

23 December 2004

Colin Reid

Dr Michael Keating
Chairman
Independent Pricing and Regulatory Tribunal
Level 2, 44 Market Street
SYDNEY NSW 2000



Dear Dr Keating

Review of Metropolitan Water Agency Prices

This submission is made in response to the Tribunal's invitation for comments that relate to the above as detailed in the July 2004 IPART Issues Paper.

As the Tribunal is aware, Sydney Water and Services Sydney have opposing water plans for Sydney and the Shoalhaven.

These plans deliver different outcomes in terms of social equity, sustainability, economics and the environment.

Services Sydney submits that capital and operating expenditures of Sydney Water and Sydney Catchment Authority nominated for implementation of their plans (as detailed in submissions to the Tribunal during November 2004 and used as the basis of reviewing their prices) should be tested against Services Sydney's alternative water plan prior to the Tribunal's rulings.

This will ensure that the price determinations are made by a fully informed Tribunal.

We value the Tribunal's independent role during these Price Reviews.

Yours faithfully
Services Sydney Pty Ltd

John van der Merwe
Director

c://jvdm.vb.ipart-reviewofwaterprices.doc

Context

This submission is relevant to the Review of Sydney Water and Sydney Catchment Authority maximum price charges to apply from 1 July 2005.

To progress the further implementation of WaterPlan 21 and the recently announced Metropolitan Water Plan, IPART has been provided with proposed capital, operating and maintenance costs of Sydney Water and the Sydney Catchment Authority.

These Expenditures are detailed in 'Revenue Requirements' of the Sydney Water submission dated 5 November 2004 (in particular Sections 6.2 and 6.3) and 'Expenditure Management' of the Sydney Catchment Authority's November 2004 submission (in particular Sections 5.2 and 5.3).

Earlier this month, the National Competition Council forwarded its final recommendation to the Premier of New South Wales concerning Services Sydney's Third Party access application for the right to compete for the provision of sewerage services in Sydney.

A determination by the Premier is expected by no later than the end January 2005 (The background to the NCC application see Appendix A).

If the application is successful, Services Sydney will have access rights to Sydney Water's sewerage infrastructure. This will allow retail customers choice of service provider and the Company the ability to implement its alternative plan in competition with Sydney Water.

Therefore, the planned multi million-dollar expenditures of Sydney Water and the Sydney Catchment Authority may be avoided and some projects rendered superfluous.

Accordingly, these expenditures should only occur once there is clarity on Third Party access and a comprehensive independent determination of the best 'value for money'.

Submission

Services Sydney submits that the proposed capital and operating expenditures of Sydney Water and the Sydney Catchment Authority for implementation of their respective plans (as detailed in their submissions to the Tribunal in November 2004 and which are used as the basis of reviewing their prices) should be tested against Services Sydney's alternative water plan prior to the Tribunal making its final determinations.

A rigorous benefit-cost analysis, using NSW Treasury guidelines, should be applied to determine best 'value for money' for customers, taxpayers and the environment. It appears that WaterPlan 21 and the Metropolitan Water Plan have not been subjected to such an Economic Appraisal.

In this regard the Company has appointed specialist Water Economists, Marsden Jacob Associates for a benefit-cost analysis. A copy of this expert report using WaterPlan 21 and the Metropolitan Water Plan as Base Case will be provided to the Tribunal in January 2005.

Matters for Consideration

When setting prices for water businesses the Tribunal addresses broad social concerns and specific agency matters, as required by Section 15 of the IPART Act.

In relation to these issues, Services Sydney offers the following comments:

Consumer Protection

- *Protecting consumers from abuses of monopoly power*

Following Sydney Water's decision in December 2003 not to progress *Sustaining the City*, Services Sydney applied for Third Party access to the Corporation's sewerage system in March 2004.

Third Party access and competition will provide customers with a choice of service provider and will alleviate abuse of monopoly power.

- *Standards of quality, reliability and safety of the services concerned*

Services Sydney proposes to develop a modern world-class resource recovery system, whereas Sydney Water attempts to maintain an old waste disposal system.

It is impossible to achieve the former by continuing to spend large amounts of money on rehabilitation, upgrades and modernisation of the latter.

Sydney Water confirms this situation in their November 2004 submission to the Tribunal, in particular Section 6.2.2 that states:

'Sydney Water's capital expenditure forecast for existing mandatory standards represents a significant increase over the levels proposed in the previous determination. Improved asset management practices have highlighted the importance of moving to an appropriate level of renewals expenditure over the medium to long term consistent with Sydney Water's aging asset base. Existing standards expenditure in 2005/06 is forecasted to be \$ 323m, a significant increase over historical levels and a 28% increase over budgeted expenditure for 2004/05.'

The two examples below confirm Sydney Water's significant concern that the reliability and the safety of the old infrastructure are barely coping with mandatory standards of quality for service provision:

- Lower SWSOOS rehabilitation:

Sydney Water called tenders for the structural rehabilitation of the Lower SWSOOS Trunk Main sewer in August 2002.

The tender extensively detailed the alarming structural condition of the SWSOOS five years after it was first reported:

'Structural failure of the sewers (SWSOOS) would result in major overflows of untreated sewage and discharge of gas, and cause major community and environmental impacts, with potential prosecution for breach of licence conditions.

Even under emergency situations, repairs of structural failures could take several months to complete and could cost millions of dollars in repairs, temporary works, clean-up, legal costs and compensation.

Secondly, siltation had become a major concern ... resulting in an increase in overflows in wet weather ... and further reduction in capacity could lead to overflows in dry weather, which would be a breach of licence conditions.

The Asset Management Division of Sydney Water has added the SWSOOS System to its risk register with a risk profile of:

Likelihood: Possible and Consequence: Catastrophic'.

- Bondi STP RIAMP:

In January 2003 Sydney Water called public tenders for the Reliability Improvement and Modernisation Program of Bondi Treatment Plant.

'With the ageing of assets at Bondi STP, Sydney Water has recognised that operational risks at the plant have increased. In recent years attempts have been made to address such deficiencies on a project-by-project basis. However, the nature of this approach, given the condition of the assets, has resulted in scope creep and associated escalation of project costs. This has also delayed a number of critical renewal projects. To address this situation a renewal program has been initiated.

In October 2000 Sydney Water conducted a risk management study that identified the need to make several near-term improvements to the Bondi STP to address concerns about plant reliability, renewal of its assets, and worker safety and comfort'.

These examples demonstrate that service standards are under pressure in terms of quality, safety and reliability. Maintenance of assets beyond useful service lives and relevance to keep operating under Services Sydney's alternative makes little sense.

- Social impact of decisions

Services Sydney is of the opinion that interbasin water transfers from the Shoalhaven River are inequitable.

The recent Hawkesbury Nepean River Management Forum supports the Company in its view here, by stating:

'The NSW Nature Conservation Council and the Seafood Industry Council consider that Sydney's growing reliance on water from increasingly distant catchments is unsustainable. The two Councils consider that it is unacceptable to compromise the health of yet another river system to accommodate high water-use lifestyles and unconstrained growth and that reliance on these water transfers should be phased out as revised reliability levels, demand management and re-use options are phased in'.

Water restrictions are also inequitable.

Not only is there loss of quality of life by many gardeners, there is also significant impact on the economy by restrictions on water intensive industries such as turf farming, horticulture and agriculture.

With large-scale re-use there will be sufficient water available to virtually stop further transfers of water from the Shoalhaven or the need to impose harsh water restrictions or to use the most expensive source of water - desalination.

Services Sydney's alternative will promote growth in both Greater Sydney and the Shoalhaven by providing 'high security' water at all times.

- *Effect on inflation*

Inflation is related to growth of the economy and largely under fiscal control of the Reserve Bank of Australia.

With the introduction of competition there will be a need to operate more efficiently by the service providers, which should drive down inflation.

Economic Efficiency

- *Greater efficiency in the supply of services*

Services Sydney and Sydney Water have different water plans with opposing outcomes in terms of economics, the environment and social equity.

During assessment of Services Sydney's Unsolicited Private Sector proposal under the guidance of the Infrastructure Co-ordination Unit of NSW Premiers Department, the Government's own independent economic comparisons of the respective plans recommended further consideration of Services Sydney's plan.

Prudent review of expenditures on the identified Projects of WaterPlan 21 and the Metropolitan Water Plan are now appropriate. At stake is not a few million dollars here or there, but hundreds of millions of dollars. It appears that WaterPlan 21 and the Metropolitan Water Plan have not been subjected to an Economic Appraisal.

It is our view that Services Sydney will be successful in its Third Party access application during 2005. The Company will then be entitled to compete directly with Sydney Water for the provision of sewerage services.

This will allow direct access to retail customers, which in turn will drive greater efficiency in the supply of sewerage and water services.

- *The need to promote competition*

As a direct consequence of Sydney Water's decision in December 2003 not to progress with the implementation of Services Sydney alternative plan, the Company sought Third Party access to the Corporation's sewerage system in March 2004 to enable it to compete directly for Customers.

The clear need to promote competition is evident by the strong support of the public, local government and leading environmental organisations during public consultation by the National Competition Council (Refer to the Council's website at www.ncc.gov.au).

It is evident that competition and customer choice sits comfortably with the community and are important elements in the provision of water services in Sydney.

The National Competition Council's final recommendation is with the Premier of New South Wales for his determination by end January 2005.

- *Effect of functions being carried out by another body*

The effect of declaration by the National Competition Council of Sydney Water's sewerage services under the Trade Practices Act will facilitate strong economic growth.

Financial Viability

- *Rate of return on public sector assets including dividend requirements*

The capital associated with 'headworks' infrastructure (to increase the transfer of water from the Shoalhaven and/or desalination) may totally be avoided by the adoption of the Services Sydney plan.

Importantly, the maintenance costs associated with the operation of an ageing waste disposal system will also be reduced. Upgrades, maintenance and rehabilitation work, planned and currently done under WaterPlan 21, can be avoided with implementation of the Company's alternative water plan.

Major Sydney Water projects relevant in this regard include the Bondi RIAMP, SWSOOS rehabilitation, aspects of SewerFix and continued work on the now largely abandoned Georges River Program.

Expenditures of several hundred million dollars on these old and dilapidated assets will increase sunk costs and impact negatively on the rate of return of these public sector assets. In addition, there is the real possibility that this expenditure may be worthless in future as these assets become 'stranded'.

Further expenditure on assets that deliver questionable outcomes will have a negative impact on future dividends.

IPART may consider accounting issues associated with capitalisation of predominantly maintenance expenses by Sydney Water.

- *Impact on pricing of borrowing, capital and dividend requirements of agencies*

Expenditure on old assets that barely manage to maintain performance standards, whilst a modern alternative is available for consumers, will have a negative impact on Sydney Water's ability to raise capital by borrowing and ultimately its ability to pay dividends.

Environmental Protection

- *Promotion of ecologically sustainable development via appropriate pricing policies*

Services Sydney submits that:

- It is against every principle of sustainability that it is still acceptable in 2005 to continue to discharge large volumes of untreated sewage deep into the ocean every day. This does not protect the environment.

There are legislated obligations on lead Environmental Agencies and Sydney Water with re-use of sewage effluent. Section 27 (1) of the Sydney Water Act 1994 is of particular relevance, where the Corporation is to adopt the ultimate aim of prevention of all dry weather flows to waters, including from ocean outfalls.

- The newly established National Water Commission and Australian Water Fund by the Australian Government confirms the Commonwealth's priority commitment to closing ocean outfalls and to providing water to rivers for environmental flows.
- Environmental flows of Services Sydney would be high security and guaranteed. They would be delivered at the correct temperature (after storage in the sun) to exacting water quality standards and in flows that mimic historical events.

Pricing policies will achieve little to modify the unsustainable outcomes of WaterPlan 21 and the Metropolitan Water Plan.

Services Sydney has conducted market research that indicates that customers are prepared to switch providers of sewage collection services having regard to questions of price, sustainability and quality of service.

The services provided by Services Sydney would be functionally identical to those provided by Sydney Water, such that Services Sydney expects to be able to win customers through competitive pricing. A key component of Services Sydney proposal is however that it is an environmentally better solution to WaterPlan 21.

The evidence available to Services Sydney is that customers are actually prepared to pay more for an environmentally superior solution such that even at the same price level as Sydney Water, Services Sydney anticipates winning substantial customer numbers.

Once customers have the ability to make a fully informed choice between an old waste disposal or a service with modern world-class facilities (based on environmental and natural resource economics) pricing will have little effect.

- *Considerations of demand management.*

Services Sydney submits that:

- Successful demand management complements sustainability, but it will not solve the water crisis or provide a sustainable water system.

The limited success of non-engineering solutions is best demonstrated by moderate gains of demand management, the ongoing transfer of water from the Shoalhaven river, the water restrictions, the rainwater tank and washing machine rebate schemes (recently extended) and the willingness of the customer simply to pay more ('price elasticity') for water on demand.

- These micro reforms are expensive and there are significant 'hidden' costs to customers. Rebates cover only a small portion of the actual overall costs to the customer.
- *Considerations of least cost planning.*

Services Sydney's proposed system removes the need for another dam, averts harsh water restrictions and prevents taking water from the Shoalhaven. It virtually stop dispersal of pollutants into the sea, provides water for irrigators, maximises the use of renewable energy, uses less fossil fuels, sustains rivers with flow regimes, prevents desalination and delivers high wet weather containment of sewage overflows across Sydney.

Rather than 'least cost options' these are 'best value for money' assets. This is in stark contrast to the outcomes offered by adherence to WaterPlan 21 and the planned introduction of aspects of the Metropolitan Water Plan.

The recent Hawkesbury Nepean River Management Forum supports the Company by stating that:

'There are a number of environmental issues associated with the transfer of water from the Shoalhaven system to the Hawkesbury-Nepean system and the use of associated rivers as conduits for these transfers:

- o Transfers from the Shoalhaven system during low flow periods can potentially cause adverse environmental impacts downstream of Tallowa Dam;
- o Transfer of water can move exotic species, diseases and other contaminants from one catchment to another and compromise genetic diversity;
- o The transfer of large volumes of water down natural river systems impacts on the morphology of river channels, riparian corridors and flood plains with consequential effects on habitat, biota and land users.
- o Pumping increases the output of greenhouse gases into the atmosphere exacerbating global warming, because of increased electricity consumption'.

Desalination may assist to overcome water supply shortages, but with considerable greater environmental impact than large-scale water re-use.

Without re-use the more water we use the more sewage we have to dispose.

Advances in reverse osmosis technology equally apply to re-use since the two processes rely on the same membranes.

The salinity of seawater is around 10 times that of sewage, and thus the process requires much more energy to deliver water to exactly the same standards.

Appendix A

Background

Services Sydney is a development company seeking to implement and operate an alternative sewage and water system in New South Wales. In 1998 the Company began working towards a comprehensive and innovative proposal for the sustainable use of water in the Sydney area.

If this alternative plan were to be implemented a major new source of water would be provided. Further benefits would include the reduction of pollution to waters (ocean and inland rivers) and the equitable sharing of water with the environment and (amongst others) the Shoalhaven community.

Services Sydney's alternative water plan is based on environmental and natural resource economics. Water is re-used on a large scale and in direct competition with:

- WaterPlan 21 where Sydney Water plans to entrench old effluent disposal system and seeks to transfer increasing amounts of water from other river systems (Appendix B); and
- Metropolitan Water Plan of the Government where unsustainable water sources (desalination) are currently being investigated (Appendix C).

Services Sydney sought to develop its original plan called Sustaining the City in partnership with Sydney Water (Appendix D).

An extensive independent review of Sustaining the City was undertaken by the NSW Government and confirmed positive outcomes. It recommended further consideration (Appendix E). However, Sydney Water refused to fully progress the plan (Appendix F).

In December 2003 the Company fully briefed IPART and sought guidance on access regimes to provide sewerage services in competition with Sydney Water.

In March 2004, the Company lodged a Third Party access application under Part IIIA of the Trade Practices Act at the National Competition Council. Services Sydney's application is available on the National Competition Council's website (www.ncc.gov.au).

In May 2004 the Hawkesbury-Nepean River Management Forum reported to the Government its recommendations on environmental flows and the need to balance the needs of the river and the economy (Appendix G).

In September 2004 the Government's Expert Water Panel reported and provided advice on the supply and demand imbalance of water in Sydney (Appendix H).

Appendix B

Sydney Water - WaterPlan 21

Sydney Water developed a long-term strategic plan for providing water services under its Operating License.

This plan, called WaterPlan 21, was first published in October 1997. It comprises a range of strategies, programs and projects across Sydney Water's area of operations over a time period to 2021.

With reference to sewage, WaterPlan 21 includes projects to maintain existing standards, projects designed to achieve business improvements and projects designed to achieve increased standards of service.

These projects include modernization, rehabilitation and upgrades of its existing sewers and treatment plants.

Details of these projects are set out in Section 3, 'Business Plan – Sewerage' of Sydney Water's submission of 20 December 1999 to IPART of Prices for Water, Sewerage and Stormwater (2000-2004). These expenditures were recently revised as detailed in Section 6 'Revenue Requirements' of Sydney Water's 5 November 2004 submission (in particular Sections 6.2 and 6.3).

In 2002, WaterPlan 21 was reviewed to reflect a new focus on integrated sustainable water services. However, the focus of WaterPlan 21 remains on demand management and maintenance of ageing sewerage systems.

Consequently since 1997, customers have paid and continue to pay for specific projects to maintain existing standards of service in accordance with this strategic plan.

They are centered on retaining the current structure of Sydney Water's sewerage system including the use of deep ocean outfalls as the primary point of preliminary treated sewage disposal for the Sydney area.

There is the potential to reclaim from this discharged sewage an amount of water that total around 75% of the sustainable yield of all Sydney's water catchments (or 450 GL).

Appendix C

NSW Government - Metropolitan Water Plan

In October 2004 the Government released its Metropolitan Water Plan.

The plan nominates proposals to harvest 'inaccessible' deep water in existing water storages and the expansion of demand management measures.

Importantly, it confirms in principal plans to take more water more often from the Shoalhaven and to prepare for the speedy implementation of desalination.

Shoalhaven transfers exacerbate current social equity and environmental issues.

Desalination delivers the most expensive water available and creates a new source of environmental pollution.

The Metropolitan Water Plan remains silent on continued marine pollution from the Major Ocean Plants at Bondi, North Head and Malabar.

Large-scale water reclamation as a modern source of water is also not addressed.

Appendix D

Services Sydney - Sustaining the City

In 1998 Services Sydney commenced a review of the Sydney Water sewerage system and the operations of Sydney Water. This review was driven by:

- the hundreds of millions of dollars planned under WaterPlan 21 for maintenance of infrastructure in dilapidated conditions that exceeded their service life; including upgrades, modernisations and rehabilitations;
- the recurring large wet weather sewage overflows in Mill Pond and Engine Pond east of Sydney Airport and into Muddy Creek and the Cooks River west of Sydney Airport where five of the top 10 overflows in Sydney occur;
- Sydney Water's commitment to retain the current structure of its sewerage system under WaterPlan 21 including retaining the deep ocean outfalls as sewage disposal systems with high intrinsic operating costs;

- the low treatment levels of approximately 80% of all sewage in Sydney being discharged from the major coastal sewage treatment plants deep into the ocean with hazardous components; and
- the water demand and supply imbalance and the clear need for the more efficient use of water resources.

Services Sydney identified provision of sewage services in Sydney using new assets and new technology that would provide better value for money for customers.

The core infrastructure features of Sustaining the City are:

- the establishment of water reclamation (with integrated bio-solids handling and additional wet weather overflow storage facilities) as a modern water platform that utilizes significantly more advanced sewage treatment processes than those operated or planned under the WaterPlan 21 by Sydney Water.
- new trunk main sewers for the transportation of sewage that will interconnect to the main trunk sewers at each of the North Head, Bondi and Malabar sewage treatment plants; and
- the construction of water conduits to return advanced tertiary treated water to the Hawkesbury Nepean River, to replace water otherwise needed for environmental flows.

The benefits of the Sustaining the City proposal include the:

- introduction of better value for money sewage treatment facilities and the promotion of competition in sewage collection services;
- immediate reduction in the disposal of contaminated sewage through ocean outfalls;
- delivery of higher wet weather performance than Sydney Water through greater integration of the Network;
- utilisation of renewable energy produced by the sewage treatment process;
- potential to use high quality reclaimed water for environmental flows in the rivers supporting Sydney; and
- potential, in the long term, for the supply of high quality reclaimed water to Sydney's drinking water supply. While Services Sydney does not intend to enter into the provision of water supply services at this point, this technology is in use in cities such as Singapore where reclaimed water is blended into the main drinking water storages.

Appendix E

NSW Government's independent Anderson Review

The independent review of the Sustaining the City proposal was commissioned by the NSW Government Infrastructure Co-ordination Unit and completed by Mr John Anderson of the Department of Commerce in May 2003.

The purpose of the Review was to clarify the scope and costs of the Proposal, compare the Proposal to Sydney Water's WaterPlan 21 and provide comments and conclusion on the relative merits of the Proposal in achieving the Government's objectives.

The Review involved an assessment of the coastal treatment plants and overflow abatement component, Georges River program/Southern interceptor component and the Water to Rivers Project component of the Proposal against specific projects proposed under WaterPlan 21.

This assessment was made across a range of criteria including:

- water balance and service needs;
- planning and regulatory issues;
- environmental outcomes;
- economic outcomes; and
- social outcomes.

The Review relevantly concluded that the new trunk main sewers, wet weather storage and water reclamation plants, return water conduits of the Proposal were competitive with the proposed WaterPlan 21 works.

The Review recommended further consideration by the Government.

This conclusion was based upon advantages of the Proposal including:

- avoided costs of WaterPlan 21;
- improved environmental outcomes; and
- the platform provided by the Proposal for future water reuse options.

Appendix F

Consultation with Sydney Water

In May 1999, Services Sydney approached Sydney Water with six major water related infrastructure projects (the cornerstone projects of the Company's alternative water plan).

Further discussion with Sydney Water led to the execution of a Heads of Agreement in October 1999 which documented the basis of further development of those projects, the respective ownership of development rights and a common objective to proceed with implementation should further the studies have positive results.

As a first step, a team of specialist experts under Connell Wagner completed a prefeasibility study jointly for Services Sydney and Sydney Water.

The Connell Wagner Report (2000) recommended detailed feasibility studies to be undertaken immediately on the basis that:

'No significant impediments or flaws have been identified. There are significant potential benefits for Sydney Water from each of the system elements across all of the technical, environmental, social, regulatory and project financing aspects'.

However, subsequent to the release of the Connell Wagner Report (2000), Sydney Water terminated the Heads of Agreement for reasons unknown.

The Corporation confirmed to Services Sydney its intention to implement WaterPlan 21 by retaining and rehabilitating the major coastal sewage treatment plants as part of its sewerage system.

After further refinement of Sustaining the City, Services Sydney presented Sustaining the City to the New South Wales Government as an unsolicited private sector proposal in September 2002.

The intention was that Sustaining the City would be developed as part of a public-private partnership between the New South Wales Government and Services Sydney.

However, in November 2003, Sydney Water confirmed its continued refusal to cooperate in the development of Sustaining the City.

Appendix G

NSW Government - Hawkesbury Nepean River Management Forum

The NSW Government established a Management Forum in 2001 to make recommendations on environmental flows and to balance the needs of the Hawkesbury-Nepean and Shoalhaven Rivers and the economy.

The Forum's Final Report was released in May 2004.

A quantity of 127 GL per year as environmental flows was recommended. This value assumes an unrealistic 100% success with demand management. Global warming is mentioned, but its impact is ignored on the sustainable yield.

In May 2003 IPART nominated 140 GL/a and earlier the Healthy Rivers Commission recommended 165 GL/a for river health of the Hawkesbury Nepean river system.

Appendix H

NSW Government - Expert Water Panel

In March 2003 the NSW Government established an Expert Water Panel for advice on the supply and demand imbalance of water in Sydney.

In September 2004 the Panel reported to Government.

In October 2004 the Company was informed the Report is Cabinet Confidential.