

AquaNet Sydney Pty Limited Submission to Productivity Commission inquiry into Australia's Urban Water Sector November 2010

This submission is made by AquaNet Sydney Pty Limited (AquaNet) in response to the Issues Paper published by the Productivity Commission in connection with its inquiry into Australia's Urban Water Sector.

Introduction

AquaNet is part of the Jemena group and is the proponent of the \$100 million Rosehill Recycled Water Scheme which will provide high quality recycled water to industrial and irrigation customers in Western Sydney. The principal components of the Scheme being delivered on behalf of AquaNet are:

- a 20ML per day capacity recycled water treatment plant which Veolia Water Australia will construct, own and operate at Fairfield, and
- a 20km (initially) distribution network which Jemena will construct, own and operate.

AquaNet will begin delivering 4.7GL of water per year to customers in the Smithfield and Rosehill areas in mid 2011. There is potential for the scheme to be extended and expanded over time.

As an active participant in the water industry, AquaNet is particularly interested in the matters that the Commission canvasses in Sections 6, 7 and 8 of the issues paper i.e. consumption and pricing, the scope for competition and contestability, and tools and options for achieving reform.

The Rosehill Scheme has been facilitated by the reforms initiated by the NSW Government. Those reforms are embodied in the Water Industry Competition Act 2006 (WICA) which has two principal components:

1. A licensing regime which provides for suitably qualified applicants to be licensed to:
 - construct operate and maintain water industry infrastructure (which encompasses infrastructure that delivers potable water, non-potable water, and sewerage services)
 - supply water or provide a sewerage service by means of water industry infrastructure
2. An access regime which provides for access seekers to obtain access to infrastructure services.

Jemena (through AGL as it was at the time) was an active participant in the consultation processes that led to the NSW Parliament passing the WICA in late 2006. Jemena has also contributed, by submission, to consultations on water reform in other jurisdictions including Victoria and Western Australia.

Our observations out of those processes are that the scope and incentive for new entrants to compete and innovate in the provision of water and wastewater retail services is limited. The demand for access is likely to be limited as a consequence. The main opportunities for new entrants, and for benefits to the community, lie in the development of new/alternative sources of supply and the associated provision of infrastructure services. Many of those opportunities do not involve access.

Taken together these observations lead to the conclusion that a national scheme such as exists for electricity and gas, with market structures, codified access regimes and a single national regulator, is not warranted for urban water. AquaNet supports the development of jurisdictionally based water access regimes and associated licensing arrangements and sees the NSW WICA as an appropriate model for both. For similar reasons we also consider that national regulation of urban water and wastewater services cannot be justified. Access and economic regulation in the water industry should remain under jurisdictional control.

Given that the level of new entrant activity and demand for access in the water industry is uncertain, AquaNet favours basic facilitating legislation, including an access regime built around the negotiate/arbitrate model as a first step. More sophisticated arrangements can be introduced in the future if warranted. AquaNet therefore supports the “adaptive management” approach adopted by the NSW Government.

AquaNet (through Alinta as it was at the time) presented a paper at the OZWATER 07 conference in April 2007 which addresses a number of the matters that are canvassed in the Commission’s issues paper and discussed in this submission. A copy of the OZWATER 2007 paper entitled *Structural Change in the Urban Water Services Industry – Lessons from Gas and Electricity* is attached.

The remainder of this submission is arranged under the following headings:

1. Drivers for reform in water and energy are different
2. Industry structure
3. The place of access in water reform
4. Water Pricing
5. Access Pricing
6. Other policy settings.

1. Drivers for reform in the water and energy industries are different:

The drivers for reform in water and energy have been quite different. The reforms in electricity and gas focused on promoting economic efficiency by enabling effective competition in those parts of the supply chain (production, wholesaling and retailing) where markets are contestable. Development of those markets was facilitated by the removal of barriers to inter-state trade in gas and the establishment of a National Electricity Market; by providing for third party access to the monopoly infrastructure; and by the progressive opening-up of end-use markets to competition.

For water, the drivers for reform have been resource management, and balancing long term supply and demand in the face of uncertain and even diminishing supplies from conventional sources, increasing populations, and environmental pressures. There is an increasing focus on the efficient use of resources, which is encouraged and facilitated through cost-reflective pricing and the development of trading arrangements.

There are also differences between water and energy that affect physical and market operations. Production locations for gas and to a lesser extent electricity are largely determined by the location of resources, and long distance transmission grids interconnecting production sources and markets are a feature of those industries. Water transmission is costly and, in most cases, collection and storage occurs close to point of consumption. Opportunities for interconnection of Australia’s major urban water markets and long distance high volume transmission are limited.

These differences suggest that large-scale structural reform in water may not be necessary or justifiable in the same way that it has been in the energy industry.

2. Industry structure:

Industry disaggregation has been a key feature of the reform processes in electricity and gas. In gas, production and merchant/retail functions are separated completely from the monopoly transmission and distribution functions. In electricity, generation and transmission are conducted separately but there are still integrated distributor/retailers in some jurisdictions. The reforms have also seen a substantial increase in direct private sector participation in both industries.

The transmission and distribution sectors of the water industry and the gas industry in particular are very similar, both in terms of technology and the management skills required. This makes the water industry a logical avenue for growth for established infrastructure providers such as Jemena. The private sector is well positioned to bring innovation, new technology and capital to the water industry in the way that it has to electricity and gas but, if this is to happen, it will be necessary to establish an appropriate regulatory regime including licensing arrangements, and an environment where participants have the opportunity to obtain rewards commensurate with risk.

In the water supply industry, bulk supply is the analogue of production in gas and generation in electricity. In AquaNet's view there is a strong case for the separation of bulk supply of water from distribution and merchant/retailing as has been done already in NSW and Victoria. In this way bulk supply costs can be made transparent thus providing appropriate price signals to the proponents of the new sources of supply that will be required to meet demand.

Ring fencing also has a part to play in ensuring competitive neutrality between new entrants and incumbents. At its simplest ring fencing involves behavioural/functional constraints (so that incumbents do not discriminate against access-seekers in favour of their related entities) perhaps coupled with accounting separation to enable identification of the costs of providing access services and to ensure that incumbents do not subsidise their contestable activities. At the other extreme, ring fencing involves separate incorporation and/or divestment (as is required in the gas industry).

Business models that involve direct retailing and/or access are not dependent on the disaggregation of the incumbent's distribution and merchant/retailing functions. The costs and benefits of disaggregation need to be fully understood before any such action is taken.

3. The place of access in water reform:

Full retail contestability was a fundamental aspect of the reforms in the energy industries, and access to monopoly infrastructure services was essential for that to occur. Without access, competing retailers could not deliver electricity and gas to their customers. However, the costs of establishing access, wholesale markets, and systems to support full retail contestability in electricity and gas have been substantial.

As far as AquaNet is aware, there is no evidence that *full* retail contestability would be an appropriate policy objective in the water and wastewater industries. Having said that, it is desirable to remove barriers to retail contestability and provide for access to infrastructure to facilitate innovative models that may involve direct retailing and/or access. For example, direct retailing and access were features of the Services Sydney water recycling proposal. On the other hand, there are other models such as the development of a new supply source for sale to an incumbent on a wholesale basis, that would not involve either access or retailing.

If the decision is taken to provide for access, options range from the basic negotiate/arbitrate model recommended originally by the Hilmer Committee and adopted in the WICA, to a fully codified regime with mandatory regulator-approved access arrangements such as exists for gas. The latter is expensive to establish and administer.

The level of demand for access in the water industry is uncertain so AquaNet favours a basic access regime built around the negotiate/arbitrate model as in the WICA. More sophisticated arrangements can be implemented over time if warranted.

4. Water Pricing:

The water industry reforms initiated by the 1995 Competition Principles Agreement and more recently the 2004 National Water Initiative (NWI), have resulted in significant changes. In terms of urban supply, major water utilities have been corporatised and cost-reflective pricing and usage-based charging have replaced rate-based systems. In its 2009 assessment of progress in implementation of the NWI, the National Water Commission (NWC) confirms the importance of proper price signals “in encouraging innovation, efficient water use and ensuring revenue streams are sufficient to deliver required levels of service”.¹ The NWC goes on to observe that there has been insufficient progress towards consistent urban water pricing policies and recommends that the parties to the NWI move quickly to endorse and implement the NWI Pricing Principles which were in draft at the time of the NWC’s review.² AquaNet notes that the Natural Resource Management Ministerial Council endorsed the NWI Pricing Principles on 23 April 2010.

Incumbents will dominate the provision of urban water and wastewater services for the foreseeable future and regulated prices for those services, and potable water supply in particular, will be the *de facto* determinant of market bearable prices for new entrants. The fact that all significant proposals for augmenting supply, including recycling, conservation projects and desalination, require subsidies or direct funding, suggests that potable water prices are currently too low.

Proper pricing at the bulk supply level in particular, is critical if the private sector is to become involved in the development of new resources. Proper pricing at the retail level is also important as a means of promoting conservation and ensuring that consumption choices (such as between potable water and recycled water, where it is available) are not distorted.

A related matter from an investor’s point of view is the stability and predictability of prices. Water infrastructure investments are generally long-lived and depend for their viability on predictable cash flows, especially in early years. In the issues paper, the Commission canvasses scarcity pricing as a means of managing demand in the face of supply variability.³ The NWC also discusses this option.⁴ In AquaNet’s view scarcity pricing, if implemented, would add greatly to the risk of infrastructure investments that are already marginal. We note that the principles for urban water tariffs in the recently-endorsed NWI Pricing Principles do not mention scarcity pricing.

¹ National Water Commission, 2009, *Australian Water Reform 2009: Second biennial assessment of progress in implementation of the National Water Initiative*, NWC, Canberra.

² *ibid.*, Finding 8.3.

³ Productivity Commission, 2010, *Australia’s Urban Water Sector*, Issues Paper, pp. 23 and 25.

⁴ *op. cit.*, p. 252.

5. Access Pricing:

IPART recommended in its 2005 report⁵ that the Efficient Component Pricing Rule (ECPR) should be used to set access prices. IPART noted that ECPR, being based on regulated retail prices, has advantages in situations such as in Sydney where there is postage stamp pricing. The ECPR approach also avoids the need to allocate the costs of a vertically integrated access provider between access provision and its other activities.

Depending on how the savings and costs of providing access are determined, the ECPR may yield an access price that is very close to the regulated retail price so that the access seeker is left with an unviable margin. On the other hand, access prices will promote economic efficiency so long as they at least cover the variable costs of providing access. It follows that, under the negotiate/arbitrate model, there is significant scope for negotiation on access prices, especially in cases where the access seeker has a viable alternative such as to by-pass the incumbent.

AquaNet notes that Services Sydney's application for access led ultimately to an access dispute with Sydney Water Corporation. That dispute was arbitrated by the ACCC. The principal issue in dispute was the access price. The ACCC determined⁶ that access prices should be calculated as Sydney Water's regulated retail prices minus avoidable costs (plus any facilitation costs) where avoidable costs are those costs that Sydney Water could avoid in the long run by providing access rather than those costs it will actually avoid.

6. Other policy settings

Independent jurisdictional regulation

Earlier in this submission we expressed a preference for access and economic regulation in the water industry to remain under jurisdictional control. Clearly that control should be guided by and subject to nationally agreed policy directions and institutions including those established under the NWI and the *Trade Practices Act 1974* (Cth). We therefore endorse the NWC's finding that it "strongly supports the establishment of effective, independent economic regulation of the urban water sector to provide incentives for cost efficiency, pricing efficiency and the provision of required levels of service, and to support the development of access based competition."⁷

Identifying and promoting optimal outcomes

As a general observation, policy settings should be directed to achieving optimal outcomes. That objective may not always be given adequate consideration. For example, in 2007, the NSW Government amended planning rules that apply to small scale "stand-alone" water recycling schemes to facilitate such operations.

In many cases, a reticulated solution will be more efficient than a multiplicity of stand-alone projects because of the economies of scale associated with reticulation. A large scale reticulated solution can also provide a foundation for efficient growth and expansion and serve consumers

⁵ IPART, 2005, *Investigation into Water and Wastewater Service Provision in the Greater Sydney Region*.

⁶ ACCC, 2007, *Access dispute between Services Sydney Pty Ltd and Sydney Water Corporation – Arbitration report 19 July 2007*, Canberra, July.

⁷ op. cit., p. 249. The finding follows from the observation (on p. 248) that "arrangements [in regard to independent economic regulation] could be usefully strengthened in several jurisdictions, particularly South Australia, Western Australia, Tasmania, the Northern Territory and Queensland."

who could never justify their own stand-alone facilities. However, reticulation systems are characterised by large up-front costs and generally require significant foundation loads to ensure their viability. Promoting stand-alone solutions before reticulation options have been fully explored could result in the loss of potential demand for the reticulation alternative, perhaps to the point where it does not proceed.

As an example, Government Funding is often targeted to politically popular initiatives such as storm water collection and treatment. Other options such as recycling of effluent present a more cost effective alternative but do not receive funding. In this way funding significantly diverts investment away from optimal outcomes.

AquaNet Sydney Pty Limited, November 2010.

Structural Change in the Urban Water Services Industry – Lessons from Gas and Electricity

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INTRODUCTION

Historically, urban water services throughout Australia have been provided almost exclusively by Governments (Local or State) acting directly or, more recently, through Government-owned enterprises.

The National Water Initiative (NWI) and persistent drought conditions have stimulated extensive policy debate and development in the area of water management and planning. In the case of New South Wales, new legislation has recently been enacted that provides for the first time for direct private sector participation in key areas of urban water service provision. The licensing scheme is complemented by arrangements whereby parties will be entitled to negotiate and, if necessary have arbitrated, terms of access to monopoly water infrastructure¹.

These developments present significant opportunities for the private sector. As Australia's largest energy infrastructure business, Alinta sees the water industry as a natural avenue for growth.

Direct private sector participation in and reform of the country's largest urban water market has and will involve complex political, regulatory and economic issues. However, there are models and extensive experience in other utilities that can be drawn upon. There are parallels and, at the same time, important differences, between what has occurred in the gas and electricity industries during the past 10 to 15 years and the structural changes that will accompany direct private sector participation and access in the water industry. Alinta has direct experience of the types of changes that are now taking place in the water industry through its involvement in the gas and electricity industries.

COMPETITION REFORM

Government reform of the Australian gas and electricity industries began in the early 1990s with the adoption of gas and electricity industry strategies. However, it is the Hilmer inquiry, commissioned in 1992, that has set the direction of competition reform in Australia since the mid 1990s. The inquiry's recommendations formed the basis for the National Competition Policy reforms agreed to by the States, Territories, and Commonwealth in 1995. The reforms included the development of a national access regime to enable competing businesses to use nationally significant infrastructure (like airports, electricity cables, gas pipelines and railway lines); and specific regulatory reforms to the gas, electricity, water and road transport industries.

¹ "Access" in this context refers to arrangements whereby third parties have a right to negotiate (or have arbitrated) terms and conditions on which their water (or wastewater) will be transported through another party's monopoly infrastructure, as distinct from the right to access a water resource itself.

In its 2005 Review of National Competition Policy Reforms, the Productivity Commission concluded that “National Competition Policy (NCP) has delivered substantial benefits to the Australian community which, overall, have greatly outweighed the costs” and went on to say that while much had been achieved over the previous 10 years “Further reform on a broad front is needed to secure a more productive and sustainable Australia.”²

GAS AND ELECTRICITY

The NCP reforms in electricity and gas have been extensive and focused on promoting economic efficiency by enabling effective competition in those parts of the supply chain (production, wholesaling and retailing) where markets are contestable. Development of those markets was facilitated by the removal of barriers to inter-state trade in gas and the establishment of a National Electricity Market; by providing for third party access to the monopoly infrastructure that conveys the gas or electricity from production source to market; and by the progressive opening-up of end-use markets to competition. These arrangements are supported by ringfencing requirements (imposed on the infrastructure owner) to ensure a level playing field for users whose gas and electricity is transported through the infrastructure, and for prospective users. In addition, for most significant assets, regulators oversee the terms and conditions of access, including price. In both industries, the reforms have been effected through extensive bodies of Legislation (including regulations and codes) established nationally, and associated institutional structures.

The competition elements of the electricity and gas regimes are complemented by jurisdictionally based licensing regimes and (for gas) market operation structures. While licensing/authorisation pre-dated the competition reforms, those regimes required modification to accommodate competitive participation by multiple new private and public sector entrants.

Access, licensing and market arrangements are now well established for both gas and electricity. At the same time recent reviews have led to further evolutionary change including modifications to institutional arrangements and legislation for gas and electricity. In particular, economic regulation and licensing are being transferred progressively to national bodies.

WATER

The reforms agreed for water in the National Competition Policy of 1995 had a somewhat different focus from the energy reforms reflecting then-current concerns about water resource management. The agreement (which was not supported in its entirety by all jurisdictions) dealt with (among other things) water pricing; water allocations or entitlements and trading in them; institutional arrangements; and environmental matters.

In the ensuing period “States and Territories have made considerable progress towards more efficient and sustainable water management. ... At the same time, there has been an increase in demand for water, and an increased understanding of the management needs of surface and groundwater systems, including their interconnection. ... The current variation in progress with water reforms between regions and jurisdictions, and the expanded knowledge base, creates an opportunity to complement and extend the reform agenda to more fully realise the benefits intended by COAG in 1994.” (Preamble, National Water Initiative (NWI), 2004)

² Productivity Commission 2005, pXII

The water reform agenda has been reinvigorated with agreement on the National Water Initiative (NWI) in 2004. This was against a background of deepening drought, increasing demand, and forecast capital requirements of many billions of dollars to maintain and replace aging infrastructure and expand capacity to meet demand growth³.

In several jurisdictions there is now recognition that the private sector can make an important contribution to the industry through innovation and new technology, and through the provision of capital. In NSW this has been translated into new legislation that provides for the licensing of private sector participants in key areas of water service provision. The licensing arrangements are complemented by a State-based access regime whereby parties will be entitled to negotiate (or have arbitrated) terms of access to monopoly water infrastructure.⁴

ENERGY AND WATER COMPARED

The drivers for reform in water and energy have been quite different. In the case of energy it was the opportunity to improve economic efficiency by opening up markets to competition while, for water, the drivers have been resource management, balancing supply and demand in the face of drought, increasing urban populations and environmental demands, and efficient use of resources (including cost-reflective pricing and trading arrangements).

There are similarities between energy and water: electricity and water services, and to a lesser extent gas, are classed as essential services, and all three involve distribution by networks that have natural monopoly characteristics. In terms of distribution technology, gas and water are very similar because both involve underground pipe infrastructure. Finally, all three involve risks and potential for public harm (health in the case of water services, and safety in the case of electricity and gas) and consumers have quality of supply and reliability expectations which must be managed competently.

At the same time there are differences that affect physical and market operations. Electricity cannot be stored so production and demand must be balanced instantaneously. Gas and water, on the other hand, can be stored. Resource location determines where gas and to a lesser extent electricity are produced, and long distance transmission, and interconnection of production sources and markets are a feature of those industries. Water transmission is costly and has been unnecessary to date with collection and storage occurring close to point of consumption. Long distance transmission may prove to be a viable solution for some urban markets in future. The extent to which this occurs will depend on the availability and cost of alternatives.

The history and extent of private sector involvement have also been different as between gas, electricity and water, and between jurisdictions. For example in NSW, gas reticulation and retailing has, for the most part, been undertaken by the private sector. Privatisation of gas businesses in other states has followed more recently, and is now essentially complete with the sale of the Allgas distribution business in Queensland in 2006. In the

³ For example, "Over the next twenty years it is estimated that necessary water supply and sewerage capital expenditure in South East Queensland, Sydney and Melbourne will amount to \$12.6 billion." (Institution of Engineers 1999, p37) and, more recently, United Water managing director Graham Dooley is quoted as saying that Australian urban water infrastructure had a capital deficit of between \$20 billion and \$30 billion. (*The Australian*, October 13, 2006)

⁴ Access is presently available under the National Access Regime contained in Part IIIA of the Trade Practices Act as demonstrated by Services Sydney's successful application for access to elements of Sydney Water Corporation's sewerage system. If a State-based regime is established and certified as effective then it would supplant the National regime.

case of electricity, Victoria led the way when it privatised the industry in that state in the mid 1990s, and some other jurisdictions have followed to varying degrees reflecting the political pressures that surround the privatisation of essential services. For example, the most recent electricity privatisations (in Queensland) have been confined to retail businesses only while, in NSW, the electricity industry remains predominantly in Government hands.

As with electricity, privatisation in the water industry is politically sensitive and so, by comparison with gas and electricity, the water industry is a long way behind. While a large and growing proportion of water industry expenditure has been out-sourced to the private sector for some time, it is only recently that the policy mix has included licensing to permit direct private sector participation in water service provision.

IMPLICATIONS FOR WATER POLICY AND REGULATION

There is no doubt that the private sector can make a valuable contribution to the water industry both through innovation and technology, and with capital, particularly in urban areas. Provision of infrastructure and related services in growth areas, and water recycling as an alternative to conventional sources of supply, offer immediate opportunities. The extent to which this potential is realised will depend greatly on policy settings including the form of regulatory structures and the establishment of a “level playing field” for participation.

There are two fundamental components of regulation:

- arrangements for third party access and, associated with that, economic regulation of natural monopolies;
- technical and operational regulation, accomplished through licensing. Licensing provides a filter to ensure that only persons with appropriate skills and resources are permitted to operate in the industry.

Wholesale market structure is a third, related, element. In the case of electricity and gas, market structures reflect the characteristics of the commodity, pre-existing arrangements, and the scope for efficiency gains through market interconnection. Those structures are still evolving. Water trading is also developing with most activity involving irrigators on river systems which provide the physical connection between buyer and seller. Opportunities for trading to urban markets are limited by the absence of physical connections and current bulk supply arrangements which generally involve monopoly suppliers. While arrangements (and infrastructure) that facilitate urban trading may evolve in time, that is not a prerequisite for purposes of meeting immediate policy objectives including encouraging private sector investment and innovation in delivering new water sources. Provision for access and for private sector participation (through licensing) are the essential and appropriate first steps. In NSW, IPART’s recommendation that incumbents make greater use of outcomes-based competitive procurement processes will also provide opportunities for the development of a competitive market for wholesale supply.

Retail pricing of electricity and gas are becoming deregulated although significant components of retail costs (i.e. charges for use of the monopoly infrastructure that connects sources of supply to markets) are regulated. Deregulation of retail pricing for water services is unlikely for some time. The regulated prices of water services are therefore the de facto benchmark against which private sector entrants will assess potential opportunities. It follows that it is important that the pricing aspects of the NWI are

fully implemented. In particular, there should be a rigorous determination of Long Run Marginal Cost (LRMC).

Level Playing Field Essential

A “level playing field” between new participants and between them and the incumbent provider is essential. Ownership structures, and the extent of unbundling/separation, particularly of incumbents and where Government interests are involved, have a significant bearing on the required arrangements. Options range from accounting and behavioural separation of monopoly and competitive activities at one end of the scale to complete structural separation at the other. Ringfencing also has a part to play as it does for gas and electricity.

IPART has observed, correctly, that the costs and benefits of industry disaggregation and unbundling need to be understood before that course is adopted for water. At the same time, IPART recognised that certain of the incumbents’ procurement activities should be “ringfenced” and undertaken independently. Beyond that, there are other aspects of current arrangements in NSW that will require amendment to establish a level playing field. For example a mechanism is required to enable private sector participants to access developer charges and avoided costs that can be attributed to the participant’s project and would otherwise flow to the incumbent provider.

Other Policy Settings

As a general observation, policy settings should be directed to achieving optimal outcomes. There is a current example of where that might not be achieved. The NSW Government has recently amended planning rules that apply to small-scale “stand-alone” water recycling schemes to facilitate such schemes.

In many cases, a reticulated solution will be more efficient than a multiplicity of stand-alone projects because of the economies of scale associated with reticulation. A large scale reticulated solution can also provide a foundation for efficient growth and expansion to meet the needs of new development areas and consumers on line-of-main who could never justify their own stand-alone facilities, thus increasing overall uptake of recycled water. However, reticulation systems are characterised by large up-front costs and generally require significant foundation loads to ensure their viability. Promoting stand-alone solutions before reticulation options have been fully explored could result in the loss of potential demand for the reticulation alternative, perhaps to the point where it does not proceed.

National Or Jurisdictionally-Based Access Regimes

In the case of electricity, third party access, while essential, was just one aspect of the competition reforms which included separation of generation businesses and establishment of the inter-connected National Electricity Market to enable competition within and between states. Similarly, in the gas industry, where the development of inter-state trade was also a feature, access was a prerequisite for the development of competition in and between upstream markets and in downstream markets. In this context, it made sense to develop National arrangements for both electricity and gas.

Current arrangements for bulk supply of water from existing sources to urban markets do not lend themselves to competition in bulk supply and so third party access will not of itself promote competition among those sources. It will take some time, and private involvement in the development of significant new water sources, before there is widespread competition in the retail market for water services in the way that there is for electricity and

gas⁵. For these reasons the level of demand for third party access to potable water infrastructure, while unknown, is not likely to be great. However, third party access may be a pre-requisite for some specific concepts such as Services Sydney's recycling proposal, or where the distribution and retailing of water in areas such as new growth areas is undertaken by a private sector operator.

While the issues in all jurisdictions are similar, namely the need for new sources of supply and sourcing capital for necessary investments, there are significant differences between jurisdictions in terms of their preparedness to embark on direct private sector participation and third party access, so development and implementation of a national access regime for water infrastructure is likely to be problematic in the short term and could delay reform in the more progressive jurisdictions.

National uniformity is a desirable objective in itself, and so one option is to develop a national access regime for water modelled on the gas or electricity regimes (for example). However, this would involve a substantial investment in establishing legislation and an access code and then the preparation and regulatory review of incumbents' access arrangements. On current knowledge, it is questionable whether that investment can be justified. Having said that, the primary question is the general form that the third party access arrangements will take. If agreement could be reached at a National level on the principles and form of a water access regime, then jurisdictions could proceed at their own pace within that framework.

Alinta believes that a jurisdictionally-based negotiate/arbitrate model supported by arrangements for declaration (to establish a right to negotiate); optional access undertakings; published access pricing principles and guidelines for arbitration; and access to limited merits review of decisions, is likely to be the most workable solution and should be given time to operate (and be refined) before more radical alternatives are considered. The new regime in NSW has these characteristics (with the exception of merits review) and could become a model for other jurisdictions.

The principal measures of the access regime's effectiveness will be:

- whether it provides an environment where competition between access seekers can occur on a level playing field;
- whether it results in investment in infrastructure and the development of new sources of supply;
- whether it promotes negotiations for access that are commercially reasonable for both access seekers and access providers; and
- whether the costs of providing and negotiating access are kept to a minimum.

Just as it has been for the energy industry, it is inevitable that the legislative and regulatory scheme for water will require refinement as the industry develops – the regime must evolve with the industry. The NSW Government has recognised this by adopting an “adaptive management” approach. This is an important and valuable attribute of the NSW arrangements and the industry would expect to participate actively in those processes.

⁵ Lack of diversity in existing sources of wholesale/bulk supply is one factor that is likely to inhibit the development of competition in retail markets for potable water. This outlook is reinforced in the NSW model by the pre-condition for grant of a retail licence that “sufficient quantities of the water supplied by the licensee will have been obtained otherwise than from a public water utility.” (Water Industry Competition Act, s10(4)(d)) In Alinta's assessment, retail margins are also unlikely to be adequate to stimulate and support widespread competition.

Pricing

Legislative structures, including licensing arrangements, are clearly necessary to facilitate direct private sector involvement in the water industry. However, if the private sector is to be encouraged to avail itself of that permission and invest in the industry, there must be the opportunity to obtain an appropriate commercial return on that investment. Ultimately that equation comes down to revenues and costs.

For the foreseeable future, the principal competitor and *de facto* determinant of revenue for private sector recycling and potable supply projects will be the regulated price of potable water supplied by incumbent providers. Recent regulatory decisions have seen significant increases in potable water prices reflecting the June 2004 NWI and a growing understanding of the costs of the next large tranches of supply, which include desalination in some cases. However, the fact that all significant proposals for augmenting supply, including recycling and conservation projects, require subsidies or direct funding, would suggest that potable water prices are still below LRMC. In its June 2006 report on, *Progress On The National Water Initiative*, the National Water Commission confirmed that establishment of proper water pricing practices remains an important priority.⁶

On the cost side, access pricing is a significant issue for those projects that require access. Legislated pricing principles are an important part of the framework for negotiation and, if necessary, arbitration, between access seekers and the service provider.

There has been much debate about the objects of providing access, and access pricing principles in the context of the review of the National Access Regime and more recently the National Electricity and Gas Regimes. The pricing principles for the National Access Regime are in section 44ZZCA of Part IIIA of the Trade Practices Act (TPA). In summary:

- (a) regulated access prices should:
 - (i) be set so as to generate expected revenue that is at least sufficient to meet efficient costs; and
 - (ii) include a return on investment commensurate with the risks involved; and
- (b) access price structures should:
 - (i) allow multi-part pricing and price discrimination when it aids efficiency; and
 - (ii) be non-discriminatory as between access seekers; and
- (c) there should be incentives to reduce costs or otherwise improve productivity.

In the gas and electricity industries, access prices are, as far as practicable, set to reflect the efficient costs of providing the relevant service. The total cost of providing services is built up from its components – O&M, return of capital (or depreciation) and return on capital – to produce a revenue requirement which is then allocated across the various access and related services that are to be provided. For large customers in particular, this can result in prices that vary according to the customer's location.

The NSW Water Industry Competition Act (WICA) has adopted the pricing principles of Part IIIA of the TPA with the qualification that they be implemented "in a manner that is consistent with any relevant pricing determinations for water supply and sewerage services including (where applicable) the maintenance of 'postage stamp pricing'" (WICA, s41). This qualification highlights one of the political and practical realities of water pricing i.e. postage stamping, and is one of the factors that led IPART to recommend that the Efficient Component Pricing Rule (ECPR) should be adopted as the *prima facie* basis for

⁶ National Water Commission, p8

setting access prices. ECPR also avoids the need to allocate the costs of vertically integrated incumbents between water, sewerage and retailing activities.

In simple terms, an ECPR access price is set by taking the incumbent's regulated retail price and adding (or deducting) the incremental costs (or savings) incurred by the incumbent in providing access. In many cases those costs and savings are likely to be small with the result that access prices are close to the "benchmark" regulated retail price, leaving very little margin for the access seeker. However, access prices will promote economic efficiency (and will therefore be consistent with the TPA and WICA pricing principles) so long as they at least cover the variable costs associated with providing access. That is, the incumbent's customers, taken as a whole, will be better off if access is provided at a price that at least covers the variable costs of providing access than they would be if access was not provided at all. It follows that, under the negotiate/arbitrate model, there is significant scope for negotiation on access prices, especially in cases where the access seeker has a viable alternative such as to by-pass the incumbent.

CONCLUSION

The reform processes in gas and electricity have been driven by the need (and opportunity) to improve economic efficiency by enabling competition in production/generation and retail/supply sectors, both within and between states. The reforms have been characterised by the establishment of national arrangements that provide for access to existing monopoly infrastructure, and the development of physical networks that enable inter-state trade in both commodities.

In the case of water, the policy imperatives are to secure new sources of supply and to encourage investment and innovation. The private sector stands ready and able to respond. However the opportunities for interconnection of sources of supply and major urban markets are much more limited for water than they are for gas and electricity. There are also considerable differences between jurisdictions in their preparedness to undertake reform. Jurisdictionally-based solutions, guided by national principles, seem appropriate.

Recent developments in NSW have potential to transform the water industry in that State and could become a model for other jurisdictions. Policy and regulatory settings (including pricing) will play an important part in determining the extent to which that potential is realised.

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