25 January 2011

Urban Water Inquiry
Productivity Commission
LB 2 Collins Street East
MELBOURNE VIC 3165

Dear Sir/Madam

Please find attached a submission by the Water Corporation to the Productivity Commission's inquiry into microeconomic reform in Australia's Urban Water Sector.

The Water Corporation has supported the more wide ranging submission made by Water Services Association of Australia. This submission is intended as a supplement, the objective of which is to inform the Productivity Commission of the specific advantages of providing water services through a Government owned State wide integrated water utility such as the Water Corporation.

The Water Corporation is happy to support your inquiry, and has provided comment through a number of channels and access to data for your modelling. Please contact Lloyd Werner, Manager Pricing and Evaluation on (08) 9420 2451 or at lloyd.werner@watercorporation.com.au if you require any further information or assistance.

Yours sincerely

Sue Murphy
CHIEF EXECUTIVE OFFICER

About the Water Corporation

The Water Corporation is the principal supplier of water services in Western Australia. It is an integrated water utility providing water, wastewater and drainage services to hundreds of thousands of homes, businesses and farms, and bulk water for irrigation.

Our services, projects and activities span over 2.5 million square kilometres. We have regional offices in Perth, Bunbury, Albany, Karratha, Geraldton, Northam and Kalgoorlie, which allow our employees to provide a high level of professional expertise to customers.

In 2009/10, the Water Corporation provided 369GL of water to 1.1 million properties from 245 schemes, treated 150GL of wastewater at 105 treatment plants from 900,000 properties and provided drainage services to 350,000 properties, including metropolitan main drainage and 6 rural drainage schemes. 242GL of bulk water supplies were provided to irrigators.

The Water Corporation received $1.9 billion in revenue, including $500 million in Community Service Obligation (CSO) payments. The Water Corporation had operating expenses of $670 million, and a capital program of $1.1 billion.

The Water Corporation's By-law prices are set by the Western Australian Government based on independent advice from the Economic Regulation Authority (ERA).

The CSO payments make up the short-fall between the cost of service provision and the prices set by Government. They include:

- subsidised prices for country water services, including State wide uniform residential water prices for consumption up to 300kL;
- tariffs concessions for pensioners, Seniors and charities; and
- the additional cost of retrofitting infill sewerage services.

We have over 3,000 employees and participate in alliances to manage over $13 billion in water supply, wastewater, drainage infrastructure and bulk water for irrigation.

We strive to deliver excellent customer service, continue to improve our existing levels of customer satisfaction and routinely engage with our customers to understand what they require from us as a service provider.

We have a commitment and responsibility to be a leader in ensuring the sustainable future of Western Australia's water supply. We aim to maximise economic, environmental and social benefits while minimising our environmental footprint.

The Water Corporation is a corporatised entity, owned by the Western Australian Government and accountable to our sole shareholder, the Minister for Water, for delivery of our services in a commercial manner. Our Board and Executive Team include a diverse range of specialist and general skills and experience.

Introduction

The objective of this submission is to inform the Productivity Commission of the advantages of providing water services through a Government owned State wide integrated water utility.

These advantages may inform analysis of potential water reforms:

- As benefits where aggregation of fragmented industry structures is being considered; and

- As costs where alternative disaggregated structures such as separating sources or retail functions are being considered.

This submission will address:

- The benefits of economies of scale;

- The real incentives for decision making within a government owned, regulated monopoly.

- The comprehensive decision making framework available to an integrated, government owned, regulated monopoly.

Economies of Scale

State wide provision of water services was established in Western Australia in 1985 with the merger of the Metropolitan Water Authority and the country water services arm of the Public Works Department to form the Water Authority of Western Australia.

The merger allowed the consolidation of many functions, and resulted in a decade of significant cost reductions. Even with subsidised country prices, cost reduction allowed water services to move from being a net cost to the State budget to being a net contributor.

The synergies from merging water businesses are significant. This has been demonstrated in two recent Western Australian studies:

- a joint study undertaken by the Corporation and Horizon Power in 2008 to examine whether there would be benefits in creating a regional water and power utility in Western Australia.

- A 2008 study *"Water Industry Structure Study Analysis of Alternative Reconfiguration Options in the South-West of Western Australia"* by Allen Consulting undertaken for the Economic Regulation Authority and the Joint Utilities Working Group (Water Corporation, Aqwest and Busselton Water)

The Horizon Power/Water Corporation study found that creating a merged regional water and electricity business would require replicating functions now undertaken within the Water Corporation and would result in an estimated 150-200 (+15% to 20%) additional Full Time Equivalent staff across the merged business, increasing the overall cost of delivering country water services by between 7.5% to 10%.

The study showed that there are greater synergies from delivering regional water within a state wide water business than the geographical synergies of delivering regional water within a regional water/electricity business.

The Allen Consulting study demonstrated significant economies of scale from merging the smaller entities (Aqwest and Busselton) with the Water Corporation compared with the existing arrangements and compared with establishing a new regional water business. The study found:

"Entity 9, where Aqwest and Busselton Water's current water operations would be merged into the Water Corporation, was estimated to potentially generate:

- *annual ongoing cost efficiencies of around $2.6 million (2007-08 base year), equivalent to 7.1 per cent of the three organisations' combined operating budgets (of around $36.8 million in 2007-08); or*

- *total cost efficiencies summing to around $36.7 million in present value terms over 20 years including transition costs."* [1]

It should be noted that the 7.1% saving is on the combined operating budgets including the Water Corporation's local operations which already benefit from economies of scale. Expressed differently, the $2.6m saving represents a 24% saving on the combined Aqwest and Busselton operating budget of $10.7 million.

An interesting point is that Aqwest and Busselton customers would not benefit from a merger. Due to the low cost access to groundwater enjoyed by Aqwest and Busselton, charges for their services are currently lower than those under the uniform pricing policy. Their charges would increase under the uniform pricing policy, even though costs would be reduced.

The incentives for decision making within a Government owned corporatised monopoly

Many proposed water reforms[2] are based on an assumption or perception of anti-competitive monopoly based behaviour which doesn't align with the real incentives or actual practice within government owned entities. Reforms based on such perceptions would be misguided.

Many people have a perception of water utilities as profit maximising commercial monopolies which seek to impede any potential competition to maintain their profits. This reflects a conventional view of monopoly behaviour and therefore tends to be widespread, but it is incorrect. The reality is that utilities are regulated,

[1] Allen Consulting *"Water Industry Structure Study Analysis of Alternative Reconfiguration Options in the South-West of Western Australia"* Executive Summary page vi
[2] For example, the ERA's Independent Source Procurement Entity

government owned businesses that try to deliver services that reflect broader community values. Private sector participation is encouraged where this assists the efficient delivery of services.

The Water Corporation's objective is to maximise the service levels provided within the limitations of the resources available, which are governed both by efficiency objectives and the wider capital limitations associated with being within the umbrella State Government budget constraints. In this environment, projects and services that can be undertaken more efficiently by the private sector help meet this objective and are actively pursued.

For planning and procurement, an integrated utility such as the Water Corporation has the benefit of the broadest available understanding of service delivery and customer service issues as it is carrying out these functions. This is often observed as information asymmetry. It should be noted, however, that this is more than an issue about access to information. It is the result of the breadth of knowledge and experience that an organisation operating a business will naturally bring to planning, procurement and operations. Any reform of industry structures should recognise this fact and seek to take advantage of this knowledge, and not seek to limit utilities involvement in decision making.

The reality of incentives for a government owned utility can be illustrated by understanding:

- Regulated prices based on a revenue cap - there is no opportunity for monopoly profits;

- Government ownership - the impact on management incentives of not having a share price.

Regulated Prices - no opportunity for monopoly profits

It is important to note that price regulated monopolies have no incentive to discriminate against individual customers. If a monopolistic profit was extracted from one customer, it would result in lower prices for another.

While most of the Water Corporation's customers pay prices set by the government, some customers are provided with services through agreements. These are generally major country customers who impose significantly different risk profiles on the scheme, or customers taking non-standard services such as recycled water.

Pricing policies for non-standard customers are developed in a manner that seeks to treat customers consistently, that assesses the impact of pricing decisions on other customers (i.e. seeks to ensure an equitable contribution to costs) and encourages optimal service delivery.

As a monopoly service provider, pricing policies are continually challenged as customers have no means of assessing comparative value. (It should be noted that this is not an issue of actual value. Customers complain even when the price they are paying is below the cost of supply.) To be in a position to answer these

challenges, it is important that consistency is maintained and the wider impact of precedent is considered, particularly as the impact of any targeted concessions flow on, and can result in increased prices for the other regulated customers who don't benefit from the particular concession.

On the supply side, as there are no monopoly rents to be protected from competition, the main focus is on efficient service delivery. The Water Corporation has been accused a number of times of trying to protect its monopoly position by discouraging competition, where in reality the projects in question were not viable or not in a position to proceed.

One well documented example was the United Utilities Australia (UUA) proposal to build a desalination plant in Esperance to supply water to Kalgoorlie and the Goldfields. The Water Corporation was happy to consider purchasing water from UUA at a price that reflected the cost avoided by ceasing supply from the Goldfields and Agricultural Water Supply Scheme (G&AWS). The issue of protecting the G&AWS from competition was not, and could not, be an issue as UUA's proposal relied on the complete substitution of the G&AWS water.

However, the G&AWS avoided costs were not enough to make UUA's project viable. Although there was no motive to understate the avoided costs, and all the information was made available to UUA, the Water Corporation's assessment of these costs was challenged. The ERA held an *"Inquiry on Cost of Supplying Bulk Potable Water to Kalgoorlie-Boulder"* in 2005 that confirmed the Corporation's assessment.

The considerable cost of this inquiry could have been avoided if the real drivers for the Water Corporation's decision making were better understood and could be articulated by parties independent of the Water Corporation. Instead of compounding false prejudices, many parties who are promoting greater competition could have made it clear that the Water Corporation would have benefited if UUA's project was viable. The Water Corporation was in fact more generous in its assessment of avoided costs than was the ERA.

The main issue with competition for both utilities and governments occurs where competition may not result in more efficiency service delivery, but in "cherry picking" regulated prices. Regulated prices do not reflect the cost of servicing specific locations or marginal costs. To maintain both postage stamp pricing (which is both politically popular and administratively efficient) and allow competition requires incorporation of avoided costs into the decision making.

The issue of access to infrastructure may arise in these situations. Genuinely efficient initiatives are likely to be adopted jointly by utilities and private companies without independent competitive processes as this will be to the advantage of both the proponent and the utility. For example, the proponent would avoid the cost and risk of seeking their own market and the utility would benefit from the lower costs/lower risk/better environmental or social outcomes delivered by the project.

Access to monopoly infrastructure has been supported by the Water Corporation on the basis that it gives proponents who have had their projects rejected by the utility an opportunity to back their own commercial judgement. There is, however,

an issue of whether this benefit is enough to justify the expense of establishing an access regime.

- *Government ownership - the impact on management incentives of not having a share price.*

The lack of a share price has a significant impact on management incentives and the type of business a government owned corporation will pursue. Without a share price there tends to be no reward for profit, only punishment for loss. Each transaction suffers a stand-alone assessment rather than as part of overall business profitability.

This can be observed from examining the experience from when Australian water utilities were first corporatised in the 1990s. Many set up conventional business development functions with the objective of business growth, both interstate and overseas. However, it soon became clear that, due to government ownership, every business opportunity had to be a winner with limited potential downside. One loss, even if it is more than offset by profits elsewhere in the business, would call into question why a government owned entity was risking taxpayers' money.

For the Water Corporation this meant withdrawing from any business development activities outside of Western Australia and from activities that didn't add value to our core business purpose. For example, our business development now focuses on projects such as recycling that provide benefits to our regulated activities through reducing scheme water demand, providing wastewater disposal solutions or releasing water resources for other purposes.

This outcome was not obvious when the Water Corporation was established but it is now clear from experience and a closer analysis of incentives.

It should be similarly obvious that the incentives in place for government owned, regulated, integrated monopolies lead them to act in the interests of the community and not to make anti-competitive decisions. However, like the business development incentives described above, this appears counter intuitive to many, and is only clear under closer analysis.

Corporatised utilities understand that incentives within the business are more likely to be risk aversion than managed risk taking for profit maximisation. While this may place a limit on some innovation and managed risk taking within the business, it should be recognised as a good attribute when dealing with unpredictable and rare events of significant consequence, such as maintaining safe and reliable water supplies and wastewater disposal services. Privately owned water utilities (e.g. those in the United Kingdom) need a higher level of regulation to achieve the same balance.

The Perth Desalination Plant was the first major plant in Australia and a good example of an innovation that occurred due to the early recognition of supply security risks. Without the timely development of this source, Perth would have experienced total sprinkler bans.

However, it is also understood that commercial incentives can be utilised to achieve innovative and efficient service delivery through external procurement

activities. Government owned utilities have efficiency objectives, resource constraints and price limits. Within this environment, it is logical for utilities to become procurement entities and use commercial incentives to help achieve efficiency objectives and manage resource constraints by outsourcing. As procurement entities, utilities are not in competition with their suppliers. For example, the Water Corporation does not develop an internal “bid” to deliver any of its major capital projects and does not have the capacity to do so.

95% of the Water Corporation’s capital program is delivered by the private sector through competitive processes. The various procurement methods used are assessed in terms of what will provide the most effective overall outcome for the Water Corporation and its customers.

Procurement strategies are optimised, both in terms of what is suitable for a particular project, but also in terms of what is efficient in delivering entire programs. Examples of the procurement strategies used by the Water Corporation include traditional tenders; panels; alliances; bundling; bundled alliances; construct; design and construct; design construct and operate; and Public Private Partnerships.

Operating and maintenance services are carried out in the metropolitan area through alliances with the private service providers.

An external incentive to optimise procurement is achieved through the process of economic regulation. Utilities have to demonstrate to regulators the efficiency of their processes and business decisions. It is interesting to note that this is a stronger efficiency incentive than would exist for an independent procurement entity.

From within a large integrated utility it is very difficult to see the benefit of setting up an alternative procurement entity. In addition to the utility being best placed to understand what needs to be delivered and the available options, large utilities have the experience of procuring thousands of projects, both large and small, and they are focused on procurement to meet service objectives (e.g. timely, efficient delivery within budget, and balancing overall service priorities).

Past attempts by Government Departments to utilise competitive processes for the allocation of water service licences in Western Australia have not been successful. There are examples of private companies that have not delivered the services promised.

There are also examples where private companies have set up schemes but have not put in place adequate arrangements to maintain the services in the long-term. In addition to the private sector examples, there are also examples of local authorities not having the technical or financial resources to continue to operate their schemes.

In response to these failures, the Water Corporation has stepped in, on behalf of the Government, as the service provider of last resort. The cost of restoring services can be considerable. Consideration needs to be given to ensuring that service provision that appears to be cost effective in the short-term is not leaving a liability for the government in the long-term.

Comprehensive framework for decision making available to a Government owned, regulated monopoly

Again contrary to many peoples expectation of the behaviour of water utilities as profit maximising monopolies, integrated utilities, as regulated, government owned businesses, try to deliver services that reflect broader community values, and optimise the whole-of-water cycle.

- As Government owned entities, the impact of the industry on the wider community is a natural part of the decision making process.

- As regulated monopolies, business cases justifying investments generate regulated revenue and profits that can accommodate decisions that include externalities. This is in contrast to business seeking to maximising profits from prevailing market prices.

- As an industry that experienced early the impact of climate change and whose activities include a large degree of environmental, customer and stakeholder management, the need to include externalities in business decisions is generally quite clear to its members.

Many of the reform proposals for the water industry are based around introducing a greater role for pricing and market mechanisms. Market mechanisms work well where value is created by the delivery of the service at the lowest price to the customer with the greatest willingness to pay.

However, the existence of externalities provides significant challenges to the practical efficiency of these models. What externalities draw into question is the benefit of leaving decisions to individuals responding to market prices.

This issue is not about competition, but market competition. By way of contrast and as outlined above, the benefits of competitive procurement processes have been clearly recognised and are widely used in the water industry.

To create markets, reform proposals also seek to disaggregate utilities into separate entitles dealing with source, distribution and retail, creating problems for the coordination of decision making over the entire water cycle. Examples include:

- an optimal solution for sources alone may not be the optimal if it is not consistent with distribution planning (integration can be more than half the cost of a desalination plant), and

- demand management strategies (e.g. showerhead/toilet retrofit, advertising) as a cost effective alternative to source development appears incompatible with the concept of competing retail entities trying to maximise business.

Disaggregation in regulation has similar issues. Unless incorporated into markets through regulation, markets do not deal with externalities. Regulation tends to deliver minimum acceptable standards, not optimised outcomes. Regulation also tends to fragment decision making, for example dealing separately with the objectives of health, environment, water resource management, and building and planning. Many of us have observed examples where the cost of adhering to

regulations has come at a cost far greater than the benefits, and that sometimes broader goals (e.g. improved environmental outcomes) can actually be compromised by narrow targets (e.g. the achievement of a simple target of zero discharge to the environment for wastewater plants may only be achieved through very high energy use which has an adverse environmental impact).

An opportunity for reform that has been generally embraced by the urban water industry is to systematically incorporate externalities into the decision making process to make better and more balanced decisions. This can be incorporated into business cases, justifying to regulators solutions that are more than simple "lowest price" service delivery.

Work is being undertaken within the Water Corporation to agree to valuation methodologies and to allow externalities to be systematically and consistently valued across the business and included in business cases. A simple example is the inclusion of a cost of $25/tonne for carbon in business cases. This reflects an estimate of the current externality, but also prepares the Water Corporation for the likely added cost in the future, as most investments are in long-lived assets. Other externalities are also being valued, and evaluations include sensitivity analysis over a range of values.

Conclusion

Some of the benefits of a State wide, government owned, integrated water utility such as the Water Corporation are:

- Economies of scale;

- Risk aversion where it matters (safe drinking water, water supply security, environmental compliance, management of assets for the long-term);

- Utilisation of commercial incentives through competition to provide outsourced services and capital projects to help meet efficiency targets and manage within resource constraints;

- Integrated decision making based on:
  - Best Available knowledge and information;
  - Prioritisation across the whole of the State on a consistent basis;
  - Incorporating externalities consistently across water services projects.

The advantage of a vertically integrated utility in delivering balanced decisions across all elements of the supply chain should not be underestimated when analysing water reform options.
