

Inquiry on Competition in the Water and
Wastewater Services Sector
Economic Regulation Authority
PO Box 8469
Perth Business Centre
PERTH
WA 6849



wacoss

Western Australian
Council of Social Service Inc

*Ways to make
a difference*

Western Australian
Council of Social Service Inc.
ABN 32 201 266 289

City West Lotteries House
2 Delhi Street
West Perth
Western Australia 6005

Phone (08) 9420 7222
Fax (08) 9486 7966
Email info@wacoss.org.au
www.wacoss.org.au

30 August 2007

Dear Sir/Madam,

The West Australian Council of Social Service (WACOSS) welcomes the opportunity to respond to the Economic Regulation Authority's Issues Paper: *Inquiry on Competition in the Water and Wastewater Services Sector* (WACOSS submission enclosed). WACOSS believes that any additional introduction of competitive elements into the West Australian water and wastewater industry has the potential to significantly impact on residential water consumers, particularly those experiencing financial hardship and other types of vulnerability.

WACOSS believes that while some aspects of competition may have the capacity to introduce real cost savings to the industry through gains in efficiency, the potential impacts of competition on small use users of water and wastewater services are still far from clear, and warrant further study. WACOSS also submits that in some instances, there is clear indication that the further introduction of competitive elements into parts of the water and wastewater services sector is not in the best interest of small use consumers.

If you require further information regarding this submission, please do not hesitate to contact Aden Barker, Senior Policy Officer on 9420 7222.

Yours Sincerely,

Lisa Baker
Executive Director

Ways to make a difference

| Social Policy & Advocacy | Organisation Development Services | Member Services |

***WACOSS Response to the
Economic Regulation Authority
Issues Paper
Inquiry on Competition in
the Water and Wastewater
Service Sector***



wacoss

Western Australian
Council of Social Service Inc

*Ways to make
a difference*

August 2007

Contact for further information
Aden Barker
Senior Policy Officer
Consumer Utilities Project
2 Delhi Street, West Perth, WA 6005
(08) 9420 7222
aden@wacoss.org.au

CONTENTS

INTRODUCTION	2
EXECUTIVE SUMMARY	3
Human Rights & Government Responsibility	3
Some Aspects of Competition Will Not Be Appropriate	3
The WACOSS Response to the Issues Paper	4
WACOSS RECOMMENDATIONS.....	5
COMPETITION IN THE WATER & WASTEWATER SERVICE SECTOR.....	8
Competition for Supply of Services to Whole Market	8
Comparative Competition.....	10
Full Retail Contestability (FRC) in the Water & Wastewater Services Sector..	10
Third-Party Access to Carriage Networks	12
OTHER ISSUES ASSOCIATED WITH COMPETITION IN THE WATER AND WASTEWATER SERVICES SECTOR	15
Reduced Carriage Network Quality	15
Privatisation of State-Owned Enterprises.....	15
Disaggregation of the Water and Wastewater Services Sector.....	17
Need for Appropriate Oversight and Regulation.....	18
Size Does Matter.....	19
Profit Margins of Private Market Entrants.....	20
HARDSHIP, EQUITY & VULNERABILITY.....	20
Disconnection & Affordability.....	20
Tenants	21
CONSUMER PROTECTION	22
The Need for Ongoing Tariff Regulation.....	22
CONCLUSION.....	24
REFERENCES & BIBLIOGRAPHY	25

INTRODUCTION

The Western Australian Council of Social Service Incorporated (WACOSS) is the peak body of the community service sector across Western Australia. Since 1956, WACOSS has been developing and strengthening the non-government community services sector's capacity to assist all Western Australians. With around 250 members, WACOSS has strong relationships with the social services sector and seeks to represent their interests, and those of the disadvantaged individuals and families they assist at a service level. Given this relationship, WACOSS is in a unique position to comment on issues in our society that socially impact upon members of the community experiencing disadvantage.

WACOSS is respected within both government and non-government arenas as being an authoritative voice for consumers with regard to energy market reform in Western Australia. WACOSS has developed a strong network with utility policy workers across Australia, which provides us with information and expert opinion on these issues.

In January 2005, WACOSS commenced the Consumer Utilities Project. Building upon the utility policy work WACOSS had undertaken over the previous four years the Consumer Utilities Project works with consumers and representative organisations to achieve better outcomes in the provision of essential services.

WACOSS has direct access to the issues of disadvantaged consumers who are living on low incomes through our Consumer Reference Group, which includes representatives from the Emergency Relief sector, Unions, Financial Counsellors and Community Legal Centres. These agencies provide us with policy information and direction in relation to our work and look to us to represent the interests of their clients with regard to utility issues. We have taken on this role due to the level and severity of the utility issues being raised by community agencies and the absence of any other resourced body in Western Australia representing these issues.

WACOSS is pleased to provide a response to the Economic Regulation Authority's Issues Paper: *Inquiry on Competition in the Water and Wastewater Services Sector*. The impacts on consumers of increased competition in the water services industry are potentially very significant. Whilst the adoption of competition and market mechanisms within some parts of the market have the potential to benefit consumers through lower charges, significant, real concerns remain regarding the possible effects of direct competition in the retail water sector, network management and bulk water supply.

EXECUTIVE SUMMARY

The water and wastewater services sector is currently undergoing a major process of reform. As a part of this process of reform, significant changes to legislation are currently underway both in regards to the way water services are delivered as well as the way in which water resources are managed. The ERA's *Inquiry on Competition in the Water and Wastewater Services Sector's* timing therefore has the capacity to interact with these proposed changes. The results of this process of reform will inevitably impact significantly on consumers of water, including those living on lower incomes, far into the future.

Human Rights & Government Responsibility

The continued access to clean, safe water is a human right recognised by international law and ratified by the Australian government¹. An underlying principle ensuring access to water, even by people facing hardship, is its continued affordability. This principle should underpin all considerations when regulating this essential service², especially in cases where additional private involvement in all aspects of the market is being considered, regardless of the involvement of private or semi-private entities in the provision of water and wastewater services, WACOSS and many other organisations representing the public interest, assert that governments must retain total responsibility for ensuring access to continued safe, and affordable, supply³.

Some Aspects of Competition Will Not Be Appropriate

The Authority's Issues Paper discusses a range of options for the introduction of competition into specific sectors of the water market. Guided by the experience of competition in essential service markets elsewhere, WACOSS believes that the introduction of specific types of competition into some parts of the water market will impact negatively on consumers. This holds particularly true in the case of the retail water sector, in which direct competition for customers should not be considered.

Unlike the subjects of many other markets, water is both an economic and social commodity. Because of the integral, social aspect of water and water uses, WACOSS

¹ World Health Organisation, 'The Right to Water', United Nations, 2003, p. 6

² Consumer Utilities Advocacy Centre & Consumer Law Centre Victoria, 'Joint Submission to the Discussion Paper on the Role of the Private Sector in the Supply of Water and Wastewater Services', 10 Oct, 2006, p. 1

³ Public Interest Advocacy Centre, 'Submission to the Independent Pricing and Regulatory Tribunal (IPART): Investigation into water and wastewater service provision in the greater Sydney area', May 2005, p. 3

also views significant involvement by the private sector in the management and planning of water services in Western Australia as being inappropriate.

The WACOSS Response to the Issues Paper

In its response to the Authority's Issues Paper, WACOSS addresses several significant concerns regarding the application of market principles, of which competition is one, to the West Australian water and wastewater services sector. Concerns addressed include those associated with full retail contestability in other essential service markets, the long-term private management of entire systems, third-party access to carriage networks, sectoral disaggregation, Build-Operate-Transfer systems and the need for regulation to protect all consumers – especially those facing vulnerability. In addition to these matters, WACOSS also highlights some of the potential pitfalls of privatisation or part-privatisation of the existing system which may follow-on from increased adoption of competition and market mechanisms.

WACOSS has focused on aspects of the Authority's Issues Paper and related issues that are most relevant to residential water consumers, particularly those living on lower incomes or facing other types of vulnerability. Absence of comment on any section of the Issues Paper should not be taken as support for, or opposition to any proposal by the Authority in relation to competition in the water and wastewater industry.

For further information in regards to this submission, please contact Aden Barker, Senior Policy Officer on (08) 9420 7222.

WACOSS RECOMMENDATIONS

RECOMMENDATION 1

That any introduction of competition by competitive tender for the long-term management of entire markets be accompanied by significant transparent, public oversight regarding operation and pricing.

RECOMMENDATION 2

That Full Retail Contestability in the retail sector of the water and wastewater service sector not be considered as an appropriate option in Western Australia for the provision of water and wastewater services.

RECOMMENDATION 3

That the introduction of third-party access to water and wastewater carriage networks only be considered in cases where relative financial and environmental risks and considerations regarding sustainability have been demonstrated to be acceptable. Such consideration should occur in a publicly accessible and transparent manner.

RECOMMENDATION 4

That access prices for any future third-party access to the water and wastewater carriage network be centrally regulated in a transparent and publicly accountable manner.

RECOMMENDATION 5

That the costs of third-party access be 'averagised' across the entire network to promote the equitable maintenance of all parts of the network and the continuation of universal tariff regimes

RECOMMENDATION 6

That further research take place regarding the real regulatory cost of compliance measures within Build-Operate-Transfer regimes.

RECOMMENDATION 7

That in cases where Build-Operate-Transfer regimes are being employed, sufficient regulatory rigour be attached to ensuring adequate investment in carriage networks.

RECOMMENDATION 8

That current publicly-owned water and wastewater service sector enterprises not be subject to a process of privatisation or effective privatisation through use of BOT devices.

RECOMMENDATION 9

That the non-economic use of water and wastewater services be viewed as a core, unalienable responsibility of government to the people.

RECOMMENDATION 10

That currently publicly-owned water and wastewater services should not be subject to all or partial vertical disaggregation.

RECOMMENDATION 11

That further study be conducted regarding the real costs of disaggregation of essential service providers by way of losses to efficiencies of scale and scope.

RECOMMENDATION 12

That Governments retain a central role in water and wastewater regulation and resource planning, considering the full spectrum of consumer benefits.

RECOMMENDATION 13

That regardless of the introduction of competition into the water and wastewater services sector, an independent Ombudsman Scheme be introduced.

RECOMMENDATION 14

That the profit margins of any possible future water and wastewater market entrants be regulated in the public interest.

RECOMMENDATION 15

That regardless of the degree or existence of competition in the water and wastewater services sector, mandated policies regarding the treatment of consumers experiencing hardship and other types of consumer vulnerability be made compulsory components of operating licenses.

RECOMMENDATION 16

That mandated policies regarding the treatment of consumers experiencing hardship and other types of consumer vulnerability exist with the purpose of preventing effective disconnection of water services as a result of payment default.

RECOMMENDATION 17

That the situation of tenants who have limited capacity to exercise market choice be considered against the possible introduction of product market competition in the water and wastewater services sector.

RECOMMENDATION 18

That regardless of the introduction of competition into the water and wastewater services sector, government continue to regulate tariffs for residential uses through the use of universal tariff regimes and price caps.

RECOMMENDATION 19

That full cost recovery through water tariffs be discontinued in instances where tariff levels are demonstrated to be leading to instances of effective disconnection from water services.

COMPETITION IN THE WATER & WASTEWATER SERVICE SECTOR

In its Issues Paper, the Authority discusses a number of different methods of competition which may be introduced to aspects, or sectors of the water and wastewater market. Reviewing the literature and the Authority's Issues Paper, it appears to be well-accepted that some types of competition may be more appropriate for some parts of the market than others, or else, not appropriate at all.

Many types of competition explicitly promise potential savings in costs and increased efficiencies which have the potential to improve service for small use consumers as well as reducing the overall cost of providing the service. However, despite the theoretical promise of market improvements, the introduction of competition and market forces to the provision of essential services, especially water, has impacted negatively on consumers in many cases, or else only provided negligible improvements. Some of these cases are discussed below, included in comment on the various aspects of competition being considered.

Competition for Supply of Services to Whole Market

The competitive supply of all management and service functions to a single (or even multiple) markets is proposed as a possible option for introducing competition into the water and wastewater services sector. If introduced, this would result in various private (and potentially public) entities bidding or providing tenders for the management of a vertically integrated water and wastewater business, or parts of that business.

In theory, it is easy to envisage potential gains in productive and dynamic efficiency which could be translated into lower product and service costs for consumer. WACOSS submits, however, that the efficacy of this method of competition in the water and wastewater services sector is still unproven and may pose significant risks to both consumers and the economy as a whole.

Issues

While some potential exists for competition for the contracted supply of services to an entire market, examples of this type of competition in other jurisdictions have provided some cause for concern. Some issues of contention relate to the competitive theory underlying the provision of medium to long-term contracts (those that span over 10 years). It may be argued that because of the length of time between "auctions", or call for tenders, some of the potential gains achievable through competition to provide

services may be lost⁴. Additionally, there are significant risks inherent in allowing essential services to be tendered-out for such long periods of time⁵.

In 1998, a trouble-laden state-owned water and wastewater provider in Atlanta, Georgia (USA) turned over the management of the system to a private company on a 20 year contract. Significant tax incentives were offered to this company to enter into the agreement and to maintain certain levels of local employment⁶. This contract was cancelled after less than 10 years because of significant contract violations in service quality (including water contamination), underinvestment in necessary capital maintenance and significant staff lay-offs⁷. While it may be argued that this example is isolated in nature and peculiar to a specific set of circumstances, it highlights potential risks in this method of introducing competition as well as suggesting that there may be issues relating to under-investment in long-life capital assets by private enterprise.

As the Authority's Issues Paper indicates, in South Australia, United Water, a private water provider has managed state-owned assets since 1996 on a 15.5 year contract. On the face of it, SA Water has remained a very profitable state-owned business⁸. There are concerns, however, regarding the relative lack of publicly available information that would ensure that community needs regarding safety and reliability continued to be met.

Significant concerns remain, however, regarding the relative lack of transparency in business and pricing processes and performance that occurs in the South Australian water and wastewater sector. This lack of transparency occurs because of the commercial in-confidence existing in the relationship between SA Water and United Water⁹. Current processes in South Australia have also limited public input into water pricing¹⁰. WACOSS recommends that any similar use of competitive mechanisms in Western Australia be underpinned by a strict, transparent compliance regime, with full public oversight. It is also of note that in South Australia, use of this type of competitive contracting still requires significant contract compliance measures to be undertaken by the state to ensure continued water and service quality.

RECOMMENDATION 1

That any introduction of competition by competitive tender for the long-term management of entire markets be accompanied by significant transparent, public oversight regarding operation and pricing.

⁴ Follmi, R. & Meister, U., 'Product Market Competition in the Water Industry: Voluntary Non-Discriminatory Pricing', Working Paper 115, Institute for Empirical Research in Economics, University of Zurich, May 2002, p. 2

⁵ Public Citizen, 'Water Privatization Fiascos: Broken promises and social turmoil', 2003, p. 3

⁶ Gleick, P. H. et. Al., 'The New Economy of Water: The risks and Benefits of globalisation and privatisation of Fresh Water', Pacific Institute, February 2002, p. 25.

⁷ Wallsten, S. & Kosec, K., 'Public or Private Drinking Water?: The effects of ownership and benchmark competition on US water system regulatory compliance and household water expenditures', Working Paper 05-05, March 2005, p. 7

⁸ <http://www.sawater.com.au/SAWater/AboutUs/AboutSAWater/United+Water.htm>

⁹ Total Environment Centre, 'Urban Water Regulation in Australia: A comparison of regulation, pricing and transparency mechanisms in major Australian cities', July 2007, p. 9.

¹⁰ Ibid. p. 12.

Comparative Competition

The experience of comparative competition, or benchmarking competition in water and wastewater service markets internationally has been varied. This variance owes itself to the different states of ownership and disaggregation of services that might exist in any jurisdiction. In principle, comparative competition may provide sufficient market signals to providers to stimulate increases in various types of efficiency, the resultant savings being passed-on to consumers. Some concerns remain, however, around how such a system may be implemented in a West Australian context.

Some of these specific concerns are examined in more depth later in other sections of this paper, however, WACOSS identifies equity issues in pricing and the provision of Community Service Obligation (CSO) payments as potentially posing problems. Is it also questionable as to how effective comparative competition would be in Western Australia without the disaggregation of the water and wastewater industry, which WACOSS does not support.

Full Retail Contestability (FRC) in the Water & Wastewater Services Sector

Full Retail Contestability, or direct product competition, is being progressed in the Eastern States within the National Energy Market. WACOSS, in previous submissions to the ERA and the Office of Energy (OOE) has asserted that this type of competition, which potentially entails total divestment of state responsibility for pricing and service provision, poses significant risks for consumers in the context of essential service markets^{11,12}.

Many of WACOSS's specific concerns stem from the real experience of consumers living on lower incomes, or else facing other types of vulnerability, particularly in the Eastern States of Australia where FRC has been introduced for small users. In the context of water, the potential risks to small consumers have been recognised by the UK Government¹³, which has instead introduced a type of comparative competition between vertically integrated service providers.

¹¹ WACOSS, 'Response by the Western Australian Council of Social Service to the Electricity Code Consultative Committee's Review of the Electricity Code of Conduct (for Supply of Electricity to Small Use Customers)', April 2007

¹² WACOSS, 'WACOSS Submission to the Office of Energy's Electricity Supplier of Last Resort Regulations Discussion Paper', August 2007

¹³ United Kingdom Parliament, 'House of Lords Hansard Text for 20 March, 2002' accessed at: <http://www.ppublications.parliament.uk/pa/ld200102/ldhansard/vo020320/text/20320w04.html>

Switching & Search Costs

It has been demonstrated in within electricity markets in Australia subject to FRC that small consumers experience significant switching and search costs¹⁴. These costs can include contract termination fees and connection fees which can be accrued by people wishing to switch providers. Small consumers also potentially face significant difficulty in differentiating between services offering identical, or similar products¹⁵.

In the United Kingdom, where retail competition in the electricity market has existed for some time, research indicated that a significant proportion of people (20-30%) actually switched providers to their own detriment¹⁶. Even more startling perhaps, was the suggestion by the research that of the meagre ~19% of consumers that were able to switch to the cheapest supplier, only 28-51% of the available gains were realised by the consumers¹⁷. These apparent poor choices and high searching costs have also been demonstrated in other markets where product differentiation is an issue, resulting in complex sales offers such as the telecommunications industry¹⁸.

It is arguable that the water and wastewater services sector poses additional levels of complexity when compared with that of electricity due to challenges in setting prices at various levels of the supply chain. This complexity therefore has the potential to resolve itself in high levels of information asymmetry between suppliers and consumers, resulting in potentially high searching costs and consumer detriment¹⁹. Comprehensive market measurement instruments would need to exist before such information could even be available²⁰, let alone useable.

Small Users and Vulnerability

FRC has a mixed record, both in Australia and overseas in achieving cost savings and other positive results for small, non-commercial users²¹. This group of users also contains consumers living on lower incomes or else facing different types of social and economic vulnerability. These vulnerabilities, in turn, further impact on the capacity of individuals to participate effectively in a contestable essential service market. Definitions of effective essential service market participation may be found in WACOSS's recent submission to the Productivity Commission's Inquiry into Australia's Consumer

¹⁴ Consumer Utilities Advocacy Centre (CUAC) & Consumer Law Centre Victoria, 'Submission to the Ministerial Council on Energy Standing Committee of Officials', September 2006, p. 3

¹⁵ Ibid, p. 2

¹⁶ Wilson, C. & Waddams-Price, C., 'Do Consumers Switch to the Best Supplier?', Centre for Competition Policy Paper 07-06, April 2007, p. 18

¹⁷ Ibid., p. 18

¹⁸ Economides, N., Siem, K. & Viard, V. B., 'Quantifying the Benefits of Entry into Local Phone Service' NET Institute Working Paper, October 2005.

¹⁹ CUAC, op. cit., p. 3

²⁰ Ibid, p. 4

²¹ Consumer Law Centre Victoria & Monash University Centre for the Study of Privatisation & Public Accountability, 'Electricity Reform in Victoria: Outcomes for Consumers', February 2006, p. 87

Protection Framework²². An example of specific vulnerability may be seen in the interaction between overall household debt and monies owed to utility companies²³.

Evidence suggests that people living on lower incomes and people residing in regional areas may also not have been well-served by the introduction of FRC in the Victorian electricity market²⁴²⁵²⁶. This may be partially due to the lower potential for profit involved in serving these consumers. WACOSS expects that this situation would prove to be analogous in the context of FRC in the water and wastewater service sector.

As mentioned previously, switching rate in sections of the contestable electricity market across Australia have been relatively low. There may be many reasons for low rates of switching, however the likelihood that incumbent providers will retain high levels of market share²⁷ and general inertia in customer switching²⁸ appears to have resulted in real reductions in operational costs (garnered through increased efficiency) not being passed-on to consumers.

RECOMMENDATION 2

That Full Retail Contestability in the retail sector of the water and wastewater service sector not be considered as an appropriate option in Western Australia for the provision of water and wastewater services.

Third-Party Access to Carriage Networks

The Authority's Issues Paper posits access by third parties to the water and wastewater carriage networks as a possible method of introducing competition into the water and wastewater services sector. This method of competition would potentially facilitate ongoing investment in the construction and management of capital works, contributing to water supply, storage and treatment. The Authority provides the current situation existing in New South Wales, as an example of the potential for independent, private investment in the area of sewerage treatment²⁹.

²² WACOSS, 'Submission by the WA Council of Social Services to the Productivity Commission's Review of Australia's Consumer Protection Framework', May 2006, p. 9

²³ Public Interest advocacy Centre (PIAC), 'Cut Off: The Impact of Utility Disconnections', February 2005, p. 14

²⁴ Essential Services Commission (Vic), 'Background Report: A Review of the Effectiveness of Retail Competition and the Consumer Safety Net for Electricity and Gas', Melbourne, 2004

²⁵ Queensland Consumers Association et. Al., 'Energy Reform Implementation Group: Joint Submission of Consumer Advocates', November 2006, p. 4

²⁶ Bowman, Diana; Coghill, David & Hodge, Graeme, 'Protecting Utility Consumers from Market Failure', Centre for the Study of Privatisation and Public Accountability, 2004

²⁷ Bathgate, T. J., 'Electricity Matters: Interviews with Queensland small end-users and their advocates', Centre for Credit and Consumer Law, Griffith University, December 2006, p. 12

²⁸ Ibid, p. 13

²⁹ Economic Regulation Authority, 'Issues Paper: Inquiry on Competition in the Water and Wastewater Services Sector', 20 July 2007, p. 13

Whilst WACOSS acknowledges that there is a potential for cost savings to be made by way of reduced public capital expenditure on larger projects, a number of concerns regarding third-party access to water and wastewater carriage systems remain.

RECOMMENDATION 3

That the introduction of third-party access to water and wastewater carriage networks only be considered in cases where relative financial and environmental risks and considerations regarding sustainability have been demonstrated to be acceptable. Such consideration should occur in a publicly accessible and transparent manner.

Setting Access Prices

In order that costs associated with increased system load and usage may be met, fees must be set for the third-party entity seeking access to the carriage network. Whilst centralised regulation of an access fee may not be necessary in cases where there is an interconnection of numerous small networks as a result of market reform, with different water sources³⁰. WACOSS asserts that the prevailing situation in Western Australia militates against this possibility. The existence in WA of larger, interconnected systems in urban areas suggests that central price regulation of system access tariffs will be required.

Having made this assertion, it is also important to highlight the possibility that the regulatory price of assessing appropriate access tariffs for larger quantities of networks may be high³¹. This situation may prevail if incrementally differentiated tariffs are desired for different parts of the network, due to the range of usage requirements within different parts of the system. Because of this, WACOSS believes that in any third-party access regime, tariffs for entry should be averaged across the entire network. This form of 'postage stamp pricing' will promote continued equity in pricing across the network and the maintenance of universal tariff regimes³²³³.

In all, given the high level of administrative and regulatory capacity required for third-party arrangements to be acceptable³⁴, WACOSS submits that third-party access arrangements pose significant risk to the public due to levels of regulatory and financial risk. WACOSS also suggests that the potential need of private business to obtain access at as low as possible a price may exist in tension with larger concerns around sustainability and the impact of new water sources, storage and treatment facilities on the environment³⁵.

³⁰ Follmi, R. & Meister, op. cit, p. 3

³¹ Ibid., p. 3

³² Freeman, E. & Wellsmore, J., Submission to the Independent Pricing and Regulatory Tribunal (IPART): Investigation into water and wastewater service provision in the greater Sydney region', Public Interest Advocacy Centre, May 2005, p. 6

³³ Public Interest Advocacy Centre (PIAC), 'Submission to Consultation Paper on Introducing a Dynamic & Competitive Metropolitan Water Industry', June 2006, p. 9

³⁴ IPART, 'Investigation into Water & Wastewater Provision in the Greater Sydney Region: Draft Paper', January 2005

³⁵ CUAC, op. cit., p. 2

RECOMMENDATION 4

That access prices for any future third-party access to the water and wastewater carriage network be centrally regulated in a transparent and publicly accountable manner.

RECOMMENDATION 5

That the costs of third-party access be averaged across the entire network to promote the equitable maintenance of all parts of the network and the continuation of universal tariff regimes

Build, Operate & Transfer (BOT) Models

BOT contracts are already being utilised in Western Australia, the current seawater desalination plant being one example. Effectively, such projects represent private concessions and third-party access regimes, for certain types of projects, with the additional security of eventual public ownership. The main advantage of BOT regimes over open competition for third-party access is the central system planning role of government, which should be maintained. This is discussed further later in this submission.

Because water source projects operated under a BOT regime must continue to comply with product safety and environmental regulations, under strict observation, in a way other entrants to the market (for instance retailer service providers) may not, additional research and analysis should take place regarding the real transactional and regulatory costs of maintaining BOT regimes. There is some suggestion that transactional costs, at least in the development stage of private participation in infrastructure, are higher than those that would be accrued by the state³⁶.

System maintenance is also another potential issue within a longer-term BOT regime, requiring significant regulation and compliance measures to ensure that assets are appropriately maintained over the period of private 'stewardship'³⁷. Ironically, however, shorter periods of stewardship may also create pressures for reduce investment in asset maintenance from investors³⁸.

RECOMMENDATION 6

That further research take place regarding the real regulatory cost of compliance measures within Build-Operate-Transfer regimes.

³⁶ So, J. et. Al., 'Transaction Costs in Private Infrastructure Projects – Are They Too High?', *Public Policy for the Private Sector*, The World Bank, Note No. 95, October 1996, p. 4

³⁷ Klein, M. & Neil, R., 'Back to the Future: The Potential for Infrastructure Privatisation', *Public Policy for the Private Sector*, The World Bank, FPD Note No. 30, November 1994, p. 4

³⁸ Follmi & Meister, op. cit., p. 2

OTHER ISSUES ASSOCIATED WITH COMPETITION IN THE WATER AND WASTEWATER SERVICES SECTOR

As discussed within the Authority's Issues Paper, there are a number of ways in which competitive elements may be introduced into the water and wastewater services sector. This section of WACOSS's submission focuses on various aspects of the potential introduction of competition. This includes an examination of some of the possible effects of regulatory and structural change, as well as potential changes to the ownership of assets that may occur following the introduction of competition. These assets may include only a portion of the sector, or the management of the entire sector itself.

As stated in the Authority's Issues Paper, the introduction of competition should not be an aim in and of itself. Rather, competitive pressures should only be introduced, in the method most appropriate, in cases where it will result in increased efficiency and improved outcomes for consumers. Whilst WACOSS submits that some forms of competition may have the capacity to increase system efficiencies and improve consumer outcomes, several aspects of such an introduction need to be examined in significantly greater detail.

Reduced Carriage Network Quality

As previously discussed, private enterprise, especially in the case of large Build, Operate Transfer project, may have little incentive to significantly contribute to capital works which promote the overall good functioning of the carriage network³⁹. This tendency was demonstrated in the United Kingdom where investment in water and sewerage infrastructure fell sharply following privatisation⁴⁰. The motivation, in this case, to reduce expenditure may be easily attributed to a desire by private companies to increase profits in the best interest of their investors who may not wish to pay such 'quasi-rents'⁴¹.

RECOMMENDATION 7

That in cases where Build-Operate-Transfer regimes are being employed, sufficient regulatory rigour be attached to ensuring adequate investment in carriage networks.

Privatisation of State-Owned Enterprises

Although the privatisation of state-owned enterprises and assets is not explicitly discussed in the Authority's Issues Paper, WACOSS believes that this issue must still be commented on as a wide scale adoption of a third-party access regime, use of BOT contracts and retail competition have the potential to effectively privatise a section of the

³⁹ Public Citizen, op. cit., p. 1

⁴⁰ Ibid., p. 9

⁴¹ Wallsten, S. & Kosec, K., op. cit., p. 5

market. WACOSS also observes that the privatisation of state-owned assets has often followed the incremental introduction of competition into essential service and other markets. Examples of this may be found in the electricity market in the Eastern States of Australia, as well as in the United Kingdom and the Australian telecommunications industry. WACOSS, like many others⁴² rejects the view that privatisation is a natural and desired outcome of the introduction of competition.

The privatisation of the water industry may pose significant risks for essential service consumers. Part of this risk, as identified by the World Bank⁴³, may lie in the possibility of effective state divestiture of assets and the associated risk that private enterprises may be less interested in the long-term welfare of both assets and consumers. This concern is supported by some evidence, which suggests that the full divestiture of publicly-owned infrastructure, or incremental privatisation of aspects of the water services sector may have a negative effect on the welfare of consumers^{44,45}.

These effects, native to the process of privatisation or effective privatisation may occur by both reducing the quality of the service and increasing the total cost to consumers. In addition to the suggestions that privatisation will result in consumer detriment, there is also evidence that suggests that the privatisation of whole, or part of the water and wastewater service sector would produce neither real reductions in cost⁴⁶, or significantly alter the welfare of consumers⁴⁷.

Setting aside questions of appropriateness of private involvement in the water and wastewater service sector, which may arise from the non-economic uses of water, the potential, claimed benefits of privatisation of water services should also be examined thoroughly. Certainly, there is a strongly held public belief that privatisation of water services will result in a reduction in social welfare⁴⁸.

As stated previously, water is not simply an economic good, but retains the special characteristics of social and environmental goods. Because of this fact and some uncertainty regarding the real economic benefits of privatisation, permanent and unthreatened public ownership of some the components of the water sector responsible for providing social and environmental goods is required⁴⁹.

Whilst history is replete with disastrous examples of private sector involvement in the water and wastewater services sector, WACOSS submits that there is some evidence to suggest a mix of private and publicly-owned water enterprises within a single market may provide no significant benefit to consumers⁵⁰. Additionally, there is also significant

⁴² Queensland Consumers Association et. Al, op. cit., p. 9

⁴³ World Bank, 'Full or Partial Divestiture', <http://www.worldbank.org/html/fpd/water/wstoolkits/kit1/kitone8.html>, Accessed 24 August 2007

⁴⁴ Wolff, G., 'Independent Review of the Proposed Stockton Water Privatization', January 2003

⁴⁵ Gleick, P. H. et. Al., op. cit. p. 24

⁴⁶ Wallsten, S. & Kosec, K., op. cit. p. 24

⁴⁷ Ibid., p. 8

⁴⁸ Wallsten, S. & Kosec, K., op. cit. p. 7

⁴⁹ Gleick, P. H. et. Al., p. vi

⁵⁰ Klein, M. & Roger, N., op. cit., p. 3

evidence to indicate that the positive effects of competition on private providers of water and wastewater services may be less than anticipated⁵¹.

RECOMMENDATION 8

That current publicly-owned water and wastewater service sector enterprises not be subject to a process of privatisation or effective privatisation through use of BOT devices.

RECOMMENDATION 9

That the non-economic use of water and wastewater services be viewed as a core, unalienable responsibility of government to the people.

Disaggregation of the Water and Wastewater Services Sector

Many of the types of competition discussed within the Authority's Issues Paper presuppose at least the partial disaggregation of currently vertically-integrated water and wastewater services. Disaggregation in the West Australian water and wastewater industries represents a potentially significant change for many consumers. In some respects, the experience of disaggregation may be assumed to mirror that experienced in electricity.

When considering disaggregation, it is important to recognise the economies of scale and scope that exist in the case of a vertically integrated service entity. Many of these cost savings may be lost in the case of vertical disaggregation and indeed, may not outweigh the savings made through possible improvements in management and efficiency, especially in areas such as information technology. This was suggested to possibly be the case prior to the disaggregation of Western Power⁵². Horizontal disaggregation of vertically integrated businesses may also not be appropriate in various circumstances due to the relative size of the market, as well as concerns regarding security of water supply⁵³.

In the absence of additional information regarding the subsequent savings and costs made following the disaggregation of Western Power, it is appropriate to draw some attention to the reasoning and analysis that informed the decision to disaggregate. This information may guide further analysis as to the appropriateness of disaggregation in the water and wastewater services sector.

As a part of the analysis by the government, prior to the disaggregation of Western Power, several independent reports were commissioned; one of which was prepared by

⁵¹ Wallsten, S. & Kosec, op. cit. p. 24

⁵² Frontier Economics, 'ERTF Recommendations – Component Two Draft Project Briefs: Electricity Reform Implementation Unit', Vol. 1., April 2003, p. 38

⁵³ Conradie, B. et. Al., 'Competition Policy and Privatisation in the South African Water Industry', Development Policy Research Unit, University of Cape Town, DPRU Working Paper No. 01/45, August 2001, p. 34.

the Allen Consulting Group (ACG)⁵⁴. Overall, the AGC paper recommended to the government that the benefits of disaggregation were likely to outweigh the potential costs. Certainly, these recommendations appear to have been borne-out in some of ACG's modelling, on a variety of factors.

In the modelling utilised within ACG's paper, potential costs under a future three-entity disaggregation scenario were separated into various parts, including capital, fuel and non-fuel costs. Significant improvements in cost savings were predicted by ACG for fuel costs and capital costs, under both median and conservative assumptions. In the report, non-fuel costs, which include aspects of administration and retailing, were modelled to achieve only modest cost savings using a median set of assumptions of less than 5%⁵⁵. Using conservative assumptions, disaggregation was modelled to result in a significant increase in non-fuel related costs of over 10%⁵⁶.

Cost savings in the retail sector are often cited, including by the ERA, as being an area that would benefit from disaggregation and subsequent competition. WACOSS posits that the significant range present in modelling predictions within ACG's report⁵⁷ suggests a level of uncertainty that does not recommend the disaggregation of retail operations from the rest of the business. To the extent that the situation of water and wastewater services are analogous with those of electricity, this uncertainty should be considered in decision-making.

WACOSS also questions the potential level of gain that might be achieved by the disaggregation of water and wastewater treatment and collection businesses as the real benefits may be relatively small in comparison to the cost of disaggregation⁵⁸.

RECOMMENDATION 10

That currently publicly-owned water and wastewater services should not be subject to total or partial vertical disaggregation.

RECOMMENDATION 11

That further study be conducted regarding the real costs of disaggregation of essential service providers by way of losses to efficiencies of scale and scope.

Need for Appropriate Oversight and Regulation

Regardless of the shape of any future constellation of disaggregated, publicly-owned, privatised or competing water and wastewater service entities, it is certain that strong regulatory involvement will continue to be required in order to protect the public

⁵⁴ Allen Consulting Group (ACL), 'The Benefits and Costs of Reform of the Electricity Industry in Western Australian: a report to the Electricity Reform Task Force', October 2002

⁵⁵ Ibid., p. 11

⁵⁶ Ibid, p. 11

⁵⁷ Ibid. p. 14

⁵⁸ Klein, M. & Irwin, T., 'Regulating Water Companies', *Public Policy for the Private Sector*, The World Bank, Note No. 77, May 1996, p. 2

interest⁵⁹. This will especially be the case in regards to issues such as consumers facing financial hardship and the possible effective disconnection through restriction of water flow as a result of bill non-payment.

While striving for increased levels of efficiency and effectiveness are laudable goals in the provision of any type of service, public policy in the area of essential services should, by definition, be focused primarily on the entire spectrum of public interest. This spectrum may include factors ranging from the capacity of consumers facing financial hardship to pay their bills to the longer-term sustainability of water supply. Competition, efficiency, deregulation and disaggregation without privileged consideration of the full-spectrum of consumer benefit should be discouraged.

Significant levels of decentralisation of water planning and other types of regulation may not be in the public interest. This position is held even by one of the world's great proponents of deregulation, competition in markets and privatisation, the World Bank. The World Bank recommends that governments retain a central role in monitoring overall performance and other, independent regulators⁶⁰.

The need for independent oversight and arbitration in any market system (be it deregulated, disaggregated or fully integrated and publicly owned) is clear. One mechanism with the potential to support fair conduct, in any system, is an independent Ombudsman Scheme. WACOSS has previously advocated for the formation of an independent Ombudsman Scheme, covering water services⁶¹. All parties participating in the market should be subject to such a scheme as a condition of their operating license.

RECOMMENDATION 12

That Governments retain a central role in water and wastewater regulation and resource planning, considering the full spectrum of consumer benefits.

RECOMMENDATION 13

That regardless of the introduction of competition into the water and wastewater services sector, an independent Ombudsman Scheme be introduced.

Size Does Matter

There is much to suggest that the benefits of the introduction of competition into a market may be proportional to the relative size and market power of individual consumers. Certainly, this has been well-demonstrated in the case of full retail contestability in the Eastern States energy markets⁶². The relative size of the market

⁵⁹ Cathgate, T., op. cit., p. 13

⁶⁰ World Bank, 'How Decentralised Should Regulation Be?', <http://www.worldbank.org/html/fpd/water/wstoolkits/Kit1/annex6.html>, Accessed on 16 August 2007

⁶¹ WACOSS, 'Submission by WACOSS to the Department of Water Review of Western Australia's Water Service Legislation', March 2007, p. 10

⁶² Bathgate, T. J., op. cit. December 2006, p. 12

may also impact the efficacy of competition. A relatively small market may result in poor levels of demand-side market information⁶³.

Profit Margins of Private Market Entrants

Further to discussion above regarding appropriate tariff regimes for residential and other small-use water and wastewater users, strict regulation is required in setting appropriate levels of profit for private water and wastewater market entrants. In the case of full cost recovery, higher-levels of profit are likely to result in higher tariffs being charged⁶⁴. Regardless of debates regarding the relative efficiency of public and privately owned enterprises, the fact remains that publicly-owned enterprises may not experience the same level of pressure for higher profits as would private enterprise which is beholden to investors⁶⁵.

In the event that private entry into the water and wastewater markets eventuates, it is recommended that levels of profit be regulated to the extent that they do not negatively impact on prices for consumers and are formulated in a transparent and public manner. Procedures currently observed by Ofwat in the United Kingdom may provide some guidance regarding this⁶⁶.

RECOMMENDATION 14

That the profit margins of any possible future water and wastewater market entrants be regulated in the public interest.

HARDSHIP, EQUITY & VULNERABILITY

Regardless of increased competition being introduced into the WA water and wastewater services sector, compulsory policies addressing the needs of essential service consumers experiencing financial hardship and other types of vulnerability should be made compulsory through the mechanism of regulated operating licenses. Such policies would be especially necessary in the case of the introduction of product market competition⁶⁷.

Disconnection & Affordability

Despite having almost universal coverage in OECD member countries, people experiencing financial hardship and other types of vulnerability still experience effective

⁶³ Queensland Consumers Association et. Al., op. cit., p. 13

⁶⁴ Public Citizen, op. cit. p. 8

⁶⁵ Gleick, P. H. et. Al. op. cit. 2002, p. 30

⁶⁶ Ofwat, 'Water Charges and Company Profits: Position Paper', June 2006

⁶⁷ PIAC, op. cit., 2006, p. 5

disconnection from water as a result of defaulting on payment of service charges. This highlights the issue of affordability, which disproportionately affects people living on lower incomes.

Studies have shown that there is little that groups living on lower incomes can do to reduce their water use without endangering health⁶⁸. Additionally, research carried-out by the British Medical Association 'correlated the rise of dysentery rates with water disconnections'⁶⁹. These factors argue that additional regulation to address these equity issues is necessary. There is little to suggest that the introduction of competition into the West Australian water and wastewater service sector would resolve such issues.

RECOMMENDATION 15

That regardless of the degree or existence of competition in the water and wastewater services sector, mandated policies regarding the treatment of consumers experiencing hardship and other types of consumer vulnerability be made compulsory components of operating licenses.

RECOMMENDATION 16

That mandated policies regarding the treatment of consumers experiencing hardship and other types of consumer vulnerability exist with the purpose of preventing effective disconnection of water services as a result of payment default.

Tenants

In Western Australia, tenants are not currently considered to be customers of their water provider. This is because, nominally, the provision of water and wastewater services is a service to the land and not the occupant, therefore making the landowner the customer. Potential problems for tenants exist in the case of direct product market competition as the tenant would have no capacity to select their water provider. Additionally, different tariff structures that competing providers use to differentiate themselves may be chosen by landowners to the detriment of tenants⁷⁰.

RECOMMENDATION 17

That the situation of tenants who have limited capacity to exercise market choice be considered against the possible introduction of product market competition in the water and wastewater services sector.

⁶⁸ Save The Children Fund Study in 'Assessing the Long-term Outlook for Current Business Models in the Construction of Water Infrastructure & Services', *OECD International Futures Project on Global Infrastructure Needs*, Global Forum on Sustainable Development, 29-30, November 2006, p. 39.

⁶⁹ Organisation for Economic Co-operation and Development, 'Assessing the Long-term Outlook for Current Business Models in the Construction of Water Infrastructure & Services', *OECD International Futures Project on Global Infrastructure Needs*, Global Forum on Sustainable Development, 29-30, November 2006, p. 39.

⁷⁰ PIAC, op. cit., 2006, p. 15

CONSUMER PROTECTION

As stated previously, the introduction of competition into the water and wastewater services sector is unlikely to provide sufficient market protections for water consumers⁷¹. The limitations of competitive markets to act as a mechanism for consumer protection extend from a number of factors discussed previously. These factors include consumer difficulty in differentiating between products, the relative size of the market and switching costs.

Concessions on service fees and volumetric charges are currently made available for some West Australian water users, such as old age pensioners, who are eligible for them. Payment to the water provider for the cost of providing the concessions is made by the Government in the form of Community Service Obligation payments, or CSOs. Whilst WACOSS contends that payment of CSOs should continue (or be expanded) regardless of any proposed reform of the market, the demonstrated need for CSOs to continue, regardless of provider type or ownership may be seen to raise some issues around the provision of market signals to providers and efficiency⁷².

The Need for Ongoing Tariff Regulation

The introduction of various aspects of competition in the water and wastewater is unlikely to negate the need for the ongoing provision of a universal tariff regime and price caps. This has been well demonstrated in the area of electricity where low levels of response to price changes have previously been observed^{73,74}. Universal pricing regimes and price caps as an integral part of centralised planning for water, as well as because of water's special status, will always be necessary⁷⁵.

The real risks associated with increases to water prices are well documented as increases to the price of water inevitably result in an increase in the incidence of payment default and subsequent effective disconnection⁷⁶. In addition to methods of consumer protection which may apply to any product in the market, the fact that water is an essential service has required that tariffs be structured in such a way that takes account of the social role and non-economic uses of water. Because of the special role of water, continued regulation regarding tariffs will be required, regardless of the role of

⁷¹ CUAC, op. cit., September 2006, p. 2

⁷² Ibid., p. 4

⁷³ Bathgate, T. (ed.), 'Everyone's a Winner?: Price Protection in Retail Energy Competition', *Electricity Issues: Interstate Perspectives on Full Retail Competition for Residential Consumers*, 2006, p. 10

⁷⁴ Langmore, M. & Dufty, G., 'Domestic Electricity Demand Elasticities, Issues for the Victorian Market', St. Vincent de Paul, 2004

⁷⁵ Fels, Allan, 'Recent Developments in Water Policy – The Impact on the Water and Wastewater Industries', presentation to the Australian Water and Wastewater Association 17th Federal Convention, March 1997, p. 10

⁷⁶ Public Citizen, op. cit., p. 8

competition in the market. This again highlights the necessary role of government in ensuring that essential services remain affordable and accessible to all⁷⁷.

Full cost recovery principles in pricing for essential services may be acceptable in cases where the cost being apportioned to residential consumers remains affordable. As previously discussed, however, water is not simply a commodity utilised for economic reasons, but a social good⁷⁸. This should be recognised in pricing whereby the tariffs paid by residential consumers are formulated on the basis of affordability, rather than full cost recovery. Certainly, in situations where the real cost of providing water services is increasing, full cost recovery in residential water pricing may place people living on lower incomes or facing other types of vulnerability at greater risk of disconnection⁷⁹, a fact recognised by the OECD.

RECOMMENDATION 18

That regardless of the introduction of competition into the water and wastewater services sector, government continue to regulate tariffs for residential uses through the use of universal tariff regimes and price caps.

RECOMMENDATION 19

That full cost recovery through water tariffs be discontinued in instances where tariff levels are demonstrated to be leading to instances of effective disconnection from water services.

⁷⁷ Queensland Consumers Association et. Al., op. cit., p. 13

⁷⁸ Gleick, P. H. et. Al., op. cit., 2002, p. 5-6

⁷⁹ OECD, op. cit., p. 39

CONCLUSION

WACOSS thanks the Authority for the opportunity to respond to its Issues Paper regarding competition in the Water and Wastewater Services Sector. Certainly, theory and experiences in some commodity and service markets indicate that there are significant efficiencies to be gained through the introduction of various types of competition. WACOSS submits, however, that the introduction of competition into some sections of the water and wastewater services sector – particularly in the retail sector – may pose potential risks for consumers, by way of equity and affordability.

Water is an essential service and as such, must be viewed not only as an economic commodity, but as a social good. Due to the changing nature of Western Australia's rainfall patterns, it is likely that future water sources will come at a higher cost to providers of water services. There is significant evidence now to suggest that increases in the price of water will increase the incidence of effective disconnection of water services and the problems that this causes. WACOSS strongly renders the belief that it is the responsibility of governments to ensure that the essential service needs of the community are met. This responsibility should be at the forefront of any consideration of the introduction of competition in the water and wastewater services sector.

REFERENCES & BIBLIOGRAPHY

Allen Consulting Group (ACG), 'The Benefits and Costs of Reform of the Electricity Industry in Western Australian: a report to the Electricity Reform Task Force', October 2002

Bathgate, T. (ed.), 'Everyone's a Winner?: Price Protection in Retail Energy Competition', *Electricity Issues: Interstate Perspectives on Full Retail Competition for Residential Consumers*, 2006

Bathgate, T. J., 'Electricity Matters: Interviews with Queensland small end-users and their advocates', Centre for Credit and Consumer Law, Griffith University, December 2006

Bowman, Diana; Coghill, David & Hodge, Graeme, 'Protecting Utility Consumers from Market Failure', Centre for the Study of Privatisation and Public Accountability, 2004

Conradie, B. et. Al., 'Competition Policy and Privatisation in the South African Water Industry', Development Policy Research Unit, University of Cape Town, DPRU Working Paper No. 01/45, August 2001

Consumer Affairs Victoria, 'Consumer Detriment in Victoria: a survey of its nature, costs and implications', *Research paper No. 10*, October 2006

Consumer Law Centre Victoria & Monash University Centre for the Study of Privatisation & Public Accountability, 'Electricity Reform in Victoria: Outcomes for Consumers', February 2006

Consumer Utilities Advocacy Centre & Consumer Law Centre Victoria, 'Joint Submission to the Discussion Paper on the Role of the Private Sector in the Supply of Water and Wastewater Services', 10 Oct, 2006

Consumer Utilities Advocacy Centre (CUAC) & Consumer Law Centre Victoria, 'Submission to the Ministerial Council on Energy Standing Committee of Officials', September 2006

Economic Regulation Authority, 'Issues Paper: Inquiry on Competition in the Water and Wastewater Services Sector', 20 July 2007

Economides, N., Siem, K. & Viard, V. B., 'Quantifying the Benefits of Entry into Local Phone Service' NET Institute Working Paper, October 2005

Essential Services Commission (Vic), 'Background Report: A Review of the Effectiveness of Retail Competition and the Consumer Safety Net for Electricity and Gas', Melbourne, 2004

Fels, Allan (Prof.), 'Recent Developments in Water Policy – The Impact on the Water and Wastewater Industries', presentation to the Australian Water and Wastewater Association 17th Federal Convention, March 1997

Foellmi, R. & Meister, U., 'Product Market Competition in the Water Industry: Voluntary Non-Discriminatory Pricing', Working Paper 115, Institute for Empirical Research in Economics, University of Zurich, May 2002

Foellmi, R. & Meister, U., *Enhancing Water Efficiency of Water Supply – Product Market Competition versus Trade*, October 2004

Freeman, E. & Wellsmore, J., Submission to the Independent Pricing and Regulatory Tribunal (IPART): Investigation into water and wastewater service provision in the greater Sydney region', Public Interest Advocacy Centre, May 2005

Frontier Economics, 'ERTF Recommendations – Component Two Draft Project Briefs: Electricity Reform Implementation Unit', Vol. 1., April 2003

Gleick, P. H., 'The Human Right to Water', Pacific Institute, May 2007

Gleick, P. H. et. Al., 'The New Economy of Water: The risks and Benefits of globalisation and privatisation of Fresh Water', Pacific Institute, February 2002

IPART, 'Investigation into Water & Wastewater Provision in the Greater Sydney Region: Draft Paper', January 2005

Klein, M. & Irwin, T., 'Regulating Water Companies', *Public Policy for the Private Sector*, The World Bank, Note No. 77, May 1996

Klein, M. & Neil, R., 'Back to the Future: The Potential for Infrastruce Privatisation', *Public Policy for the Private Sector*, The World Bank, FPD Note No. 30, November 1994

Komives, K. & Brook-Cowen, P. J., 'Expanding Water and Sanitation Services to Low Income Households: The Case of the La Paz-El Alto Concession', *Public Policy for the Private Sector*, Note No. 178, April 1998

Langmore, M. & Dufty, G., 'Domestic Electricity Demand Elasticities, Issues for the Victorian Market', St. Vincent de Paul, 2004

McDonald, J. & Brass, K., 'Submission to Discussion Paper on the Role of the Private Sector in the Supply of Water and Wastewater Services', Centre for Health Research and Practice, University of Ballarat, September 2006

Ofwat, 'Water Charges and Company Profits: Position Paper', Ofwat, June 2006

Organisation for Economic Co-operation and Development, 'Assessing the Long-term Outlook for Current Business Models in the Construction of Water Infrastructure & Services', *OECD International Futures Project on Global Infrastructure Needs*, Global Forum on Sustainable Development, 29-30, November 2006

Public Citizen, 'Water Privatization Fiascos: Broken promises and social turmoil', 2003

Public Interest Advocacy Centre (PIAC), 'Submission to Consultation Paper on Introducing a Dynamic & Competitive Metropolitan Water Industry', June 2006

Public Interest Advocacy Centre, 'Submission to the Independent Pricing and Regulatory Tribunal (IPART): Investigation into water and wastewater service provision in the greater Sydney area', May 2005

Public Interest Advocacy Centre (PIAC), 'Cut Off: The Impact of Utility Disconnections', February 2005

Queensland Consumers Association et. Al., 'Energy Reform Implementation Group: Joint Submission of Consumer Advocates', November 2006

SA Water, 'About SA Water', Accessed on 22 August, 2007

<http://www.sawater.com.au/SAWater/AboutUs/AboutSAWater/United+Water.htm>

Save The Children Fund; in 'Assessing the Long-term Outlook for Current Business Models in the Construction of Water Infrastructure & Services', *OECD International Futures Project on Global Infrastructure Needs*, Global Forum on Sustainable Development, 29-30, November 2006

So, J. et. Al., 'Transaction Costs in Private Infrastructure Projects – Are They Too High?', *Public Policy for the Private Sector*, The World Bank, Note No. 95, October 1996

Total Environment Centre, 'Urban Water Regulation in Australia: A comparison of regulation, pricing and transparency mechanisms in major Australian cities', July 2007

United Kingdom Parliament, 'House of Lords Hansard Text for 20 March, 2002' accessed

at:

<http://www.ppublications.parliament.uk/pa/ld200102/ldhansard/vo020320/text/20320w04.html>

Wallsten, S. & Kosec, K., 'Public or Private Drinking Water?: The effects of ownership and benchmark competition on US water system regulatory compliance and household water expenditures', Working Paper 05-05, March 2005

Webb, M. & Ehrhardt, D., 'Improving Water Services Through Competition', Public Policy for the Private Sector, Note No. 164, December 1998

West Australian Council of Social Service, 'WACOSS Submission to the Office of Energy's Electricity Supplier of Last Resort Regulations Discussion Paper', August 2007

West Australian Council of Social Service, 'Response by the Western Australian Council of Social Service to the Electricity Code Consultative Committee's Review of the Electricity Code of Conduct (for Supply of Electricity to Small Use Customers)', April 2007

West Australian Council of Social Service, 'Submission by WACOSS to the Department of Water Review of Western Australia's Water Service Legislation', March 2007

West Australian Council of Social Service, 'Submission by the WA Council of Social Services to the Productivity Commission's Review of Australia's Consumer Protection Framework', May 2006

Wilson, C. & Waddams-Price, C., 'Do Consumers Switch to the Best Supplier?', Centre for Competition Policy Paper 07-06, April 2007

Wolff, G., 'Independent Review of the Proposed Stockton Water Privatization', January 2003

Wolff, H. & Hallstein, E., 'Beyond Privatization: Restructuring Water Systems to Improve Performance', Pacific Institute, December 2005

World Bank, 'How Decentralised Should Regulation Be?', <http://www.worldbank.org/html/fpd/water/wstoolkits/Kit1/annex6.html>, Accessed on 16 August 2007

World Bank, 'Full or Partial Divestiture',

<http://www.worldbank.org/html/fpd/water/wstoolkits/kit1/kitone8.html>, Accessed 24

August 2007

World Health Organisation (WHO), 'The Right to Water', United Nations, 2003