The development of contestable markets in the urban water industry

- *what makes water so different (or is it)?*

CEDA

Water – Its role in supporting WA's economic growth
23 October 2008

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COAG 1994 Agreement
Urban Component

- Changing for water on a volumetric basis and two part tariffs
- Separation of policy and regulation from service delivery
- Annual benchmarking – National Performance Report
- Water price reforms – return on investment for new infrastructure
- Inclusion of externalities in water prices
- Removal of the shield of the crown

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What has not happened since the 1994 COAG Reforms?

- No privatisation of any urban water utility - however, substantial private sector involvement
  - Capital works design, project management and construction
  - Operation of assets - contracting out services
- No third party access schemes despite statutory regimes in Part IIIA of the Trade Practices Act and the NSW Water Industry Competition Act
- No introduction of direct competition in potentially contestable areas
- Still rely on restrictions rather than prices to clear supply/demand imbalances

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Is Water Different to Gas and Electricity?

(yes, it is!)

- Storage
  - Water can be stored cheaply in reservoirs & aquifers
  - Electricity cannot be stored
- Transport costs
  - Water is heavy and pumping is energy intensive and expensive. Water networks that cannot use gravity will generally be local (sometimes regional)
  - Electrons move freely and gas can be compressed
- High transmission losses even with piped water systems compared to gas and electricity
- Quality
  - Few quality issues with electrons and gas molecules
  - Different water sources require different levels of treatment and blending multiple sources of water can be problematic

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Is Water Different to Gas and Electricity? Cont'd

(yes, it is!)

- Reliability of supply
  - Climate dependent sources of water such as reservoirs highly unreliable in an era of a drying climate
  - Gas and electricity production generally highly reliable
- Water resource management inextricably linked to the environment - extraction, wastewater disposal, river health, recycled water etc.
- Optimal resource outcomes likely to be achieved through integrated water cycle management - wastewater, recycled water, stormwater etc.
- Managing water quality is complex and is the raison d'être of the urban water industry. Public health can never be compromised.

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What's Up for Grabs

	Transport infrastructure as % of assets	Transport costs as % of total costs	Production costs as % of industry costs
Water/wastewater	70	21	31
Electricity	50	8	50
Gas	60	14	40

Source: Tasman Asia Pacific (1997) referenced in IPART (2007)

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Scarcity Pricing

- In electricity scarcity pricing is found only in wholesale market – price signals to consumers muted
  - Unlikely to be the case for urban water
- Lower price elasticity than for electricity
  - ABARE assumed -0.45 and estimated price variability $1 to $12/KL
  - More likely to fall well below $1 and rise above $12/KL

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Contestable Urban Water Market

- It does not exist anywhere
  - No lessons to avoid mistakes
- It is unlikely to work everywhere (if anywhere)
  - Natural monopoly segment is a much bigger % of total costs
- Need to work out:
  - Which components are contestable?
  - Who will be the supplier of last resort?
  - Do the marginal social benefits exceed the marginal social costs?
- Are the policy makers comfortable with price fluctuations or is a more orderly market preferred?

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Conclusion

- 'One size fits all' model will not work
- Contestable urban water markets have not been developed anywhere due to significant natural monopoly characteristics
- The natural monopoly segment of urban water is larger proportion of total costs
- Strong water utility performance is required and has been demonstrated in WA
- Regulatory regimes need to recognise the public health, social, environmental and economic values of water
- The private sector will continue to play an increasingly important role in the operations and capital delivery programs of water utilities

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