the inclusion of information on SA Water's asset management framework. However, similar to previous years, the Commission considers that necessary steps to achieving adequacy include providing information to demonstrate that:

- ▲ projects 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.

At a minimum, the Commission considers that it is reasonable to expect SA Water to provide the following information for capital expenditure in 2010-11:

- ▲ for projects above \$11 million – a narrative description for each project covering scope, drivers, costs, and phasing of spend; and
- ▲ for projects between \$4 - \$11 million – a listing of projects detailing planned phasing of spend and a short descriptive narrative.

### **Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?**

Based on the material that was presented to Cabinet with which the Commission has been provided, the Commission is satisfied that the information regarding capital expenditure is adequately summarised in Transparency Statement – Part A.

## **3.4 Asset Valuation**

### **3.4.1 Pricing Principles**

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

*The deprival value methodology should be used for asset valuation, unless a specific circumstance justifies another method.<sup>60</sup>*

NWI Clause 66(i) states:

*Metropolitan*

*Continued movement towards upper bound pricing by 2008<sup>61</sup>*

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

The NWI pricing principles refer to the process for rolling forward the asset base, setting out the following formula for calculating asset values in each year:

$RAB_t = (RAB_{t-1} + Prudent\ Capital\ Expenditure_t - Depreciation_t - Disposal_t (discarded\ assets))$ .

*(Where t = the year under consideration)<sup>62</sup>.*

The pricing principles also state that:

- *Where assets are optimised, they should not be subject to further optimisation unless there are relevant changes in market circumstances.*
- *Where DRC or DORC is used as a basis for asset values, the RAB comprising new investments and legacy investments should be re-valued through an independent appraisal on a rolling basis in accordance with Accounting Policy Standards.*
- *Where a renewals annuity is used, asset values should not be depreciated.<sup>63</sup>*

---

<sup>60</sup> Refer to the NCC website: <http://ncp.ncc.gov.au/docs/PIAg-001.pdf> pg 112

<sup>61</sup> Refer NWC website: <http://www.nwc.gov.au/resources/documents/Intergovernmental-Agreement-on-a-national-water-initiative.pdf> pg 13

<sup>62</sup> Refer endorsed NWI Pricing Principles available on the following website: <http://www.environment.gov.au/water/publications/action/pubs/nwi-pricing-principles.pdf> pg 8

<sup>63</sup> Ibid

### 3.4.2 Transparency Statement – Part A Comments

Historically, Transparency Statements have indicated that SA Water's assets are valued using a fair value method based on depreciated replacement costs. Similar to the 2009-10 Transparency Statement – Part A, the 2010-11 Transparency Statement – Part A does not repeat this information, focussing instead on the approach for rolling forward the asset value and manner in which the inputs into the asset roll forward (capital expenditure, depreciation, return on assets) are derived.

Transparency Statement - Part A sets out the formula for the asset roll forward, which is consistent with the formula specified in the NWI pricing principles. It explains that the asset values as at June 2006 have been rolled forward in nominal terms, using an escalation rate of 3.5% per annum, consistent with the inflation forecast assumption in the real WACC calculation.<sup>64</sup>

### 3.4.3 The Commission's assessment

The Commission appreciates that, given the roll-forward approach that has been adopted, it is more relevant to discuss the inputs into the roll-forward than focus on the valuation methodology that underpins the initial asset value. This valuation methodology has been discussed in previous Inquiries, where the Commission has concluded that the fair value approach is adequate. The Commission's assessment of the Regulatory Asset Base in this Inquiry is therefore limited to the approach used to determine the inputs into the asset roll forward, which are discussed separately in this report.

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

***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

The Commission has previously judged the fair value approach to be adequate and it is satisfied that the Cabinet submission included sufficient information to demonstrate how the asset value was rolled forward from the previous year.

***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

The Commission considers the current information in Transparency Statement – Part A to be adequate.

---

<sup>64</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 39

## 3.5 Contributed Assets

### 3.5.1 Pricing Principles

The Guidelines for applying section 3 of the CoAG Strategic Framework state:

*In determining prices, transparency is required in the treatment of ... contributed assets...*<sup>65</sup>

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

Principle 6 of the NWI principles for recovering capital expenditure relates to contributed assets. Paragraph 23 provides that:

*New contributed assets<sup>i,ii,iii</sup> (i.e. grants/gifts from governments and contributions from customers (e.g. developer charges)) should be excluded or deducted from the RAB or offset using other mechanisms so that a return on and of the contributed capital is not recovered from customers<sup>iv</sup>. If a renewals annuity is used, it should include provision for replacement of contributed assets.*<sup>66</sup>

*Notes:*

*i. For contributed assets other than developer charges, funding should be recognised as an asset contribution only where there is clear contractual or policy evidence that this funding was meant to be used to lower long-term prices.*

*ii. For the purposes of principle 6, contributed assets exclude gifts or grants where there is clear contractual or policy evidence that charges be set to achieve full cost recovery, inclusive of the value of the gift or grant.*

*iii. Equity injections should be distinguished from grants /gifts /contributions.*

*iv. It is acceptable for principle 6 to apply to legacy contributed assets if adequate information is available to identify them.*<sup>67</sup>

Principle 10 of the NWI principles for urban water tariffs suggests, in paragraph 19, that:

*To avoid over-recovery, revenue from developer charges should be offset against the total revenue requirement either by excluding or deducting the contributed assets from the RAB or by offsetting the revenue recovered using other mechanisms.*<sup>68</sup>

### 3.5.2 Transparency Statement – Part A Comments

Transparency Statement – Part A provides the following in relation to contributed assets:

*The Government has continued to adopt the treatment of contributed assets outlined in previous transparency statements. SA Water's estimate of post corporatisation contributed*

---

<sup>65</sup> Refer to NCC website: <http://ncp.ncc.gov.au/docs/PIAg-001.pdf> pg 113

<sup>66</sup> Refer endorsed NWI Pricing Principles available on the following website: <http://www.environment.gov.au/water/publications/action/pubs/nwi-pricing-principles.pdf> pg 8

<sup>67</sup> Ibid

<sup>68</sup> Refer endorsed NWI Pricing Principles available on the following website: <http://www.environment.gov.au/water/publications/action/pubs/nwi-pricing-principles.pdf> pg 11



*assets has been deducted from the RAB. The post corporatisation estimate of contributed assets is considered to be robust, defensible and consistent with the NWI Pricing Principles.*

*As noted in previous transparency statements, it is considered that adequate information is not available to identify contributed assets prior to 1995.<sup>69</sup>*

### 3.5.3 The Commission's assessment

The Commission considers that the approach described in Transparency Statement – Part A is consistent with the NWI principles.

However the Commission notes that Transparency Statement – Part A does not provide any information regarding the quantum of forecast contributed assets. As noted in Section 3.5.2, capital expenditure by project provided in Transparency Statement – Part A includes (but does not identify) Federal Government funding and contributed assets.

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

***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

The treatment of contributed assets in the information provided to Cabinet is adequate, in so far as it sets out the new NWI Principle 6 and explains why the approach adopted in respect of legacy contributed assets is consistent with this Principle. In general, this information will have enabled Cabinet to make pricing decisions consistent with the high level outcomes.

The Commission understands that SA Water's asset planning is undertaken on a gross capital expenditure basis and that forecast contributions are deducted in order to develop a net capital expenditure forecast to be used for pricing purposes. Forecast contributions therefore provide an important link between capital plans and pricing.

***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

The Commission is satisfied that the information provided to Cabinet about contributed assets is adequately summarised in Transparency Statement – Part A.

---

<sup>69</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 40

## 3.6 Depreciation

### 3.6.1 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]<sup>70</sup>*

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<sup>71</sup>*

In addition, clause 65 of the NWI refers to the outcome “avoid monopoly rents”.

### 3.6.2 Transparency Statement – Part A Comments

Transparency Statement – Part A notes that SA Water has continued to estimate depreciation in the upper bound using the straight-line method, based on the estimated average useful lives of the assets.

Transparency Statement – Part A outlines the manner in which asset lives are estimated, which has changed from previous pricing decisions:

*Legacy assets, or those in existence as at 1 July 2006, are estimated to have an average useful life of 50 years. All other new or replacement assets have an estimated average useful life of 60 years except for water security related projects that are separately identifiable, for which individual depreciation schedules are used.<sup>72</sup>*

The Commission noted in the 2009-10 Transparency Statement – Part A, that the 2008-09 pricing decision assumed that new assets had a useful life of 100 years. For legacy assets, the previous approach was based on a “modified financial depreciation rate”. The 2009-10 Transparency Statement – Part A also stated that the outcome of changing the approach to estimating the useful life of assets is a “relatively minor increase in the GFFCR”. It is also noted that regulatory depreciation is recognised at the time that a new asset is expected to be commissioned, and that work-in-progress is not depreciated.

---

<sup>70</sup> Refer to NCC website: <http://ncp.ncc.gov.au/docs/PIAg-001.pdf> pg 112

<sup>71</sup> Refer NWC website: <http://www.nwc.gov.au/resources/documents/Intergovernmental-Agreement-on-a-national-water-initiative.pdf> pg 13

<sup>72</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 43

### 3.6.3 The Commission's assessment

In its 2009-10 Final Report, the Commission commented favourably on the inclusion of additional information on the methodology used to estimate asset lives, and supported the movement towards an approach that explicitly distinguished between asset classes, where asset lives may be different. In addition, the Commission acknowledged the establishment of separate depreciation schedules for the water security projects was a positive step.

SA Water has provided equivalent information in the 2010-11 Transparency Statement – Part A as it did in 2009-10.

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

***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

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

***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

Transparency Statement – Part A provides an adequate summary of the methodology for calculating regulatory depreciation.

## 3.7 Externalities

While issues associated with the infrastructure and operational aspects of potable water and sewerage 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 management of environmental impacts, is, in part, through the consideration of “externalities”.

The inclusion of externalities in the setting of water prices ensures that consumers can make decisions about water use, facing the full economic costs resulting from that water use. This means that the decision will be consistent with the principle of efficient use of potable water and sewerage infrastructure.

### 3.7.1 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.<sup>73</sup>*

#### NWI clause 65(ii) states:

*.. full cost recovery for water services to ensure business viability and avoid monopoly rents, including recovery of environmental externalities where feasible and practical.<sup>74</sup>*

Furthermore, as noted by the Commission in previous Inquiry reports, clause 73 of the NWI 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. However, the Commission also notes that, for lower bound revenue purposes, the NWI pricing principles adopt the narrow definition of externalities consistent with the 1994 principles. It is unclear whether or not this definition also applies for upper revenue bound purposes.

### 3.7.2 Transparency Statement – Part A Comments

As stated in Transparency Statement – Part A, SA Water has maintained its position that, until there is a nationally consistent pricing approach to address the impact of externalities, it will continue to include externality costs that are “*both attributable to and incurred by*” SA Water in the upper revenue bound and lower revenue bound in compliance with CoAG guidelines and previous practice.

Consistent with previous practice, the 2010-11 Transparency Statement – Part A provides a range of non-market mechanisms (e.g. Coastal Water Study, water planning) and management activities (e.g. Environmental Impact Assessment, SA Water’s Climate Change Sector Agreement), which are included as externalities.

In its response to the 2009 Final Report, the Government acknowledged:

*While work on these national developments is progressing, the Government through its Water for Good Plan aims to identify costs of providing water planning and management, to introduce an associated cost-recovery framework and to set charges in accordance with the framework by 2011-12.*

*It is appropriate to continue to reflect externality costs to the extent actually incurred by SA Water.<sup>75</sup>*

---

<sup>73</sup> Refer to NCC website: <http://ncp.ncc.gov.au/docs/PIAg-001.pdf> pp 112-113

<sup>74</sup> Refer NWC website: <http://www.nwc.gov.au/resources/documents/Intergovernmental-Agreement-on-a-national-water-initiative.pdf> pg 13

### 3.7.3 The Commission's Assessment

The Commission notes that the Government of South Australia continues to take a narrow view on the treatment of environmental externalities, while waiting for national clarity on this issue.

While the Commission notes the uncertainty surrounding national clarity, it also continues to have the view that the NWI requires more to be done on the identification and management of externalities. This is supported in the NWC's 2009 NWC Second Biennial Assessment of Progress in Implementation of the NWI, which acknowledged that while some states had investigated or implemented the use of pricing and market-based instruments to address environmental externalities, all states had further work to do to explore the feasibility of such actions.

The NWC report concluded that:

*The Commission recommends that NWI parties renew collective and individual efforts to respond to NWI clause 73 (use of pricing and markets to deal with environmental externalities), given that well-designed externality pricing can be a powerful and enduring way of dealing with the environmental impacts of water provision and use.<sup>76</sup>*

Therefore, the Commission does not consider that the work being undertaken through NWC should prevent further progress being made on the management of externalities in South Australia, where it is feasible and practical to identify the cost of externalities.

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

#### ***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

The material provided to Cabinet does not contain information that would have reasonably enabled Cabinet to make pricing decisions consistent with the NWI principles. Further work is required to at least identify the relevant externalities.

#### ***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

The Commission is satisfied that the information provided to Cabinet about externalities is adequately summarised in Transparency Statement – Part A.

---

<sup>75</sup> Refer 2009-10 Transparency Statement on Wastewater Prices in South Australia (Part C) : [http://www.treasury.sa.gov.au/dtf/infrastructure\\_support/water.jsp](http://www.treasury.sa.gov.au/dtf/infrastructure_support/water.jsp)

<sup>76</sup> Refer: <http://www.nwc.gov.au/www/html/147-introduction---2009-biennial-assessments.asp> pg 186

### 3.8 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 (also referred to as the weighted average cost of capital or WACC) 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 assets component in pricing considerations ensures 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.

#### 3.8.1 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.<sup>77</sup>*

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]. [Upper Bound pricing] [Emphasis added]<sup>78</sup>*

NWI Clause 66(i) is relevant in that it requires continued movement towards upper bound pricing by 2008.

The NWI pricing principles for the recovery of capital expenditure contain several clauses relevant to the cost of capital. Importantly, the principles distinguish between the WACC to apply to new capital expenditure and the WACC to apply to legacy capital expenditure (the initial asset base). In respect of the WACC to apply to new capital expenditure paragraph, 15 of Principle 1 states that:

*The rate of return should be consistent with the Weighted Average Cost of Capital (WACC) with the cost of equity derived from the Capital Asset Pricing Model (CAPM).<sup>79</sup>*

A footnote to this clause explains that the WACC should be consistent with the form of asset valuation methodology adopted. For example, a nominal WACC

---

<sup>77</sup> Refer to NCC website: <http://ncp.ncc.gov.au/docs/PIAg-001.pdf> pg 104

<sup>78</sup> Ibid, pg 112

<sup>79</sup> Refer endorsed NWI Pricing Principles available on the following website: <http://www.environment.gov.au/water/publications/action/pubs/nwi-pricing-principles.pdf> pg 6

should apply to a historic cost valuation and a real WACC should apply to a current cost valuation.

In respect of the WACC to apply to legacy capital expenditure, the notes to paragraph 18 of Principle 4 state that:

*The return earned should be no less than the return being achieved at the legacy date, and, if the return being earned before the legacy date is above the current WACC return, no more than the return being achieved at the legacy date.<sup>80</sup>*

The legacy date set out in Transparency Statement – Part A is 30 June 2006.

### 3.8.2 Transparency Statement – Part A Comments

Transparency Statement – Part A indicates that SA Water has adopted a “Go Forward Full Cost Recovery” (GFFCR) approach while in transition toward upper bound pricing. The GFFCR approach is defined as one in which:

*... new and replacement assets earn a rate of return that is based on the WACC and the rate of return on legacy assets, valued at depreciated replacement cost, is based on the rate of return at the legacy date.<sup>81</sup>*

Transparency Statement – Part A sets out the values of the respective WACCs used to determine the GFFCR. They are:

- ▲ for new and replacement assets, a 6% real pre-tax rate of return;
- ▲ for legacy water assets, a 3.1% real pre-tax rate of return; and
- ▲ for legacy wastewater assets, a 7.2% real pre-tax rate of return.

In determining the upper revenue bound (URB) a 6% real pre tax rate of return has been used for all assets.

Appendix 6 to Transparency Statement – Part A, includes a description of the WACC formula, a summary of the value of the WACC parameters, and brief definitions of the parameters. The 6% WACC is the same as that used to determine SA Water’s prices in 2007-08, 2008-09 and 2009-10. The WACC parameters are therefore based on historic observations: for example the risk free rate of interest was estimated at 24 October 2007.

In addition to the current WACC calculation, Transparency Statement – Part A sets out the calculation of the rate of return on metropolitan legacy assets. This is based on the revenue being earned on these assets at the legacy date of 30 June 2006, taking into account operating expenditure and depreciation.

Transparency Statement – Part A also includes a comparison with decisions by other regulators concerning the WACC, including:

---

<sup>80</sup> Ibid, pg 7

<sup>81</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 40

- ▲ 5.09% (ESC, 2009 Water Price Review);
- ▲ 6.5% (IPART, Gosford City Council and Wyong Shire Council Water Determination; and
- ▲ 5.7% (AER, WACC for electricity transmission and distribution network service providers).<sup>82</sup>

### 3.8.3 The Commission's Assessment

The Commission believes that the information provided regarding the WACC is broadly satisfactory and, to the extent that the GFFCR incorporates a separate WACC for new capital expenditure and legacy assets, is consistent with the NWI pricing principles.

In its 2009-10 Inquiry, the Commission raised its concerns about the WACC for new and replacement assets being based on market information that is not current. In particular, it noted that the risks of not reflecting market conditions in the WACC, and the relationship between the frequency of setting prices and debt refinancing, should be recognised in Transparency Statement – Part A.

In response to the concerns raised by the Commission, Transparency Statement – Part A provides the following discussion points concerning risks of not updating the WACC:

- ▲ the duration of SA Water's debt has been extended recently by the Government to approximately three years;
- ▲ in general, medium to long-term fluctuations in the cost of debt have tended to average out and the cost of debt over the long-run is consistent with the estimate of the WACC; and
- ▲ regulators generally set prices for a period of three to five years, over which there will be fluctuations in key parameters used to calculate the WACC. The Government considers that the approach taken to the WACC is consistent with the approach that would be taken by a regulator in setting a medium term price path.<sup>83</sup>

The Commission agrees that the approach of retaining the same WACC over a number of years is consistent with the approach taken in industries with independent price regulation, and considers that this approach may provide benefits in terms of price stability.

As provided in Appendix 6, Transparency Statement – Part A, the Commission notes the provision of information regarding the WACC methodology. However, the

---

<sup>82</sup> Ibid, pg 42

<sup>83</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pp.41-42



Commission remains concerned about the lack of information on the derivation of the parameters used to calculate the WACC, particularly given the following:

- ▲ the WACC was determined prior to the global financial crisis; since this time, several of the WACC parameters have changed significantly and do not necessarily appear to be returning to pre-crisis levels;
- ▲ the general practice of economic regulators in setting a WACC for the regulatory period provides some scope to the businesses to align their financing arrangement (in line with their financial risk management strategies) in the knowledge that the WACC parameters will remain fixed for a period of time (typically between 3 to 5 years). However in SA Water's current price setting processes, where the regulatory period is for 1 year only (ie prices are reviewed each year and there is no set price path) SA Water does not have the same opportunity to align its financing strategy to the regulatory period.<sup>84</sup> Therefore leaving the WACC parameters unchanged does not serve the same purpose; and
- ▲ there is no indication of if or when the WACC might be updated to reflect current market conditions. This creates uncertainty and a lack of transparency.

With regard to comparisons with the decisions of other regulators, the Commission notes that in the most recent water regulatory decision IPART provided a 7.4% pre-tax real WACC for Country Energy's water business. This is significantly higher than the 6% applied to SA Water.

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

#### ***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

The Commission's view is that the information provided to Cabinet on the rate of return is sufficient to have enabled Cabinet to make pricing decisions consistent with the pricing principles.

The Commission notes that the information presented in Transparency Statement – Part A represents an improvement in disclosure in comparison to the previous year. Specifically, this relates to the additional information provided on:

- ▲ the risks associated with retaining the same WACC over a number of years;
- ▲ SA Water's debt financing arrangements; and
- ▲ the calculation of the return on legacy assets.

---

<sup>84</sup> Noting that annual financing for SA Water is not feasible.

However, as noted in the Commission's 2008-09 and 2009-10 inquiries, the material would be improved were more detailed information presented to explain the derivation of each WACC parameter.

***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

The Commission is satisfied that the information provided to Cabinet about the return on assets is adequately summarised in Transparency Statement – Part A.

### **3.9 Tax Equivalent Regime**

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

#### **3.9.1 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.

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<sup>85</sup>*

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

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

The 2010-11 Transparency Statement – Part A states that:

*SA Water is liable for the full range of rates and taxes or their equivalents as if it were not a State owned business. This includes corporate tax and a range of land tax and council rates.*

*It is unnecessary to include a separate taxation amount in the revenue requirements, as the return of assets...is estimated using a pre-tax WACC.<sup>86</sup>*

---

<sup>85</sup> Refer to NCC website: <http://ncp.ncc.gov.au/docs/PIAg-001.pdf> pp 112-113

<sup>86</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 48

A corporate tax rate of 30% is assumed in the pre-tax WACC calculations.

### 3.9.3 The Commission's Assessment

The inclusion of a 30% corporate tax rate in deriving a pre-tax WACC is common regulatory practice and is considered to be consistent with the combined pricing principles.

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

***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

Information presented to Cabinet relating to the TER is adequate.

***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

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

## 3.10 Efficient Resource Pricing

The 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 importance at present given the proposals for new augmentations to water supply infrastructure in South Australia.

### 3.10.1 Pricing Principles

The CoAG Strategic Framework requires:

*the adoption of pricing based on the principles of consumption based pricing.<sup>87</sup>*

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<sup>88</sup>*

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

*economic regulators ... should determine the level of revenue for a water business based on efficient resource pricing.<sup>89</sup>*

“Efficient resource pricing” is defined in the CoAG Strategic Framework as including:

---

<sup>87</sup> Refer to NCC website: <http://ncc.ncc.gov.au/docs/PIAg-001.pdf> pg 103

<sup>88</sup> Ibid, pg 104

<sup>89</sup> Ibid, pg 112

*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<sup>90</sup>*

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....<sup>91</sup>*

The Commission also observes 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.*”

Finally, the NWI principles for urban water tariffs contain a number of principles related to efficient resource pricing and specifically, the adoption and calculation of two-part tariffs. These are as follows:

*Principle 2: Tariff structures*

10. *Two-part tariffs (comprising a service availability charge and a water usage charge) should be used to recover the revenue requirement from retail residential and non-residential and bulk customers<sup>i,ii</sup>*

*Notes:*

- i. Unless this is demonstrated to not be cost effective.*
- ii. This does not preclude charging for peak capacity.*

*Principle 3: Cost reflective tariffs*

11. *The water usage charge should have regard to the long run marginal cost of the supply of additional water<sup>i</sup>.*

*Notes:*

- i. On economic efficiency grounds the water usage charge should comprise only a single usage charge. However, governments may decide on more than one tier for the water usage charge for policy reasons, e.g. sending a strong pricing signal to encourage efficient water use; and having regard to equity objectives.*

*Principle 4: Setting the service availability charge*

12. *The revenue recovered through the service availability charge should be calculated as the difference between the total revenue requirement as determined in accordance with Principle 1 [efficient cost recovery] and the revenue recovered through water usage charges and developer charges.*
13. *The service availability charge could vary between customers or customer classes, depending on service demands and equity considerations. Unattributable joint costs should be allocated such that total charges to a customer must not exceed stand-alone cost or be less than avoidable cost where it is practicable to do so.*

*Principle 7: Differential water charges*

---

<sup>90</sup> Ibid, pg 113

<sup>91</sup> Refer NWC website: <http://www.nwc.gov.au/resources/documents/Intergovernmental-Agreement-on-a-national-water-initiative.pdf> pg 13

16. *Water charges should be differentiated by the cost of servicing different customers (for example, on the basis of location) where there are benefits in doing so and where it can be shown that these benefits outweigh the costs of identifying differences and the equity advantages of alternatives<sup>92</sup>.*

Notes:

- i. *Differential pricing may be achieved by upfront contributions, including developer charges.*

### 3.10.2 Transparency Statement – Part A Comments

The tariff structures for water and wastewater customers for 2010-11 have not changed from 2009-10. The following increases in tariff levels apply from 1 July 2010:

- ▲ potable water charges increased by 21.7% in real terms on average. This encompasses an increase of approximately 32% (in nominal terms) in each tier of the variable charge and approximately 3.5% (in nominal terms) in fixed charges;
- ▲ metropolitan wastewater charges increased by 0.8% in real terms on average; and
- ▲ regional wastewater charges increased by 1.3% in real terms on average, to move towards achieving similar average sewerage bills in country and metropolitan regions.

---

<sup>92</sup> Refer endorsed NWI Pricing Principles available on the following website:  
<http://www.environment.gov.au/water/publications/action/pubs/nwi-pricing-principles.pdf> pp 10 - 11

## Water

The changes to water tariffs for residential, non-residential and commercial customers are summarised in Table 5, below.

**Table 5: 2010-11 Water prices (\$ nominal)**

Tariff	2009-10	2010-11	% change (nominal)
<b>Non-commercial</b>			
Fixed charge (\$)			
Residential	137.60	142.40	3.5%
Non-residential (industry)	174.60	180.80	3.5%
Usage charge (\$/kL)			
First tier (<120 kL p.a.)	0.97	1.28	32%
Second tier (>120 kL p.a.)	1.88	2.48	32%
Third tier (>520 kL p.a. – single residential dwellings only)	2.26	2.98	32%
<b>Commercial</b>			
Fixed charge			
Property rating scale	0.0768%	0.0749%	n.a. <sup>93</sup>
Minimum (\$)	174.60	180.80	3.5%
Usage charge			
First tier (<120 kL)	0.97	1.28	32%
Second tier (>120 kL)	1.88	2.48	32%

Transparency Statement – Part A notes that it has increased the first two tiers of the water charge to a level that is more consistent with Long Run Marginal Cost (LRMC). The estimate of LRMC used by SA Water is \$2.40 per kL in 2010-11 dollars.<sup>94</sup>

SA Water notes that it has used the same measure of LRMC as used in 2009-10 for the 2010-11 pricing decision, which was \$2.35 per kL in 2009-10 dollars.

For usage in the third tier, the variable charge exceeds LRMC with the aim of achieving the policy objective of discouraging “excessive” water use in residential premises.

In relation to the fixed charge, Transparency Statement – Part A makes the following observations:

<sup>93</sup> After provision for movement in property rates, the rate change provided for an average 3.5% increase in commercial water rates.

<sup>94</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia p 54

*The service availability charge for commercial customers continues to be based on property value, with the minimum charge increased by 3.5%. In its 2009 Biennial Assessment, the NWC recommended that jurisdictions move away from water charges based on property values where they still exist. In the Water for Good plan, the South Australian Government has endorsed the following action:*

*In consultation with customers and over a period of five years, transition SA Water customers to water supply charges based on the number and size of the customer's meters while managing any unreasonable impacts for individual customers.<sup>95</sup>*

Transparency Statement – Part A also provides additional discussion in relation to the Government's affordability, equity and customer impact considerations in setting water charges.

Under the Government's Statewide Uniform Pricing Policy, the water charging structure is uniform between Adelaide and regional customers. The Statewide Uniform Pricing Policy therefore gives rise to a Community Service Obligation (CSO) issue, which is addressed below.

### **Sewerage Charges**

SA Water's tariff structure for sewerage charges is unchanged for 2010-11. All of SA Water's customers pay a charge based on property value, subject to a minimum charge, (\$308 per annum in 2010-11). Transparency Statement – Part A notes that the property rating scale for 2010-11 was still to be determined (as is the rating scale for the water supply charge). These rates were subsequently gazetted on 24 June 2010.

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. While the general intent is that country customers should pay similar amounts to city customers, Transparency Statement – Part A notes that metropolitan customers occupying the average residential property will pay a total sewerage charge of \$459 per annum, while country customer occupying the average residential property will pay \$382 per annum.

As noted above, there will be a relatively higher increase in regional sewerage charges than in metropolitan sewerage charges in order to reduce the gap between average regional charges and average metropolitan charges.

Similar to water charges, the Government's statewide pricing policy involves the payment of a CSO to ensure regional customers pay similar sewerage charges to metropolitan customers.

---

<sup>95</sup> Ibid, p 55

### **Community Service Obligations**

CSOs are paid by the Government to SA Water in the pursuit of Government policy objectives. Transparency Statement – Part A indicates that the most substantial CSO payments made to SA Water are a result of the statewide pricing policy. In 2008-09, 49% of revenue from SA Water’s country operations was obtained via CSO payments.

Clause 66(v)(c) of the NWI states:

*Rural and regional... 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.<sup>96</sup>*

Transparency Statement – Part A sets out the actual CSO payments to SA Water for 2008-09 and the estimated CSO payments for 2009-10 and 2010-11. In addition, Transparency Statement – Part A states:

*Full cost recovery for water and sewerage services in regional areas, and therefore compliance with the NWI, has been achieved via transparently reported CSO payments.<sup>97</sup>*

### **3.10.3 The Commission’s Assessment**

#### **Water**

The advent of the NWI principles for urban water tariffs has provided additional detail and clarity regarding aspects of efficient water pricing. In summary these principles require:

- ▲ movement towards cost reflective pricing;
- ▲ two-part tariffs to be applied;
- ▲ the water usage charge to have regard to the LRMC of supply;
- ▲ a single water use charge, with the caveat that governments may adopt more than one tier for policy reasons including equity or the need to encourage efficient water use;
- ▲ the fixed charge to reflect the difference between the revenue requirement and revenue from usage charges; and
- ▲ water charges to be differentiated by the cost of servicing different customers where there are benefits of doing so and where the benefits outweigh the costs of identifying differences and the equity advantages of alternatives.

---

<sup>96</sup> Refer NWC website: <http://www.nwc.gov.au/resources/documents/Intergovernmental-Agreement-on-a-national-water-initiative.pdf> pg 14

<sup>97</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia, pg 49



In respect of the first requirement, the Commission has previously noted the lack of information on assumptions around consumption, which is necessary for generating tariffs. Transparency Statement – Part A provides more detail than previous years in terms of aggregate consumption forecasts. Table 6 sets out SA Water’s consumption forecasts.<sup>98</sup> SA Water’s revenue is based on “normal” consumption, which does not take account of the reduction in consumption due to temporary water restrictions (which is considered only to have a short-term impact).

**Table 6: SA Water forecast consumption (GL)**

	2009-10	2010-11	2011-12	2012-13	2013-14
Normal	217	209	203	198	197
Restricted	190	190	198	198	197

The Cabinet documents provided to the Commission also provide some information regarding expected growth in water and sewerage customer numbers; however, this information is not reflected in Transparency Statement – Part A.

The Commission notes that SA Water’s revenue targets are set based on “normal” consumption forecasts. On the basis that temporary water restrictions are effectively reducing average consumption below their “normal” levels, SA Water’s actual revenue will not meet its revenue targets.

In respect of the second requirement, SA Water applies a two-part tariff and, therefore is compliant with the NWI principles.

In respect of the third requirement, in previous Inquiries the Commission has expressed concerns about the lack of information provided to support the estimate of LRMC. Transparency Statement – Part A again notes that the LRMC was derived based on the expansion of the ADP from 50GL to 100GL, but does not provide any further information on the method used. Accordingly, the Commission considers that disclosure around efficient resource pricing could be improved by SA Water providing more information regarding its method of estimating LRMC.

The Commission also notes that while the usage charge for the second tier is now relatively close to the LRMC estimate, the third tier charge is now significantly above the LRMC estimate. The Commission notes the statement in Transparency Statement – Part A justifying the third tier charge on the basis of discouraging excessive water use in residential premises. If the LRMC provides an accurate reflection of the costs associated with water consumption (including externalities), then there is limited justification for charging prices well in excess of the LRMC. Such an outcome would be likely to lead to an inefficient allocation of resources in terms of customers’ decisions about using water and SA Water’s decisions about

---

<sup>98</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 54

investing in infrastructure. However, the Commission notes that the Water for Good plan outlines the Government's policy intention (in the short to medium term) to retain a three-tier inclining block structure for residential water consumers.<sup>99</sup>

In relation to the fourth requirement, while the Commission noted in its 2009-10 Inquiry that it was satisfied that the application of a multi-tiered structure was consistent with the NWI principles, it suggested that further information on the application of the third-tier charge to some customers and not others would be beneficial. The Government response to the 2009-10 Inquiry noted the Commission's concerns and states:

*Water for Good (action 71) indicates that the Government will initiate, over the period 2011-2016, a move to a single potable water use price for SA Water's non-residential customers<sup>100</sup>*

The Commission supports this action.

In relation to fixed charges, in its 2009-10 Inquiry the Commission questioned the economic rationale for imposing different fixed charges on residential and non-residential customers. In response to the 2009-10 Inquiry, the Government noted:

*With regard to fixed charges, Water for Good (action 72) states the Government will transition, over the period 2011-2016, to a (fixed) service availability charge based on the number and size of meters.<sup>101</sup>*

The Commission supports this action.

In relation to the requirement that water charges should generally be differentiated by the cost of servicing different customers, in its 2009-10 Inquiry the Commission observed that SA Water had a common tariff structure across metropolitan and regional areas, despite higher costs in regional locations and that information on the detriments of implementing more cost-reflective pricing should be provided. In response to the 2009-10 Inquiry, the Government noted:

*... the Government has endorsed the consideration of this issue in the transition to independent economic regulation.<sup>102</sup>*

Transparency Statement – Part A also notes that the Government has endorsed a review of the effect of statewide pricing by the Commission. The Commission looks forward to working with the Government on that review.

---

<sup>99</sup> Refer to Water for Good plan: <http://www.waterforgood.sa.gov.au/wp-content/uploads/2009/06/complete-water-for-good-plan.pdf> p144

<sup>100</sup> Refer Government of SA (2009), *Inquiry into 2009-10 Metropolitan and Regional Water & Wastewater Pricing Process – Government Response*, October, p.4

<sup>101</sup> Ibid.

<sup>102</sup> Ibid.

## **Sewerage Charges**

In its 2009-10 Inquiry, as in previous years, the Commission stated that:

*SA Water does not apply consumption based pricing, other than to the largest dischargers. ... 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.*<sup>103</sup>

However, the Commission also noted that while it 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.*<sup>104</sup>

Despite the Commission’s comments, there has been no change to the approach to setting charges for sewerage services. Transparency Statement - Part A notes that while the CoAG pricing principles promote consumption based sewerage charges, it also notes previous comments by the National Competition Council (NCC) stating:

*Charging on a consumption basis for wastewater services provided to households and small commercial consumers is generally not efficient (NCC, 2003, page 14).*

Further, Transparency Statement – Part A also notes:

*The South Australian Government’s decision with regard to sewerage charges is not inconsistent with COAG principles, given that direct consumption charges are generally not able to be applied cost-effectively in practice.*<sup>105</sup>

The Commission again recognises that SA Water’s approach to charging for wastewater services is not inconsistent with the pricing principles. However, it continues to believe that, for the reasons set out previously, there would be value

---

<sup>103</sup> Refer 2009-10 Final Report available at the Commission’s website: [http://www.escosa.sa.gov.au/library/090717-WaterPricingProcessInquiry\\_2009-10-FinalReport.pdf](http://www.escosa.sa.gov.au/library/090717-WaterPricingProcessInquiry_2009-10-FinalReport.pdf) pg 46

<sup>104</sup> Ibid

<sup>105</sup> Ibid, pg 56

in reviewing the approach to charging for this service at the same time as the review of other aspects of SA Water's charging regime.

### **Community Service Obligations**

In addition to the requirements outlined above, the NWI pricing principles require water business to move toward full cost recovery.

The regulatory model estimates provided in Transparency Statement – Part A indicate that with the addition of CSO payments, SA Water will achieve upper revenue bound pricing in for its country water and sewerage operations in 2010-11. In response to the 2009-10 Inquiry, the Government noted:

*The Government considers that a review of CSOs is not required at this stage. However, the Government is in the process of developing more detailed regional information in the National Performance Report process.<sup>106</sup>*

The Commission considers that SA Water has met transparency requirements in relation to CSOs, and also provided the necessary information to demonstrate that it is likely to achieve full cost recovery for regional services in 2010-11.

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

#### ***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

Documents provided to Cabinet contain information about water pricing, including the proposed price structure. The Commission notes the actions and objectives outlined by the Government to:

- ▲ initiate a move to a single potable water use price for SA Water's non-residential customers;
- ▲ transition to a (fixed) service availability charge based on the number and size of meters; and
- ▲ consider the effect of statewide pricing in the transition to independent economic regulation.

However, the Commission reiterates its concern that forecast revenue is based on "normal" consumption, which may not reflect the actual situation under current water restrictions.

#### ***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

---

<sup>106</sup> Government of SA (2009), *Inquiry into 2009-10 Metropolitan and Regional Water & Wastewater Pricing Process – Government Response*, October, p.4.

The Commission is satisfied that the information provided to Cabinet about efficient resource pricing is adequately summarised in Transparency Statement – Part A.

### **3.11 Cross-subsidies**

Given South Australia's water supply logistics, 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 consideration of alternative management arrangements aimed at removing the need for an ongoing CSO.

#### **3.11.1 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.*<sup>107</sup>

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*<sup>108</sup>

The CoAG Expert Group also noted that *"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.*<sup>109</sup>

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

##### **Cross-subsidies**

Unlike previous Transparency Statements, the 2010-11 Transparency Statement – Part A does not include explicit discussion on any cross-subsidies

---

<sup>107</sup> Refer to NCC website: <http://ncc.ncc.gov.au/docs/PIAg-001.pdf> pg 103

<sup>108</sup> Ibid

<sup>109</sup> Refer endorsed NWI Pricing Principles available on the following website: <http://www.environment.gov.au/water/publications/action/pubs/nwi-pricing-principles.pdf> pg 14

in place. Previous Transparency Statements argued that it was unlikely that there were any cross-subsidies in place, where cross-subsidies are defined under the Baumol test. The Baumol cross-subsidy test described situations where:

- some users are paying less than the avoidable costs (or LRMC) of service provision while others are paying more; and/or
- some users are paying more than the full cost of service provision on a stand alone basis – stand alone cost (i.e. with a dedicated system).<sup>110</sup>

In addition, previous Transparency Statement – Part A acknowledged that the NWC, in its 2005 NCP Assessment, stated:

*With regard to cross-subsidies, the Commission considers that South Australia has met its COAG commitments. South Australia has identified areas where cross-subsidies are likely to exist, and has reported that there are unlikely to be significant cross-subsidies in water and wastewater pricing. (NWC, 2006, p 6.30)*

### Community Service Obligations

The 2010-11 Transparency Statement – Part A sets out the CSO payments to SA Water<sup>111</sup> for 2008-09 (actual), 2009-10 (estimates) and 2010-11 (estimates) as shown in Table 7.

**Table 7: CSO Payments to SA Water**

CSO PAYMENTS (\$M IN NOMINAL TERMS)	2008-09 ACTUAL	2009-10 ESTIMATE	2010-11 ESTIMATE
Statewide Uniform Pricing	166.52	179.12	158.63
Exemptions and Concessions	11.20	11.62	12.04
Water Proofing Adelaide	3.69	6.04	6.19
Emergency Functional Services	0.59	0.60	0.57
Emergency Services Concession (SAPOL)	0.05	0.05	0.06
Rain Water Tank Rebate	0.04	-	-
River Murray Levy Administration	0.06	0.06	0.06
Government Radio Network	0.42	0.47	0.48
Administration of Pensioner Concessions	0.52	0.41	0.41
<b>TOTAL CSO PAYMENTS</b>	<b>183.09</b>	<b>198.36</b>	<b>178.43</b>

As outlined below, the 2010-11 Transparency Statement – Part A highlights that the Government has continued to endorse statewide pricing, with full cost

<sup>110</sup> Refer Transparency Statement – Part A – 2009-10 Water and Wastewater Prices in Metropolitan and Regional South Australia [http://www.escosa.sa.gov.au/library/090402-Water-WastewaterInquiry\\_2009-10-TransparencyStatement-PartA.pdf](http://www.escosa.sa.gov.au/library/090402-Water-WastewaterInquiry_2009-10-TransparencyStatement-PartA.pdf) pg 34

<sup>111</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 49

recovery of water and sewerage services in regional areas achieved via publicly reported CSO payments.

*The Government's water security plan, Water for Good, endorses continued support for regional communities using SA Water's networks through statewide pricing. The Government's 2010-11 pricing decision also confirmed continuation of its statewide uniform pricing policy for reticulated water and sewerage. Consistent with this policy, SA Water provides reticulated water and sewerage services to its customers in South Australian regional areas at prices similar to the metropolitan area. Given higher costs in many regional areas, water and sewerage services are provided to many regional customers at less than total economic cost, including return on assets.*

*Full cost recovery for water and sewerage services in regional areas, and therefore compliance with the NWI, has been achieved via transparently reported CSO payments.<sup>112</sup>*

### 3.11.3 The Commission's assessment

Although the information provided in the 2010-11 Transparency Statement – Part A excludes a discussion of cross-subsidies, the Commission notes information presented in previous Transparency Statement where SA Water has continued to assess the possible existence of cross-subsidies in water supply using the Baumol approach. The Baumol approach has been endorsed by the NCC and is used in other jurisdictions.

The effect of using the Baumol approach is that prices that lie between the stand-alone cost of supply and avoidable cost of supply are not considered to represent a cross-subsidy. As noted by the Commission previously:

*the Baumol Band is generally broad and may not reveal sufficient information about the major cost differences of serving different customers<sup>113</sup>*

Using this approach, SA Water can therefore continue to assert that there are no cross-subsidies. This is despite the Commission's repeated recommendations that the major cost differences of serving different customers be examined further.

In relation to CSOs, the Commission notes that Transparency Statement – Part A again limits its discussion of alternative strategies to the Statewide uniform pricing CSO. In its Final Report, the Commission retained the view that:

*information provided to Cabinet could be improved by giving greater consideration to alternative management arrangements to CSOs and in reviewing the major cost differences of serving different customers.<sup>114</sup>*

---

<sup>112</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pg 49

<sup>113</sup> Refer Inquiry into the 2006-07 Metropolitan and Regional Water and Wastewater Pricing Process Final Report [http://www.escosa.sa.gov.au/library/051115-WaterPricingProcessInquiry\\_2006-07-FinalReport.pdf](http://www.escosa.sa.gov.au/library/051115-WaterPricingProcessInquiry_2006-07-FinalReport.pdf) pp 45-46

<sup>114</sup> Refer: [http://www.escosa.sa.gov.au/library/090717-WaterPricingProcessInquiry\\_2009-10-FinalReport.pdf](http://www.escosa.sa.gov.au/library/090717-WaterPricingProcessInquiry_2009-10-FinalReport.pdf), pg 50

Consistent with the Government's response to the Commission's Final Report for the 2007, 2008 and 2009 Inquiries, Transparency Statement – Part A states that a review of CSO payments is not required at this stage. However, the Government acknowledges in its response that

*The Government is in the process of developing more detailed regional information in the National Performance Report process.*

Noting this response, the Commission remains of the view that further work could be done in determining CSOs in a more transparent manner; it encourages SA Water to undertake a further review to ensure continuous improvement in this area.

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

#### ***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

The Commission retains the view that the information provided to Cabinet could be improved by giving greater consideration to alternative management arrangements to CSOs and in reviewing the major cost differences of serving different customer classes.

#### ***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

The Commission is satisfied that the information provided to Cabinet about cross-subsidies (albeit on the basis of previous Inquiries) and CSOs is adequately summarised in Transparency Statement – Part A.

## **3.12 Movement towards the upper bound**

### 3.12.1 Pricing Principles

NWI Clause 66(i) states:

*Metropolitan*

*Continued movement towards upper bound pricing by 2008*<sup>115</sup>

The NWI pricing principles differentiate between returns on historical assets and returns on new assets, thereby creating an alternative approach to the calculation of the upper bound (the GFFCR).

---

<sup>115</sup> Refer NWC website: <http://www.nwc.gov.au/resources/documents/Intergovernmental-Agreement-on-a-national-water-initiative.pdf>  
pg 13



### 3.12.2 Transparency Statement – Part A Comments

The pricing decisions set out in Transparency Statement – Part A and the four-year revenue direction is part of an intention to move toward full cost recovery, as defined by the GFFCR.

The application of the GFFCR approach to SA Water's water and wastewater revenues is discussed in Transparency Statement – Part A, which states,

*The South Australian Government has adopted an approach referred to as go forward full cost recovery (GFFCR) to transition to, or move towards, upper revenue bound pricing. Under GFFCR, new and replacement assets earn a rate of return that is based on the WACC and the rate of return on legacy assets, valued at depreciated replacement cost, is based on the rate of return at the legacy date.*

*For SA Water's metropolitan sewerage assets, the rate of return on legacy assets is greater than the current estimate of WACC. Although a price path based on GFFCR complies with NWI principles, the additional revenue could be considered to be monopoly profits. As part of the transition to independent economic regulation, the rate of return earned on metropolitan sewerage legacy assets is being reduced to, and is expected to achieve in 2010-11, the current estimate of WACC. This is consistent with the Government's NWI obligation to 'move towards' upper revenue bound.*

*For SA Water's metropolitan water assets, the rate of return on legacy assets is lower than the current estimate of WACC. GFFCR therefore lies below the upper revenue bound. Nevertheless, these legacy assets will, over time, be replaced with new assets, which will earn a rate of return that is consistent with the WACC. This is consistent with the Government's NWI obligation to 'move towards' upper revenue bound.<sup>116</sup>*

In moving towards GFFCR, Transparency Statement – Part A states that:

*SA Water's metropolitan water business, the South Australian Government continues to adopt the approach to achieving the URB over a period of time, known as GFFCR. Nevertheless, there is expected to be large expenditure on water security measures over the period 2010-11 to 2013-14, which is expected to result in significant fluctuations in GFFCR and the URB from year to year.<sup>117</sup>*

Transparency Statement – Part A outlines SA Water's intention to 'smooth' annual price increases over the revenue period, and thereby match GFFCR on a cumulative basis rather than a year by year basis.

### 3.12.3 The Commission's assessment

Consistent with previous Inquiries, the Commission notes that the requirement of NWI clause 66(i) is only for movement "toward" the upper revenue bound (URB) pricing. As described in sections 3.8 and 3.10, Transparency Statement Part A outlines SA Water's intention to move towards URB via State Government funded CSO payments, and the GFFCR approach.

---

<sup>116</sup> Refer Transparency Statement – Part A - 2010-11 Potable Water and Sewerage Prices in South Australia pp 40 - 41

<sup>117</sup> Ibid, pg 51

As discussed in section 2.3, the NWI Pricing Principles, were endorsed by the Natural Resource Management Ministerial Council on 23 April 2010. The Principles for the recovery of capital expenditure only applies to the provision of water services, i.e. it does not apply to wastewater or stormwater services.

Transparency Statement – Part A outlines the approach by the state Government to adopt the GFFCR for both its water and sewerage assets as a transition towards URB pricing. The effect of this approach is that returns on legacy assets are effectively locked-in until the assets are replaced. Full cost recovery is only sought in relation to new and replacement capital investments incurred following the legacy date. This implies that prices should be set to at least achieve the Government's calculated WACC of 6% (pre-tax, real) for capital expenditure beyond 30 June 2006, with no attempt to adjust prices to reflect any over-recovery or under-recovery relative to the full WACC for the value of assets in place prior to this date.

For legacy water assets the historical rate of return is 3.1%, while for sewerage assets the historical rate of return is 7.2%.<sup>118</sup> The Commission notes that the adoption of the GFFCR approach for legacy water assets is below the upper bound, while sewerage assets (for which the NWI Principle for the recovery of capital expenditure does not apply but which has been adopted anyway) results in a rate of return that is above the upper bound.

Nevertheless, consistent with its view in previous Inquiries, the Commission's main concern relates to the estimation of the upper bound (or GFFCR level) itself, in so far as the issues raised earlier in this report, especially around efficient costs, mean that doubt must exist about the location of the upper bound (or GFFCR level). 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).

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

#### ***Adequacy of information: Did Cabinet receive information that would allow for adequate application of the pricing principles?***

Information presented to Cabinet shows an intention to move towards GFFCR (and the upper bound), which appears to be consistent with the combined pricing principles.

---

<sup>118</sup> Legacy date is 30 June 2006

***Transparency of information: Does Transparency Statement – Part A adequately summarise the relevant information?***

The Commission is satisfied that Transparency Statement – Part A adequately summarises the information supporting the movement towards GFFCR.