

Principal Associate

Terence M. Dwyer FTIA B.A. (Hons), B.Ec. (Hons) (Sydney) M.A., Ph.D. (Harvard), Dip. Law (Sydney) Deborah R. Dwyer FTIA B.A. (cum laude), M.A. (Smith) LL.B. (ANU), LLMCL (NTU)

17 May 2011

Ms Wendy Craik
Mr Warren Mundy
Commissioners
Productivity Commission Inquiry into Urban Water Sector
Level 28, 35 Collins Street
MELBOURNE VIC 3000

Dear Sirs

MONOPOLY UNLEASHED

RESPONSE TO THE DRAFT REPORT ON AUSTRALIA'S URBAN WATER SECOTOR

The Productivity Commission's Draft Report and recommendations on urban water are not only disappointing but profoundly disturbing and even potentially extremely dangerous, not only for the community's economic welfare but its health and happiness.

Credit should, however, first be given where credit is due.

The Commissioners have rightly pointed to the wastefulness and folly of desalination plants and the large costs inflicted on business and the community through water restrictions. The Commission has correctly pointed out that the huge amounts of money invested in desalination projects were fundamentally wasted and have left the public with burdens of servicing scarce capital misapplied to fundamentally uneconomic projects.

However, that is about as much which can be said about the report without becoming increasingly critical.

The sad truth is that the Commission has failed to address the central problem of ensuring monopoly network infrastructure is financed as efficiently as possible and serves the community as fully as possible.

Suite 4, Level 6, CPA Australia Building,161 London Circuit GPO Box 2529,CANBERRA CITY ACT 2601, Australia

 Indeed, what stares in the face of the economically literate reader is the apparent wilful refusal to face the existence of natural monopoly – and its consequences for incentives. It is almost as though the Commissioners think it is "pc" to assume the problem of monopoly away. One wonders what Brigden, Melville and Rattigan would make of the "Productivity Commission" as a supposed intellectual successor.

There can be no other rational explanation for a recommendation that water monopolies be subject to some sort of useless price surveillance instead of a serious attempt to prevent the creation and extraction of monopoly rents as a huge indirect tax burden on the people and industry of this country.

In effect the Commissioners have chosen to turn a blind eye to massive rent seeking in the water supply industry. What were once user-owned cooperative service utilities are being corporatised and perhaps later privatised so that their monopoly position can be used to extract as much by way of monopoly rents as possible, whether for treasuries or merchant banks or engineering contractors.

In particular, I make the following observations.

1. Who owns water and scarcity rents? What are the implications for governance?

Before discussing water pricing, one should ask who – if anyone – owns water.

Flowing water does not belong to anyone, no more than the air we breathe. That is true of both Roman and English law. Flowing water does not belong to any water monopoly, it does not belong to any government and it does not belong to the Crown.

It is a common resource which is, in truth, the common property of the people and to which all have equal right. It is therefore wrong in principle that any scarcity rent arising from a need to ration supply should be appropriated arbitrarily by either a water authority or the treasury officers of the Crown and its Ministers.

That scarcity rent represents the common property of the people, all of whom have equal rights to the use of the water.

If that scarcity rent can be eliminated by further investment, the first legitimate use for such a scarcity rent is for it to be ploughed back into augmentation of supply so that future scarcity rents can be eliminated and water can then be delivered to the community at the lowest possible short run marginal cost of production.

If it is otherwise, water authorities and governments can appropriate scarcity rents for their own purposes without any obligation to apply those scarcity rents for the benefit of the true owners, the people, who are the water users. A perverse system of incentives is created whereby governments and water authorities have a vested interest in making sure that supplies are never adequate. There is nothing wrong with a natural competitively-determined market rent for a scarce resource but there is a lot wrong with a monopoly rent only able to be extracted because a monopoly government water provider vetoes new supply options.

The object of scarcity rents should be to call forth the supply which will annihilate or reduce them. In a competitive market the function of prices is not merely to ration existing supply but to call forth new supply.

If policymakers such as the Productivity Commission fail to recognise that water is a common property resource to which all have equal rights and instead permit water scarcity rents to be appropriated willy-nilly by water authorities and governments, they create a perverted system of incentives as dysfunctional as that which operated in Wall Street prior to during and after the global financial crisis where people are rewarded, not for their contribution to the economic system, but for their depredations upon others.

The situation is a new version of the Enclosures where, in the name of efficiency, English villagers were driven off their common lands but denied any of the benefits of the more rationally managed lands. The tragedy of the commons was not that rent had to come into existence but that rents were misappropriated by those with power. It seems that air and water in the 21st century are to be the battleground of a new enclosure movement where the ordinary people may see their ancient rights disappear and themselves reduced to buying from merchant banks and treasuries what was once taken as a birthright.

Scarcity rents water should be, as William Vickrey suggested, first applied to building up an escrow fund for augmentation of supply, for example the creation of new dams or the development of underground aquifers or, if justified, desalination plants.

If supply is incapable of being augmented and water must be rationed and sold for ever above short run marginal cost of production because there is simply no possibility of expanding supply so that it can be priced at short run marginal cost, scarcity rents should be distributed to water users as a per capita dividend. This is just what is done, for example, where one child in a deceased estate uses common property - the others are compensated by sharing the rent he pays and all owners share the rent equally. The "owners" of the water are the people, not water authorities and not the government, and therefore should be the ones to benefit from any dividend of scarcity rents.

Thus while the Commission is correct in recognising that there is a case for scarcity rents to be charged above short run marginal cost if and when supply becomes temporarily inadequate and that it is not unreasonable that during a drought, as reservoir levels fall, for water prices to rise to reflect a scarcity rent, that is by no means the end of the matter. On the contrary, the Commission is dangerously in error in thinking that is the end of the matter.

Who gets the scarcity rents and how they are used matter a great deal. The scarcity rents should not be appropriated to general revenue by either water utilities or as dividends to the governments who control them.

On the contrary, the water utilities should be seen as the servants of the people and the scarcity rents seen as the property of the people, not of the utility or of the government. There are both sound legal and economic reasons for this view. Water does not belong to government nor does it belong to the utility. Neither of them created it. It is common natural resource, belonging equally to all. It is not the property of any man.

Where scarcity rents have been applied to the augmentation of infrastructure, it is also essential that consumers are not charged any rate of return on capital cost of any infrastructure financed by the application of scarcity rents from an escrow fund. They have already paid through the scarcity rents. For a water utility to claim a rate of return on assets funded through scarcity rents is fundamentally wrong. The scarcity rents belonged to the people. Accordingly any assets created through the application of those scarcity rents also belong to the people and not to the water utility. Water users have paid for any dam financed out of scarcity rents. They have paid by paying high prices for years in times of scarcity. They should not be charged again.

This brings us to another example of the Commission's failure to address the deficiencies of regulatory systems.

In particular, the Commission should address the abuses of replacement cost accounting which has been used most creatively to justify double and triple charging *ad infinitem*.

Assets which were paid for by users decades ago have now been revalued and users are being charged a rate of return on assets they have already paid for.

It is as though someone came along stole your house and then started to charge you a market rent for giving you the privilege of living in it. This is what the current system of so-called water regulation has permitted. Far however from condemning this corrupt regime, the Productivity Commission proposes to unleash further abuses by proposing that there be no monopoly regulation at all. This is really quite unbelievable.

The only governance arrangement which can prevent monopoly abuse is to recognize that a water utility exists to secure the equal rights of the community to a common resource and that, accordingly, it should be answerable to the community and to no one else – not treasuries, not merchant banks, not domestic or foreign "investors". No one should be allowed to own a water utility, it should be run on a least-cost basis and vested in the legal ownership of locally elected user and ratepayer representatives answerable as trustees to the community they serve. Private or Treasury corporatized ownership creates huge incentives for perpetual and highly profitable monopoly rent-seeking.

2. No understanding of optimality of price equals SRMC rule

The Commissioners are in grievous error in thinking that the optimality rule of "price equal to short run marginal cost" cannot be achieved and that infrastructure *must* be financed by subjecting users to full cost recovery (however defined) mainly through tolls or charges on throughput.

In fact, as I pointed out in my evidence, a perfect two-part tariff of a fixed and a variable charge (set at short run marginal cost to cover operating expenses) is readily achievable and was achievable under the system of rating land values to cover fixed costs of infrastructure serving the land.

The central fallacy of the Industry Commission's previous report into water policy back in 1992 was to ignore this. Yet curiously, even then, the Industry Commission admitted in a footnote (as detailed below) that the results of its recommendations would be to shift rates off land, enrich landholders and impose increased taxes upon industry and consumers.

Why any economist would support a system of indirect taxation which involved removing inframarginal charges and replacing them with charges on marginal activity is something which should cause bewilderment. Yet nonetheless that is what the Industry Commission recommended. Later, in its 1992-93 Annual Report, the Industry Commission admitted that utility rate setting was essentially akin to a taxation system. Even then, however, it still failed to recognise that if one is to look at the problem of utility rate setting as a taxation problem the system of covering fixed costs from land value rates or charges was again a system with almost zero excess burden compared to the alternatives.

For the benefit of the Commission I attach a copy of the submission made by the Burdekin River Irrigators Association to the Queensland Competition Authority which sets out at some length some of the economics relating to optimal pricing of water supply infrastructure.

3. Refusal to acknowledge dams as the cheapest and best supply option

The Commissioners quite rightly criticise the ridiculous "investments" made by State Governments in desalination plants in parts of the country where there is perfectly adequate rainfall. One might drily note that the Commission has saved its criticism for a time when the governments responsible for most of those decisions have lost office or appear about to lose office. Where was the Productivity Commission when these decisions were being made?

Be that as it may, what is extraordinary is that the Commission then fails to set out the most obvious least cost alternatives to desalination plants. The Wellcome Reef Dam on the Shoalhaven to Sydney is not mentioned, nor are the possibilities of using the Mitchell or McAlister rivers in Gippsland to augment Melbourne supply. There is no discussion of the plan by the former Melbourne Metropolitan Board of Works to use the Mitchell or McAlister to supplement Melbourne's water supply and put the excess into the Murray Darling basin as opposed to the current program for Melbourne to extract 90 Gigalitres a year from the basin.

Unfortunately, the Commissioners appear to have "bought" the political line that there are no new dam sites available. This is nonsense.

The Commissioners seem to have refused to make thorough inquiries or judgments and be merely pandering to politically motivated assertions generated by vocal pseudo-environmental groups who are more willing to see damage caused to the environment by massive desalination plants than have properly managed dams which could augment both human water supply and environmental flows for rivers in drought.

4. Endorsing wasteful and dangerous direct sewage recycling into drinking water

The Commissioners show massive inconsistency in having (correctly) criticised the ridiculous cost of desalination plants when they then proceed to think or suggest that sewage and waste water can be immediately recycled back to augment urban drinking water supplies.

The cost of recycling sewage back into drinking water is enormous - as much or more as desalination and the potential health dangers are infinitely greater.

It is ridiculous enough that Sydney's desalination plant is sucking up some ocean outfall sewage but the direct recycling of sewage back in a continuous loop into urban drinking supplies runs the enormous risk of concentrating drugs such as oestrogen or other undesirable things such as diseases in waste water. It is the aqueous equivalent of running the risk of spreading mad cow disease into the community by mixing diseased meat with uncontaminated meat in making hamburgers from hundreds of cows en masse.

Incidentally it is quite misleading and intellectually meretricious to in any way compare indirect linear recycling of water along a continuously flowing river system that is fed by rain and flows into the sea with proposals for recycling of sewage in a loop back into the same reservoir from which it came.

At the National Health and Medical Research Council conference on water recycling which I attended, the chief medical officer of one of the States quite properly pointed out that that sort of

looped water recycling is a very different proposition from recycling along a linear river where there was continuous fresh inflow and continuous dilution of the water and long periods of exposure of the water to the breakdown of pathogens by natural processes. Of course, all water is recycled - rainwater after all is nothing but recycled seawater and dams are nothing more than passive solar desalination devices and, if gravity fed, operating far more cheaply than any other conceivable water supply system.

But the simple observation that ultimately all H_2O is recycled one way or another within a finite system of oceans, atmosphere and rivers does not mean that immediate recycling of human sewage is either safe or desirable or in any way comparable to the indirect recycling which occurs along a river or through the capture of rainwater in the dam. All attempts to directly recycle sewage into drinking water face two fundamental problems.

- 1. One might be termed the "Titanic problem": namely, that multiple barriers will fail in an unexpected fashion.
- 2. The second might be termed the "Chernobyl problem": namely, that no matter how poorly or well the system is designed, human operational error may cause a crash just as many plane crashes are the result of pilot error rather than engineering failure in the design of the aeroplane.

If it is not absolutely and unavoidably necessary for a large human community dependent on single reticulated water supply systems to run these risks, then they should not be run at all.

The fundamental error behind the Draft Report

What is most depressing about the report is the failure of the Commission to address the principles of an economic optimum. An economic optimum is not achieved by some naive process of full cost recovery and certainly even less so by a principle of unrestrained monopoly.

More than two hundred years of economic thought and economic history make it perfectly clear that the public interest and an economic optimum require that network monopoly infrastructure be made available to all comers on the principle of short run marginal cost pricing. If that leads to losses in terms of recovery of the fixed costs of such infrastructure it is far better (as Harold Hotelling pointed out) for such losses to be recovered from non-distorting taxes such as land value taxes or rates rather than impose ad valorem or per-unit of use charges which prevent the maximum use of the infrastructure.

The George-Hotelling-Vickrey (GHV) Theorem on land rent financing of spatial public works (named in honour of the 19th century economist, Henry George) has been not only explored by Hotelling and Vickrey but by Professors Feldstein, Arnott and Stiglitz. Essentially, it shows that an economic optimum can be achieved where land rents cover the fixed costs of infrastructure, enabling it to be available for maximum use by users at low - or even nil – short run marginal cost.

The intuition behind the GHV theorem can be seen in asking why building owners do not charge tenants and visitors for using lifts or shopping centre owners do not charge the public for using toilets, seats or elevators or why strata title unit holders levy themselves for common facilities.

They provide common use infrastructure at nil cost to the public because:

1. The short run marginal cost of use by consumers is low;

- 2. Congestion is not a large problem because they have built for the likely required capacity;
- 3. The infrastructure is spatially fixed;
- 4. The infrastructure therefore adds value to their properties or tenancies which they are renting out; and
- 5. They can therefore recoup the cost of the building's common use infrastructure through the enhanced rent of their tenancies (indeed, a tenancy without access would be almost unrentable, just as a tenancy without reticulated water might be unrentable.

The GHV Theorem is fundamental to any discussion of how to finance network infrastructure yet the Productivity Commission appears completely unaware of this fundamental economic theorem and its potential to liberate infrastructure for maximum community use.

Even worse the Commissioners appear to think that the problem of monopoly does not exist. The problem is "solved" by assuming its non-existence. In that regard, the Draft Report is reminiscent of the celebrated joke of the economist who, stranded alone on a desert island with a tin of corned beef as his only source of sustenance, solves the problem by saying loudly "Let us imagine we have a tin opener". Unfortunately this draft report gives credence to the idea that most economists are that stupid.

But it is not so. If the Commission would only take the time to study the history of the marginal cost controversy it might be better informed about the basic economics. It might actually realise that the public interest is best served through the operation of reticulated natural monopolies as user owned and user controlled public service utilities with the fixed costs being defrayed from land value rates.

In fact it is interesting that in the whole draft report the terms "social optimum" and the "public interest" are never discussed in any serious fashion. It is also interesting to note that the phrases "economic optimum" or "social optimum" never occur at all in the report. The phrase "public interest" is rarely used in the report and, where it is used, it is used in the sense of a political decision which has no necessary relation to sound economics. How anyone can write a report on a subject as important to the life of the community as its water supply without ever seriously adverting to the concept of the "social optimum" or economic optimum" or the "public interest" is beyond comprehension.

In effect, the term "public interest" is used by the Commission as some sort of political cop-out to be left to Ministers and the vagaries of politics and vested interest. This does a severe disservice to economics. As Adam Smith conceived it, the science of political economy is all about the "public interest" and all about rational methods of deciding what is in the public interest. The Commission is doing economics a disservice if, as seems to be the case, it is suggesting that economics has nothing to say about the public interest and only something to say about the maximisation of commercial profits. The report seems to be written as though welfare economics did not exist.

History and sources of the Productivity Commission's intellectual confusion

In the Industry Commission's 1992 Report Number 26 Water Resources and Waste Water Disposal at page 67 it recommended that

"urban authorities should pursue full cost recovery on the provision of water through a two

part tariff, comprising an access charge plus a usage charge for each kilolitre of water supplied. The usage charge should be set to cover the costs of making additional water available plus a loading to ration supply when capacity in the system is scarce. The access charge should be set so that, in total, the desired revenue yield is achieved over the life of an asset system."

At page 93, it was stated that

"many authorities are now looking to reduce or eliminate their dependence on property based access charges on the grounds that they entail cross subsidies both within customer classes (e.g. residential) and between classes of customers (e.g. commercial and residential).

In its draft report, the Commission argued that if property valuations were only used to determine access charges for residential WSD services, the adverse efficiency implications would be small. This is because the level of the access charge (within the bounds implied by property based charging) is unlikely to affect consumers' decisions on whether to connect to these services. In this area, property-based charging is primarily a redistributive mechanism.

However, the Commission went on to argue that the cross subsidy from the business sector to domestic customers that is typically evident under property based access charges, *in effect constitutes a tax on production*. Accordingly, the Commission proposed that WSD (water, sewerage and drainage) agencies dispense with property based access charges as soon as practicable."

Unfortunately this is where everything went wrong.

The Industry Commission made a fundamental mistake here in asserting that a land value tax (which, by the way, is *not* a property tax) was a tax on production.

As its footnote 2 on that page admitted -

"Of course, commercial land prices would tend to rise if this tax on business users were eliminated."

Thus the Industry Commission's own footnote admitted that a land value rate is really a tax on landholders and *not* a tax on production as such. It thus contradicted itself, vitiating the whole tenor of its fundamental argument.

The intellectual confusion exhibited by the Industry Commission (which appears to have proliferated in its successor Productivity Commission), is further exhibited in the 1992–93 Annual Report of the Industry Commission. At page 180, the Industry Commission noted that

"The significant exception to this conclusion [i.e. there is little place for financial targets in improving cost recovery and efficiency of government business enterprises] occurs in markets characterised by natural monopoly where pricing at long run marginal cost will result in losses for the enterprise. Several GBEs operate in markets which contain elements of natural monopoly. Here, imposition of a financial target offers an alternative to sustained losses by requiring the enterprise to price above long-run marginal cost and recover full costs including a return on capital. A financial target in this sense is simply another form of indirect taxation. The choice is essentially between taxation methods. The inefficiency involved in raising a toll above marginal cost to reduce enterprise losses must be weighed against the inefficiencies incurred elsewhere in the economy by distortionary taxes levied to

finance the losses of GBEs"

It should be noted that the Industry Commission in this remark continues to deviate from economic orthodoxy in failing to recognise that the optimality rule is that price should equal *short run* marginal cost, not long run marginal cost. Further it fails to recognise that if one is to choose between different taxation mechanisms, a rate on land values is uniquely efficient as it involves zero excess burden, given that land of itself exhibits no supply responses.

The social and economic tragedy of the Industry Commission's confused understanding of economics is that its reports since 1992 have resulted in a transfer of funding mechanisms for urban infrastructure, especially water infrastructure, from infra-marginal rates on land values to additional charges on marginal production or consumption through per kilolitre water charges (a sales tax which now feeds into Australian production costs and wage pressures).

This policy outcome has been precisely contrary to the rules of economic optimality. It is also precisely contrary to any genuine concept of the public interest in economics and has resulted in windfall benefits to landholders at the expense of industry, consumers and producers. It is a very hard to understand how an "industry" or a "productivity" commission with any real understanding of economics could possibly advocate that input charges and production costs should be raised for users of industrial inputs while passive landholders should receive windfall capital gains resulting from the capitalisation of charges abolished on their land values (even though the landholders benefit from the infrastructure servicing their lands).

Conclusion

The only conclusion I have been able to reach in relation to this extraordinarily disappointing Commission Draft Report is that the education of modern economists has seriously declined over the years. It is as though they have been trained to look at the world as a J B Clark world of homogeneous jelly capital where sunk costs, bygones, land rent and spatial external benefits do not exist.

That is bad enough, but even more serious is that the intellectual failures of the Draft Report will lead to it being used as a stalking horse for a massive unleashing of monopoly power against the community as managers and would-be "investors" in the water supply industry look to profit from floats and huge stock option profits when the industry is privatized. Just as the demutualization of the NRMA and AMP enriched certain people while helping to bring on the insurance capacity crisis, the "open slather" pricing policy which the Draft Report is urging for water monopolies will enrich some at the expense of the whole community.

I hope this appalling prospect does not eventuate. All I can do is assume for the moment that the Commission is fundamentally misguided and urge the Commission, as strongly as I humanly can, to remedy the deficiencies of this Draft Report by starting over afresh.

In the meantime, I would still like an answer to the question I posed which is: if what cost me \$797 in 1990 by way of 1297 kL of water would now cost in excess of \$5000 what is the implied decline in the productivity of the ACT water industry as represented by its monopoly ACTEW? A "productivity" commission should at least be able to calculate the declines in productivity which have occurred as suppliers have been rationed and prices have skyrocketed. If it cannot even do that, it should have the name "productivity" removed from its title and, if the tenor of the draft report is retained in the final report, it would be more fitting for the commission to be renamed as the "Commission for Promotion and Protection of Monopolies and the De-Industrialization of

Australia". One cannot think of any better way of destroying a country's industry, commerce and prosperity than by handing it over to the ministrations of monopoly tax-farmers.

Finally, may I protest against the persistent misuse of the word "reform" to describe the Commission's proposals? The word "reform" is the most abused word in the English language when it comes to the patter of bureaucracy. Usually what is referred to in the Draft Report as "reform" would be more accurately described as the further corruption of what went before. The Draft Report would perhaps read more clearly and intelligibly if the word "reform" were replaced throughout by "decay" or "corruption".

Yours sincerely

Terence Dwyer

ANNEXURE

Comments on Overview of Draft Report

Page xvi

The Commission is correct to say that water restrictions are likely to have imposed very large excess burdens. A cost of \$1 billion a year is probably extremely conservative as many costs cannot be properly estimated. Costs such as cracked houses, injuries on hard sports fields and injuries to pensioners and watering gardens with buckets would not enter the statistics.

The Commission is also right to criticise the ridiculously inefficient desalination plants and the costs they have imposed and will impose upon the community.

The Commission is correct to say that an overarching objective of policy should be the provision of water, waste water and stormwater services which maximise net benefits to the community.

However the Commission does not realise that this requires pricing at short run marginal cost and requires that scarcity rents be applied to supply augmentation rather than being misappropriated by those who have seized control of a former common access resource. Nor does the Commission realise that the best practice arrangements for regulating agencies and water utilities should be to make them completely answerable to water users - and water users alone, recognizing the rights of the public as the original resource owners - rather than being used as cash cows for treasuries or those who would like to securitize their assets and turn them into tradable paper on stock exchanges. After all, if economics is about consumer sovereignty why hand over the consumers as serfs to be exploited by monopolists? Would it not be more sensible to vest the monopoly under the ownership of the users?

Page xviii

The Hunter District Water Board case was in fact the beginning of the corruption of the water utilities. By trying to shift costs to a so-called "user pays" basis, John Paterson ignored the fact that water infrastructure benefits landholders, not just the users of the water flowing through the pipes. Further the 1992 Industry Commission enquiry made a huge and fundamental mistake on the nature of tax incidence and supporting a shift away from land value rating as the first part of a two-part tariff. Further the COAG "reform" process did nothing to improve the security of supply for urban water. In fact the COAG process has been the cause of much of the problem as it has glossed over the de facto veto on new dams being built to supply urban water.

Page xix

To blame a lengthy period of unexpected low rainfall and inflows to dams for the stress on the urban water system is nonsense. There has been nothing exceptional about Australia's recent drought cycle. The real problem has been the veto on new storage together with mandated increases in environmental flows to empty the existing dams we already have.

Given the increasing population, the logical thing to have done would have been to proceed with long planned dams such as those planned years ago for Melbourne Sydney and Brisbane. It would also have been logical to look at groundwater supplies for Adelaide and Perth. But such possibilities have been vetoed by a silent, undiscussed, political process which appears to have been based on pandering to minority groups holding strategic balances of power in certain legislatures. There has never been a transparent enquiry into the process whereby theses supply options were banned.

Unfortunately the Commission's Draft Report does not represent the beginning of such a transparent enquiry but, on the contrary, panders to a policy of disinformation and disguised vetos on sensible supply options.

Page xx

In terms of the costs "in kind" of water restrictions one might also mention accidents, back injuries, sports injuries and cracking of structures. The estimate for the cost of water restrictions in the ACT is a gross underestimate. The cost of dead trees having to be chopped down by householders is one example of a major cost which is simply been ignored.

Page xxii

In looking at how effective governance arrangements are at ensuring institutions are accountable and face the right incentives, the Commission should look at the perverse incentives created by dividend requirements to State Treasuries. Water utilities and State Treasuries now have every incentive not to augment supply but, on the contrary, to maximise scarcity rents and exploit monopoly positions. There is no accountability to the consumer whatsoever in current arrangements. On the contrary, consumers have been ripped off time and again and have been forced to pay several times over for assets which they have already paid for.

Page xxiv

The requirement that environmental flows be determined by other authorities, without any proper accountability or charging, may not be in the interests of the community or the consumers. Environmental agencies tend to be captured by ideological interests who, by mandating large environmental flows, have effectively expropriated water paid for and stored for consumers and diverted that water formerly stored for consumers into environmental flows. That might be acceptable if those agencies dictating environmental flows were forced to pay for them at the same rate as consumers so that there would be some accountability. For example in the ACT water users have massively cross-subsidized environmental flows by having water in the dams they paid for withdrawn from consumer use and given away without charge to environmental flows and downstream users, neither of which contributed a cent to ACT dams.

Page xxv

The example of ACT wastewater being treated and sent down river is not an example of *direct loop recycling*. This form of indirect reuse of water is *linear recycling* which includes a great deal of diversion through fresh water sources and a great deal of exposure of pathogens and bacteria to breakdown through natural processes. It is not at all comparable to immediate direct loop recycling which is far different and has far greater dangers.

Page xxvi

Demand-side management is an economic perversion which only possible in a non-competitive market. In competitive markets, producers do not routinely talk about controlling or managing demand: they talk about responding to it. This sort of language ignores the fact that the function of demand is not to call for rationing (whether through price or quantity adjustment) - it is to call forth fresh supply so that a product is supplied up to the marginal cost of offering it in the short run. Supply normally expands to meet demand.

The Commission is correct to say that there has been too great a focus on water restrictions, technical water use reductions and conservation for their own sakes - as if they were ends in themselves. The Commission is correct to say there should be cost benefit analysis of these things. However, the commission should go on to say that a cost benefit analysis should also be applied to the question of whether there should be new dams and larger or lesser environmental flows. There seems to have been no attempt to apply genuine cost benefit analysis to any of the vetoed dams or to the mandated increased environmental flows. These bans on new dams and mandated increased environmental flows have simply been dictated by narrow political interest groups with lobbying power and with no real accountability to the community.

Page xxvii

The Commission perhaps fails to understand the history and rationale for inclining block tariffs.

Originally when water utilities were paid for through land rates, the idea was that the land rates would cover the fixed costs of infrastructure. Infrastructure would be built to supply all reasonable needs and therefore a free allowance (better described as a prepaid allowance) was allowed per household. In Canberra this was 455 kL per household. This allowance was not some sort of concession, but really an entitlement of households, recognising that the sale value of land and the rates had paid for the infrastructure which serviced the land and the supply was adequate for the land serviced.

The reason no per kilolitre which charge was levied was that marginal costs were very small.

Excess water charges were really designed to make sure that the system was not overstretched and provided some revenue towards capacity expansion. Curiously, it was a 2 part tariff with zero marginal cost and a scarcity price for excessive use. It was not that different to farmers owning a minimum level of water rights and then buying more if required.

The suggestion that relatively few households experience payments difficulties for water services is absurd. The water which my family used in 1990 for \$797 would now cost over \$5,000 a year. Many consumers have in Canberra at least found huge water bills an onerous burden, so costly that they have been forced to see their gardens destroyed (a cost not factored into costs of water supply failure).

It is also wrong to describe the former free allowance as a distortion of prices. It was not a distortion of prices: it was a prepaid allowance, just like irrigators' water rights. But whereas irrigators were compensated by the grant of new property rights in water under the COAG "reforms", urban householders simply was stripped of their prepaid allowances without any compensation or recognition whatsoever for what they had paid for. The Commission makes absolutely no mention of this gross inequity.

Page xxix

It is wrong to say that the fundamental impediment to improved performance is an absence of clarity about government objectives regarding policy development and its implementation. One thing is only too clear - consumers have been mercilessly screwed and policy has been driven towards maximising monopoly rents for treasuries and monopolists through the seizure of strategic water assets which were paid for by consumers but who have now been dispossessed of their ownership.

The way to maximise net benefits to the community is to follow the normal rule of economics, viz., optimality requires that one price at short run marginal cost.

Page xxxii

Box 6

Independent cost benefit analysis should be provided in respect of the benefits and costs of dams and mandated environmental flows. This has not been done. The Commission should ensure that it is done.

In particular, the Commission should mention the de facto policy ban on new dams as a supply augmentation measure, well ahead of potable reuse of sewage water. If the Commission is serious that all options should be evaluated, it cannot ignore the history of the vetoing of dams in the last 20 years. Dams are a cheaper and easier supply option, as is use of ground water in aquifers.

These options are the ones which should be back on the table, not dangerous, costly and stupid options such as direct potable reuse.

Negative community perceptions about recycling of sewage have become entrenched, not in the absence of good evidence, but on the basis of excellent evidence about the dangers of such foolish actions

Page xxxiii

The Commission's pious remark about community consultation being essential in relation to various supply augmentation is amusing, given the history of public consultations in Canberra. Over the last eight years or so, I have been to several community consultations where people have said that they wanted new dams, that they wanted security of supply yet, lo, when the minutes of the meetings were written up by the appropriately instructed public servants, the wishes of the community were edited out. The government would announce what it was going to do – and which was usually nothing sensible or in accord with what had been expressed to it in these consultations. Community consultations in Canberra have all the legitimacy of party meetings conducted in North Korea under the wise guidance of Kim Il-Jung.

The suggestion that governments should direct water utilities to adopt real options about planning is totally misguided.

That is where the problem has begun. Water utilities once were answerable to local government and, through them, to ratepayers and consumers. The real problem is that water assets should be seen as belonging to the community, *not* to the government – they should be seen as belonging to the water consumers. Water utilities should be seen as existing to serve the needs of those consumers much as a club serves the needs of its members. They should not be seen as "government business enterprises" extracting monopoly profits to pay as dividends to the Treasury.

In relation to examining for costs and benefits and integrated water cycle management, the Commission might observe that dams are merely passive solar recycling devices catching water which has been evaporated by solar energy.

The suggestion of a two-part tariff should be amplified to state that the volumetric price should be based on price being set at short run marginal cost and the fixed service charge should not be a service charge but an access charge based on rating the land values. Furthermore all land available to be serviced should pay rates as the availability of service adds to land value, whether or not the connection is made.

As for the normal application of competition and consumer protection laws, these are totally inadequate to deal with a strategic natural monopoly and afford consumers very little protection against water utilities. ACTEW in the ACT has been a splendid example of a utility which apparently complies with all applicable consumer protection laws but has nonetheless been encouraged and allowed to rape the consumer through relentless price increases and triple charging.

Page xxxiv

The idea that utilities should have hardship policies in lieu of a basic right to water is not satisfactory.

Fundamentally, water is the property of everyone. Everyone has an equal right to water. That is why, instinctively and intuitively, consumers are right to resent being forced to beg for what is theirs by right.

It is rubbish to say that hardship is not being caused by price rises in water. This is the propaganda of water supply industry managements (apparently seeking to improve their revenues and "performance pay") which, trading on the idea that water is essential, are suggesting that more of consumer budget should be seized by them.

On the same logic, we should start charging people for air because nothing is paid for air in consumer budgets.

But the percentage of a consumer budget spent on something says nothing about what the correct price for that thing is. The price should be set at short run marginal cost and not dictated by the ability of the monopoly supplier to extract more than that.

Page xxxv

The idea that a water retailer-distributor has any interest in understanding consumer preferences or serving them other than to screw the maximum out of the consumer exposed to its monopoly position is absurd. The idea that there can be contestability and competition to new water supplies is equally a fantasy.

Similarly, the idea that full corporatisation of government trading enterprise does anything to improve efficiency is fanciful. It all depends on who gets the dividends. A corporatised utility controlled by a treasury or merchant bank will assiduously rape consumers. If a water utility is corporatised it should be corporatised as the Sydney Water Board or the Melbourne Metropolitan Board of Works used to be corporatized, that is, as a body answerable to local government ratepayers who fund it through rates. Accountability should be to the ratepayers and consumers, not to anyone else.

Page xxxvi

Incorporation under the *Corporations Act* does nothing to improve accountability of the board. It weakens it, as technically boards are no longer answerable to consumers as owners.

The idea that government ownership, a charter between governments and utilities, the application of the *Corporations Act* and performance monitoring would minimise the risk of abuse of market power or excessive production costs is fanciful. On the contrary they would facilitate it. Until and unless ratepayers and consumers are seen as owners, they will continue to be abused.

To say that there is no role for price setting by economic regulators is to commit the same mistake as has been made with Sydney Airport where a strategic asset has been turned into an unregulated monopoly. At the time when Sydney Airport was sold, amazement was expressed at the price paid by Macquarie Bank. Defending the price paid, a Macquarie banker was reported famously in the *Financial Review* (possibly after a few drinks) gloating over how they would sweat the asset. Well, they did sweat it. I am perfectly sure that merchant banks are quite capable of sweating any dam they buy, that is to say, making the public sweat under monopoly pricing.

The idea that price monitoring should be replaced by self reporting is laughable. The Commission is just choosing to avoid facing the problem of natural monopoly and making it accountable to consumers by saying it should be left alone to do as it likes to maximise its profits and be accountable to those lucky persons or politicians who happened to be in a position to have control of it.

Principles for pricing and service offerings (including asset valuation and return on assets) are exactly where the whole COAG process has gone wrong. The widespread use of replacement cost accounting has meant that consumers are being charged again for assets that they have already previously paid for. Similarly dividend policies have been an instrument of taxation. The Commission has, sadly, had nothing useful to say about the economic inefficiencies of these practices.

Rather than using consumer representative groups as some sort of quisling or toady group to be run as a front by a friendly monopoly screwing consumers, it would be far better for the consumers to own the utility as they used to make it accountable through their local government rate paying representatives.

Page xxxvii

In relation to assistance provided to businesses and households to represent their interests in policy and regulatory decisions relating to the Australian national energy market, as a lawyer who represented consumers in the Australian Competition Tribunal in fighting the inclusion of easements in the regulatory base for electricity networks I can only say such assistance as is provided is woefully inadequate. To have to run a case against senior counsel with barely 2 weeks' notice of funding approval of a budget of \$10,000 and facing procedural obstacles as a third class litigant seeking leave to intervene meant that consumers had virtually no say at all and no funds to appeal. As for process, it is not known that most evidence received in tribunals from utilities is not tested on oath. There is no danger of prosecution for perjury in gilding the lily for a utility employer or client.

Unlike the USA where there are levies on utility bills to fund consumer advocates automatically to something like an equal level as the utilities, Australia has a woefully unequal system. Utilities charge all their legal and regulatory costs as operational expenses against the consumers. Consumers cannot organize and must bear cost themselves. The asymmetry is obvious.

Australia's system for regulating monopolies is far inferior to the previous system of having them owned by local government and therefore answerable to local ratepayers, consumers and voters. It is even far inferior to the American system of regulated private monopolies. At least the Americans, unlike Australians, realise that when they allowed private ownership of strategic utilities they would be rapists if they were allowed half a chance.

Having recognised that there is no competitive market-based mechanism in urban water to make sure that utilities are accountable to water consumers, why does the Commission not recognise the

obvious solution of making the utilities accountable by being owned by urban water users?

Page xxxviii

As for regulatory institutions the idea of merit appointment of independent regulators is fanciful. Most regulators appear to get or keep their positions by being toadies to the Treasury that appoint them. As for appeals to the Courts, the Commission does not understand the nature and limits of judicial processes. As one who has run an appeal through a tribunal I can only express my astonishment that the Commission is apparently unaware of the way in which evidence is taken without being examined on oath, technical points are used to exclude relevant evidence and the result is usually a far cry from anything to do with economic efficiency. There is something rather amusing about being the only person in a courtroom with a Ph.D. in economics listening to lawyers talk about what amounts to economic efficiency, as they quote an Act. Economic efficiency is not defined by Acts of Parliament or by Courts. Appeals processes in this regard are quite useless from that point of view. The institutional structure has to be right in the first place before the Courts can really be expected to get a handle upon it. Either the incentive and ownership structures are designed correctly or they are not and, if they are not right, there is little a Tribunal or Court can do about it.

Page x1

It is fanciful to talk about breaking up large metropolitan utilities. It is far more efficient to have integrated supply. The trick is to make it accountable to the users, that is, the water consumers. The old system of having water boards accountable to local governments and ratepayers was far better in terms of ensuring there were incentives restraining price gouging. Disaggregation only introduces inefficiencies and in the end there will be re-aggregation just as occurred in the electricity market after the separation of generators, distributors and retailers.

Page xlii

The Commission's bold statement that its so-called reform package would improve the performance of Australia's urban water sector for the benefit of water consumers and the community is bizarre, given its proposal that monopolies be completely deregulated and allowed to charge what they like for a necessity of life. The Commission does not seem to understand either the basic rules of economic optimality or the basic structure of incentives it is creating for rape and pillage.

We have been brought to this mess by a surfeit of so-called "reforms". What is needed is not more bogus "reform", but public revolt against the rent-seeking of treasuries and would-be managerial plutocrats. The feather bedding of trade unions seems almost benign in retrospect compared to the ruthlessly efficient water price extortion practised by corporatized State-owned utility managements operating as treasury tax collectors.

Page xliii

Property rights to water are a fundamental issue. The truth is that no one owns water. Water belongs to everyone - it is a fundamental basis for human existence as much as air or land and should be available to people on an equal access basis. That is why people instinctively, bitterly, and rightly, resent monopoly abuses where somebody claims to own what is the common property of all men. The only thing consumers should be expected to pay for water is the cost of storage and delivery rather than for a manufactured scarcity of water.

Page xliv

The suggestion that price regulation is not an appropriate mechanism to deal with affordability or to ensure that urban water utilities fully recover costs is both wrong and bizarrely correct. Existing price regulation has allowed them to far over-recover costs!

The suggestion that planned potable reuse and unplanned potable reuse occur commonly without any apparent ill effects is completely untrue. There is no evidence for it at all.

In suggesting that government should not provide subsidies for particular environmental outcomes except where the subsidy is commensurate with the costs, the Commission ought to be consistent and suggest that cost benefit analysis be applied to mandated environmental flows which have reduced the availability of water for urban consumers.

Page xlv

Why should upfront charges be used where a sensible practice would be to borrow and amortise the charge through a sinking fund paid for out of rates over the years of life of the infrastructure? Cost should be spread over time as well as across users. As for spreading costs across users and beneficiaries, the fixed part of a two-part tariff should be rates which levy a contribution from landholder beneficiaries and the users should pay a price equal to short run marginal cost.

Page xlvi

The Commission does not realise the formerly free part of an inclining block tariff represented an acknowledgement of the fixed charge having paid for the fixed costs of the system (which would generally so much larger than the operating costs that operating costs could conveniently be ignored—it was often more trouble than it was worth to meter use).

Page xlviii

The Commission is right to criticise non-price demand management.

Page xlviii

The suggestion that many consumers would be willing to pay a higher water bill to avoid being subject to restrictions is correct in so far as people have incurred extraordinary costs in terms of water tanks to save gardens etc in Sydney and Canberra and elsewhere. However there are also consumers would actually like more water for less (as they used to have before) and they do know that there is no reason why they should not have it other than the manipulation of political processes by noisy minority environmental groups or others.

It is absolute rubbish to suggest that expenditure on water represents a small proportion of income and imposes no hardship. This is certainly not true of Canberra which is at the cutting edge of rapacious monopoly pricing.

As for efficiency gains being made by replacing water concessions with direct payments to targeted households, the Commission it is only introducing another poverty trap and labour force disincentive.

Page lii

The idea that we need reviews to decide whether water utilities are abusing their market power and what action should be done about it shows the Commission may not understand what monopoly is about. If the Commission does not understand how water utilities have abused their market power then perhaps it is not the proper body to be conducting this inquiry.

The suggestion that pricing principles should be amended to remove any reference to independent regulatory price setting is as naïve as suggesting brothel keepers might be interested in promoting chastity. No one who uses Sydney airport and pays the appropriate fee to Macquarie Bank's progeny has any delusions about the efficiency of unrestrained monopoly. They understood only too juts how efficiently monopoly sweats strategic assets to rape the public. This proposal to abolish any form of regulatory price setting would be to the Australian water sector what Alan Greenspan and Ben Bernanke have been to Wall Street - a government "sugar daddy" handing out lollies to lean and hungry merchant bankers.

Page 1x

The idea that there should be more widespread cost recovery and increased dividend payments from water authorities is completely perverted. The Commission seems completely oblivious that there has been widespread and persistent cost over-recovery in both urban and irrigation water. The case of the Burdekin River is a classic. Irrigators paid for serviced land and are now being asked to pay a rate of return on assets they had previously contributed towards. Similarly Warragamba Dam in Sydney and the Melbourne system were paid for by ratepayers, not by governments, and consumers are now being asked to pay again. The Commission simply does not understand the industry it is analysing; it does not understand the history and it does not understand the economics. It also does not seem to understand the import of 250 years of economic history and history of economic thought.