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24 March 2006

Dr Michael Keating, AC
Chairman
The Independent Pricing and Regulatory Tribunal of NSW
Level 2, 44 Market Street
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Dear Dr Keating

Review of Recycled Water Pricing

Thank you for the opportunity to contribute to the Tribunal's review of recycled water prices for Sydney Water Corporation, Hunter Water Corporation, Gosford City Council and Wyong Shire Council. As the proponent of a large scale private sector water recycling scheme, AGL has a keen interest in the outcome of the review because the benchmarks and principles that will come from the review will inevitably shape the market in which private sector projects will be participating.

AGL supports the well-established Government policy position of encouraging innovation in water supply to address Sydney's water supply imbalance. Private sector participation and increased use of recycling for non-potable uses are key components of the policy and a number of recycling schemes are already operational while others are planned. Water recycling is a highly sustainable water source for the long term. Developing it as a major part of the water source mix will allow investment in new/alternative water sources to be deferred; it can generate system-wide benefits such as deferral or reduction of investment in wastewater treatment infrastructure; and it can generate environmental benefits such as reduced ocean outfalls and increased environmental flows to rivers.

We note that the Government, through the National Water Initiative, is committed to the "development of pricing policies for recycled water and stormwater that are congruent with pricing policies for potable water, and stimulate efficient water use no matter what the source". The economic viability of recycling is determined by potable water prices as it is the principle substitute for recycled water. Desirably the price of potable water on the margin should be set at the upper end of the range of Long Run Marginal Cost (LRMC). This would provide the appropriate economic signals for the development of recycling, whether privately or publicly, as well as for the production and consumption of potable water.

Available evidence suggests that, at current potable water prices, water recycling projects are uneconomic if they are to be fully self-funding. This, together with the very clear need for recycled water in the supply mix as articulated in the Metropolitan Water Plan, supports the view that the estimate of LRMC ($1.20 to $1.50/kL), which the Tribunal has taken as the basis for recent potable water price determinations, is understated. If potable water prices remain unchanged, then transfers within the water services customer base, or other funding mechanisms such as Government grants, will be necessary for recycling projects are to proceed.

AGL proposes that the following approach to recycled water pricing be considered by the Tribunal:

- Where recycled water use is mandatory the usage charge be capped by reference to the usage charge for potable.
- Where the use of recycled water is discretionary (ie for industrial and commercial consumers) the retail price be determined by negotiation with the customer.
- Provision should be made to allow recovery of costs that are not recoverable through usage charges by: (i) application of avoided costs of the relevant water agency, (ii) recovery from the broader customer base (either through use of an addition to the fixed charge or in the second block of the usage charge), (iii) application to remove any price distortion that currently exists and, if necessary, (vi) application of government subsidies.
- Such an arrangement should enable postage stamping of recycled water prices.

AGL submits that this approach is consistent with principles developed by the Victorian Essential Services Commission (ESC) in the course of its 2005 Water Price Review, and with principles set out in the paper prepared for the Water Services Association of Australia (WSAA) by ACIL Tasman in association with GHD, both of which are referred to in the Tribunal's Issues Paper.

Pricing of recycled water is not the only policy setting that will influence the efficient development of recycled water. It is also important that policy settings provide incentives for the most economically efficient recycling solutions. In this regard there is a concern that policy settings designed to encourage recycling may have suboptimal results. That is, policy signals need to facilitate those projects that will deliver the greatest community benefit at the lowest community cost first. In particular, they should ensure that where large scale centralised production with reticulation is likely to be the most efficient solution and provide significantly greater capacity for recycling, that these are not inadvertently undermined by stand-alone projects which do not deliver the same benefit and cost.

Opportunities presently exist for large scale centralised production and reticulation in established areas of Sydney – for example Sydney Water is presently evaluating Registrations of Interest for a project to serve industrial loads located around Camellia, with the possibility of expansion or replication in other areas. A proliferation of stand-alone projects will reduce demand for any potential large scale centralised project within the same area, risking such detriment that the large scale project cannot proceed. Policy settings that "tilt the playing field" in the direction of stand-alone projects should be corrected, so that the viability of large scale centralised alternatives, which have much broader public benefit and are economically more efficient, can be tested before stand-alone projects proceed.

AGL's detailed submission is attached. AGL's responses to the Tribunal's specific questions are summarised in Attachment A. Should you wish to discuss the submission, please contact Warwick Tudehope on 9921 2929 or Chris Harvey on 9921 2601.

Yours sincerely

Dr Robert Wiles
General Manager Regulation and Policy

IPART Review of recycled water prices for Sydney Water Corporation, Hunter Water Corporation, Gosford City Council and Wyong Shire Council

This submission by The Australian Gas Light Company (AGL) is made in response to the Issues Paper produced by the Tribunal in connection with its review of recycled water prices for Sydney Water Corporation (SWC), Hunter Water Corporation, Gosford City Council and Wyong Shire Council. As the proponent of a large scale private sector water recycling scheme, AGL has a keen interest in the outcome of the review, because it will establish benchmarks and principles that will inevitably shape the market in which private sector projects will be participating.

In the present context there are two main classes of recycling project:

- small scale stand-alone projects producing water limited to on-site or local use and justified by site-specific economics; and
- large scale projects involving centralised production and reticulation to a much larger number of consumers, and justified by the economics of supply to a broad customer base.

The principal focus of the Tribunal's review is retail pricing of centrally produced and reticulated recycled water (for non-potable use) by the agencies that are within the Tribunal's jurisdiction. The review will have an indirect, but significant, effect on privately funded large scale projects in that it will shape the market in which those projects operate. Stand-alone projects may also be affected indirectly to the extent that a reticulated supply is available as a substitute.

Many of the questions canvassed by the Tribunal in its Issues Paper are dealt with in a paper prepared for the Water Services Association of Australia by ACIL Tasman in association with GHD[1]. The paper, which the Tribunal has referred to at several points in its Issues Paper, presents a thorough examination of the topic of recycled water pricing and proposes a set of well-considered the Guiding Principles.

The principles proposed in the WSAA paper highlight the integrated nature of the water industry and the close relationship that exists between the pricing of recycled water and the industry's other products, and potable water in particular. This relationship is also reflected in the National Water Initiative, which calls for the "development of pricing policies for recycled water and stormwater that are congruent with pricing policies for potable water, and stimulate efficient water use no matter what the source"[2].

The Victorian Essential Services Commission (ESC) has also developed principles in the course of its 2005 Water Price Review, cited by the Tribunal in section 3.3.1 of the Issues Paper. The two sets of principles are consistent in important respects although the ESC's are more succinct and go more specifically to retail pricing. AGL considers that the ESC's principles would provide an appropriate framework for recycled water pricing in NSW.

AGL supports the principles in both these reports (reproduced in Attachment B). There are, however, several issues that are specific to circumstances in Sydney. These are:

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[1] Water Services Association of Australia, *Occasional Paper No 12, Pricing for Recycled Water* (prepared by ACIL Tasman Pty Ltd in association with GHD Pty Ltd), February 2005

[2] Council of Australian Governments, *National Water Initiative Agreement,* Clause 66(ii)

- the economics of water recycling given current potable water prices;
- recovery of water recycling costs given current potable water prices;
- the relationship between the Tribunal's review and potential private sector recycling projects; and
- the potential for suboptimal development of water recycling by encouraging multiple stand-alone recycling projects on the one hand which will limit uptake of recycled water and result in loss of the efficiency benefits of large scale centralised production and reticulation options on the other.

These issues are discussed in detail below. AGL's responses to the matters on which the Tribunal seeks comment are summarised in Attachment A.

The relationship between recycled water and potable water prices

Recycled water and potable water are substitutes in a wide range of applications – there are only a small number of uses (most notably potable uses) where they are not. There is also a general perception that potable water is more valuable than recycled water, although that is not always the case. The value is determined by the application; for example, high quality reverse osmosis (demineralised) recycled water may be more valuable for applications, such as for boiler feed than potable, while that same water may be less valuable for irrigation because it lacks nutrients. In other cases, low cost groundwater or river water may be the least cost alternative to recycled water. However, compared to Adelaide and Melbourne, Sydney has fewer opportunities to offer recycled water for irrigation purposes. There are few nearby market gardens, grazing land, crops and vineyards. The price at which recycled water can be sold in Sydney will, in most cases, be closely related to the price of potable water[3].

In Sydney, demand will soon exceed the sustainable yield of existing resources (if it has not done so already) and alternative sources of supply are being actively considered. The most likely options are recycling and (until recently) desalination. Other resources such as aquifers and the project to access additional reserves in Warragamba Dam, are not comparable alternatives since they cannot be drawn on continuously – they are best characterised as insurance resources.

An important observation that can be made at the outset is that, at current retail prices for potable water, the recycling alternative is uneconomic if its operation is to be fully self-funding. This is the case for the Rouse Hill and SOPA recycling projects as noted by the Tribunal. The observation is also supported by AGL's assessment of the proposal it has made in response to SWC's call for Registrations of Interest (RoI) to supply recycled water to Camellia and surrounding areas. The project involves large scale centralised production and reticulation to serve large geographically concentrated loads. This type of arrangement will generally deliver the most recycled water at the lowest cost, chiefly because it has lower life-cycle unit costs than small stand-alone projects such as for single industrial sites.

The Metropolitan Water Plan states that "Recycled Water is critical to achieving a sustainable and secure water supply for greater Sydney"[4]. In the light of this it is difficult to reconcile the costs of recycling with the estimate of LRMC for water supply ($1.20 to $1.50/kL) which underpins the Tribunal's determination of potable water prices[5]. If recycling is the next lowest cost sustainable source of supply, the known costs

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[3] In fact it is the usage charge for potable water that will most often be relevant – fixed charges are generally a sunk cost for consumers.

[4] February 2006 Progress Report - Metropolitan Water Plan page 5

[5] IPART (2005) page 18 and IPART (2006) pages 21 and 32

of recycling[6] support the view that the estimate of LRMC for water supply is understated at $1.20 to $1.50/kL.

The structure of potable water pricing is also relevant. As we understand it, all water usage charges determined by the Tribunal in September 2005 include a significant component of fixed and shared distribution costs. For SWC that is of the order of $1.00/kL given the current cost of raw water from the Sydney Catchment Authority (SCA). Thus, to the extent that potable water is displaced by recycled water, SWC will forego recovery of its fixed and shared costs, as will SCA as a result of reduced use of dam water.

These observations lead to the conclusion that, at current potable water prices:

- Recycling will require external funding either through government grants, developer contributions, or through increased charges on water consumers generally. Those funding options would be justified through the explicit recognition of the system-wide benefits provided by an additional source of supply as well as the avoided costs and external benefits associated with recycling. A number of the matters canvassed by the Tribunal in the Issues Paper appear to acknowledge this possibility.

- There is little if any prospect of a recycled water supplier exercising monopoly power except where the use of recycled water is mandated. Where use is discretionary, the market should be permitted to operate, particularly in the case of large/industrial customers. We note that the Tribunal favours this approach[7]. Where recycled water use is mandated e.g. by requiring installation of a third pipe, a discount is unnecessary to encourage uptake. The price should be capped by reference to the potable water price[8], or if it is preferred not to regulate the price, price monitoring would be appropriate. These principles would effectively achieve postage stamp pricing, but also allow an element of Ramsey pricing where industrial & commercial customers assign a different value to recycled water relative to potable water (greater or lesser) and achieve greater overall economic efficiency.

- In the absence of subsidies and/or a mechanism by which the net costs of recycling are recovered over the broader customer base, SWC has no incentive to engage in or encourage recycling for so long as dam water is available at a marginal cost of the order of $0.20/kL and when displacement of potable water by recycled water results in under-recovery of fixed and shared costs.

It is clear that pricing of potable water (and dam water) will play an important part in determining the success of the Government's policy of increasing recycling through private sector participation. Desirably the prices of dam water and potable water should be fully cost-reflective on the margin so that proper economic incentives exist for efficient investment by existing agencies as well as private sector participants.

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6 Recycled water costs will vary depending on the circumstances of the project, but are significantly margin greater than $1.50/kL

7 IPART (2006), page 23

8 Consumers' marginal consumption choices will be driven by usage charges. If the usage charge for recycled water is above that of potable water, the use of recycled water may be discouraged (which is undesirable), and there may also be incentives for consumers to circumvent the mandatory use of recycled water e.g. by attaching hoses to potable water taps or modifying plumbing. Costs of recycled water not recovered through usage charges would be recovered elsewhere.

Recovery of recycling costs

Where the use of recycled water is discretionary, AGL proposes that the retail price be determined by negotiation with the customer. Where use is mandatory the usage charge should be capped at the usage charge for potable. In principle, this is a relatively uncomplicated approach. The more complex question, given the current view of recycling economics as described above, is: how should costs in excess of the revenue obtained from recycled water customers be recovered?

A public water agency could produce and distribute recycled water itself or acquire a bulk supply of recycled water from a contracted service provider.[9] Given the current view of recycling economics, only part of the utility's cost would be recoverable through usage charges for recycled water. Remaining costs, to the extent that they are not funded directly through the likes of Government grants and developer contributions[10], would have to be recovered through:

- through increased fixed and/or variable charges across the consumer base for potable water, and/or
- by application to remove any price distortion that currently exists.

The public water agency and the regulator are in the best position to determine how that recovery should be made, taking into account relevant externalities and any additional or avoided costs elsewhere in the public utility's business[11], as well as efficiency, equity and other relevant considerations. That allocation would be a matter for consultation and decision at the time of a price review.

If AGL's understanding of recycling economics is correct, it appears unlikely that a privately funded centralised production and distribution solution would ever be feasible on a stand-alone self-funding basis at current potable water prices. Assuming that such a project could be justified on the basis of its associated avoided costs and externalities, then mechanisms would be required to provide external funding in recognition of the true economic value of the project. This would inevitably involve Governments and project by project evaluation to ensure funding is applied prudently.

The Tribunal suggests that, "where recycled water is mandated ... there may be a case for spreading some costs over the water and sewerage customer base."[12] In the light of the critical need for recycled water articulated in the Metropolitan Water Plan there is a strong economic and equity case for spreading costs over the whole retail consumer base. However, AGL submits that apart from avoided sewerage costs, which should be reflected in the form of a contribution credited to water recycling projects, recycling benefits water consumption rather than sewerage operations and that recovery of

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9 In the latter case, the cost of supply is a transparent cost to the host utility and if a competitive procurement process is used then that should be *prima facie* evidence that the cost is efficient.

10 The method of determining developer charges will require modification to reflect relevant costs where a third pipe is mandated. This would include recognition of any consequent reduction in the cost of potable water infrastructure and the potential economies of co-location.

11 Additional costs include any fixed and shared costs that would otherwise go unrecovered as a result of recycled water displacing potable water. Avoided costs include those in the host utility's sewerage operations which, as the Tribunal notes, could result in a negative cost for sewer mining. In the case of SWC, it is expected that the extent of avoided sewerage costs will be revealed through the process of establishing access prices for sewerage services.

12 IPART (2006), page 21

recycling costs through sewerage charges is inappropriate. An arbitrary allocation of unrelated costs to sewerage services could distort decisions relating to those services.

The Tribunal's review will have a bearing on private sector recycling activities

The Tribunal suggests that its review will affect private sector participants only indirectly[13]. However, AGL is of the view that the indirect impact on the economics on private sector projects is likely to be significant for network-based recycling projects. There are some scenarios in which the relationship may be quite direct. For example, a recycled water producer could be in the position of a contracted service provider to the host utility, taking sewage supplied by the host and returning bulk recycled water. The host utility would provide the retail function. The arrangement between the private sector provider and the host utility would be an arms' length commercial agreement reflecting, among other things, an agreed sharing of risks. In this scenario we assume that the host utility's retail pricing would be subject to the outcome of the Tribunal's current review which will flow through to the competitive position of the privately funded operation.

The Tribunal's review will be significant for proposals involving centralised production and reticulation, whether or not there is private sector involvement.

Summary of AGL's proposed Recycled Water Pricing Principles

The following summarises the principles for recycled water developed above and AGL proposes be considered by the Tribunal:

- Where recycled water use is mandatory the usage charge be capped by reference to the usage charge for potable.
- Where the use of recycled water is discretionary (industrial and commercial consumers) the retail price be determined by negotiation with the customer.
- Provision should be made to allow recovery of costs that are not recoverable through usage charges by application of avoided costs of the relevant water agency, by recovery from the broader customer base (either through use of an addition to the fixed charge or in the second block of the usage charge), by application to remove any price distortion that currently exists, and if necessary government subsidies.
- Such an arrangement should enable postage stamping of recycled water prices.

AGL submits that this approach is consistent with principles developed by the Victorian Essential Services Commission (ESC) in the course of its 2005 Water Price Review, and with principles set out in the paper prepared for the Water Services Association of Australia (WSAA) by ACIL Tasman in association with GHD, both of which are referred to in the Tribunal's Issues Paper.

Non Price Policy Settings

Water recycling is a new industry and so policies for the period when the industry is being established will need to be different from those that appropriately apply in the longer term. For example there is a need to remove barriers to new investment, recognise and where possible reduce risk, and foster opportunities for efficient developments. A particular example is the policy setting that will determine whether efficient centralised production and reticulation solutions can succeed where stand-alone production may be an alternative. Policy settings can be established in a transitionary manner and roll-off when appropriate economic conditions, including those that truly reflect the relative costs of potable and recycled water, are established.

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13 IPART (2006), page 4

Some large industrial users may have access to benefits such as reduced trade waste disposal costs and/or government grants to support an investment in dedicated stand-alone recycling facilities at current potable water prices. However stand-alone recycling facilities are unlikely to be as efficient as centralised production and reticulation which benefit from economies of scale and relieve the consumer of the ongoing operation and maintenance costs associated with stand-alone recycling facilities (where that is an alternative for the consumer). This includes the fact that operating costs of numerous stand-alone systems will inevitably significantly greater than for a single larger water treatment facility. A further benefit is that large scale centralised production can provide a foundation for growth and expansion to serve residential growth areas and customers who could never justify stand-alone facilities.

A proliferation of dedicated stand-alone projects within the potential footprint of a centralised/reticulation project will reduce demand for that solution, perhaps to the point where it is no longer viable. If that occurs then the demand of those consumers who cannot justify their own facilities and/or who could be reached by extension and expansion of a reticulation system over time will be unmet. The potential efficiencies of a centralised/reticulation solution will be lost.

AGL is aware of several large industrial consumers that are actively considering stand-alone options. In addition, recent allocations from the NSW Water Savings Fund and Government policy announcements relaxing approval requirements will facilitate stand-alone projects. Some of these projects are likely to be within the footprint of potential centralised production and distribution projects. Analysis of the benefits of these projects[14] demonstrates that the stand-alone approach is substantially more costly on the basis of $/kl of recycled water produced.

If the social benefits of centralised production and reticulation are to be realised, policy settings that favour small scale stand-alone should be only be considered in the context of a framework which also supports at least until the viability of centralised production and reticulation solutions is tested and, if they proceed, then at least until they are in operation and established.

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[14] This analysis consists of the calculation of the $/kl of subsidy provided by the Water Savings Fund to date. In addition to requiring a smaller subsidy recycled water produced by a centralised facility and delivered through a network provides a much greater public benefit (in terms of both cost to the recycling to the economy and volume of water recycled) than stand-alone systems.

Attachment A

Matters on which the Tribunal seeks comment[15]: Summary of AGL's responses

3.2.1 The Tribunal seeks comments on the current pricing arrangement and price levels for recycled water at Rouse Hill.

AGL comment: It is clear that the price of Rouse Hill water is subsidised. It is also clear that recycled water from the project is accepted by consumers. There is a substantial case for reducing, if not eliminating, the current discount relative to the price of potable water. The Rouse Hill project should be subject to whatever principles are developed out of the current review.

4.1.1 The Tribunal seeks stakeholders' views on how marginal costs may be incorporated into recycled water prices.

4.1.2 The Tribunal seeks comments on the direct costs of recycled water that should be incorporated into prices.

4.1.3 The Tribunal seeks stakeholder comments on how joint costs might best be reflected in recycled water pricing arrangements.

4.1.5 The Tribunal seeks comments on how external costs and benefits associated with recycled water projects might best be estimated for incorporation into recycled water prices. The Tribunal also seeks comments on how these costs might be recovered.

4.1.6 The Tribunal seeks comments on appropriate means of recovering costs of meeting mandatory recycled water targets.

6.1 The Tribunal seeks comments on how recycled water prices can incorporate economic efficiency objectives.

6.2 The Tribunal seeks comment on how efficient pricing and revenue adequacy objectives can be balanced.

AGL comment: Consumers' consumption decisions will be driven in large measure by the usage charge for recycled water where the potable water usage charge will be the *de facto* benchmark. Given the economics of recycling, a usage charge set at the potable water usage charge will not permit full cost recovery. Any costs not recovered through usage charges will have to be recovered elsewhere e.g. by inclusion as part of the total cost base and revenue requirement of the utility, through [increased] fixed and/or variable charges. In this context, recycling costs must include appropriate compensation for risk.

If it is accepted that some of the costs of recycling will necessarily be recovered as part of the utility's total cost base, then there are no equity and efficiency considerations that are peculiar to the recovery of recycling costs. The allocation of those costs would be a matter for consultation and decision at the time of a price review. Avoided costs attributable to recycling will fall out in the process of assessing the utility's total cost base.

Now that certain of Sydney Water's sewerage services have been declared, caution must be exercised in the allocation of costs between sewerage and water services. Arbitrary or over-allocation of costs, including recycled water costs, to sewerage services could distort decisions relating to those services.

15 Identified by reference to paragraph numbering in the Tribunal's Issues Paper.

4.1.4 The Tribunal seeks comments on the likely extent of avoided water and sewerage costs that might arise as a result of recycling water.

5.5 The Tribunal seeks views on the appropriate level of price regulation for sewer mining.

The Tribunal also seeks suggestions about possible approaches to determining prices for sewer mining projects, and on whether it is possible for water agencies to reliably calculate avoided costs that may be associated with sewer mining projects.

AGL comment: Identification of avoided water/sewerage provision costs will be difficult to quantify and will be affected by, among other things, whether a short, medium, or long term view is taken.

In the case of SWC, it is expected that avoided sewerage costs will be revealed through the process of establishing access prices for sewerage services which have recently been declared.

4.2.2 The Tribunal is interested in stakeholder views on taking account of customers' willingness to pay when making a determination on recycled water pricing.

AGL comment: AGL proposes that the market be permitted to operate where use of recycled water is discretionary. Negotiations will reveal customers' willingness to pay and in any event, the usage charge for potable water will be the dominant benchmark.

Willingness to pay is not a significant consideration where use of recycled water is mandated e.g. through a third pipe. The usage charge for recycled water should be set at (or close to) the potable usage charge to avoid perverse incentives for over/under consumption of recycled water and/or incentives to circumvent mandated use.

Public education campaigns, funded from general water revenues, should be considered to ensure user acceptance of recycled water for non-potable uses initially. Promoting acceptance for indirect potable use could be a longer term goal.

4.3.3 The Tribunal seeks comments on how recycled water prices can be structured to provide appropriate signals to users while meeting revenue requirements and having regard to equity considerations.

The Tribunal also seeks comments on discounting developer charges where recycled water schemes are installed to reflect lower capacity costs for traditional water and sewerage services.

AGL comment: See responses to items 4.1.1 to 4.1.6, 6.1 and 6.2 above in relation to price structure.

Where recycled water is mandated by a third pipe, the method of determining developer charges should be modified to provide for the third pipe taking into account the economies of co-location. Some adjustment may also be appropriate to allow for any reduction in the required capacity of potable water infrastructure.

5.1 – 5.3 The Tribunal seeks stakeholder views on:

- the most appropriate option(s) for determining prices for recycled water services
- the advantages and disadvantages of the options [of market/negotiation; set by Tribunal scheme by scheme or postage stamp; or Tribunal establishes methodology] discussed above
- whether it is possible to develop a practical and robust methodology for the pricing of recycled water
- whether a single approach can be used for all customer types and uses of recycled water.

AGL Comment: Where use of recycled water is discretionary, the market should be permitted to operate to determine the retail price. Large consumers generally have countervailing power and the usage charge for potable water is a *de facto* benchmark. Where use of recycled water is mandated e.g. by installation of a third pipe, a price cap at the usage charge for potable water should be established. If it is preferred that prices not be regulated price monitoring would be appropriate. This approach will result in a relatively uniform usage charge for recycled water given that potable water pricing is set on a postage stamp basis.

Costs not recovered through usage charges will be recovered by inclusion as part of the total cost base and revenue requirement of the utility, to be recovered over the wider base of water service customers through fixed and/or variable charges.

5.4 The Tribunal seeks comments on whether it should have an audit role, to ensure the ongoing efficiency of recycled water prices. If so, is either of the above models appropriate for reviewing recycled water prices, and how often should reviews take place?

AGL Comment: This question suggests a view that it may be possible to produce recycled water at a price below the potable water price and that "auditing" is necessary to ensure against monopoly behaviour. That scenario is highly unlikely. If anything, price monitoring may be appropriate.

6.5 The Tribunal seeks comment on whether:

- the evaluation criteria discussed above [in 6.1 to 6.5 i.e. Economic efficiency Revenue adequacy; Transparency and administrative simplicity; Equity; and Competitive neutrality] are appropriate for assessing recycled water pricing options and whether there are other objectives that should be considered
- any trade-offs between objectives that need to be considered in assessing recycled water pricing options
- it needs to consider any additional issues with regard to competition in the water industry when determining recycled water prices, and how these issues can be addressed.

AGL Comment: See responses to items 4.1.1 to 4.1.6, 6.1 and 6.2 above in relation to price structure.

The usage charge for recycled water will be close to that of potable water which is in turn set on a postage stamp basis. Equity will be among the considerations when determining how remaining costs of recycled water provision should be recovered.

AGL notes that, with the current structure of potable water prices, where usage charges include approximately $1.00/kL of fixed and shared costs. Given that recycled water displaces potable water in many applications, Sydney Water will have no incentive to promote recycling for so long as dam water is available unless there is a mechanism for it to recover those fixed and shared costs.

Attachment B

Pricing Principles for Recycled Water

Water Services Association of Australia
Pricing for Recycled Water – Occasional Paper No 12

Guiding principles

The discussion in this report leads to a number of principles for the pricing of recycled water:

- Prices for recycled water should be set within a price band, with (whole of system) incremental cost as the floor and willingness to pay (as defined by the lesser of stand-alone cost or by-pass price of the alternative) as the ceiling.

- Commercial judgments should determine whether prices are set at the lower end of the efficient price band (ie just covering system incremental costs) or towards the higher end (where recycled water users make an increasing contribution to joint/common costs).

- Prices for recycled water should be set in a way that broadly tracks the prices of substitutes, but not locking in artificially low prices for an unnecessarily long time into the future.

- Prices for recycled water should be set as part of a longer term pricing reform strategy encompassing the suite of products provided by the industry (rather than a short-term position based on current charges for potable water and other services).

- In the case of mandated targets, any subsidies provided to recycled water projects at the expense of the broader (water) customer base should be fully and transparently costed. Preferably, these subsidies should be paid for from general revenue since they constitute a community service obligation (CSO).

- If uneconomic recycled water projects are mandated (without CSO funding), it would be appropriate that regulators accept the costs of mandatory schemes (provided the projects undertaken are the most efficient way of meeting the targets) as a legitimate 'cost of doing business', recoverable from the broad customer base.

- While regulators have a legitimate interest in overseeing prices of recycled water and the efficiency of these schemes, such regulation should be light handed to provide appropriate flexibility in pricing (e.g.an approach where regulators require adherence to specified principles rather than prescribing specific prices or directly intervening in commercial arrangements), particularly where users have alternative sources of supply or considerable countervailing power as a buyer.

- In some cases, efficient pricing may required different prices for different users, reflecting factors such as the different qualities of recycled water and associated costs of supply – which may vary by user and/or location – and willingness to pay. Failure to allow differential pricing may result in viable recycling projects not proceeding.

- Policies towards recycled water and towards competition and regulatory reform should be developed by governments and regulators in an integrated fashion.

Essential Services Commission in Victoria (ESC) final decision on the Water Price Review for Victorian water agencies.

Publicly owned water businesses are to set recycled water prices according to the following principles:

- revenue should be maximised with reference to the price of substitutes and customers' willingness to pay
- prices should cover the full cost of providing the service unless there are identified public benefits or to meet Government targets
- prices must include a variable component to provide appropriate signals for resource management.

Where costs associated with providing recycled water are not fully recovered, water businesses must demonstrate:

- that they have assessed the costs and benefits of the recycled water project
- that they have identified how any revenue shortfall will be recovered
- that there has been consultation about willingness to pay for the benefits of recycled water if the revenue shortfall is to be recovered from customers.