A new method for determining the revenue allowance

Essential Services Commission (Vic)

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Overview

- New method of determining revenue allowance for water and wastewater services
- Focus is on improving transparency
- Enables more light-handed regulation in determining revenue allowance
- Greater encouragement for efficient pricing



Four key proposals

- 1. Unbundle, for the purposes of economic regulation, the value chain
- 2. Focus on a few new key measures by customer group
- 3. Require a framework for managing changes to usage prices
- 4. A more light handed process for determining revenue allowance (except for bulk water)



1. Unbundling the value-chain

- Separate into:
 - bulk water
 - water treatment and distribution
 - wastewater treatment and distribution, and
 - retailing
- Why?
 - Simplifies measures to track performance improving transparency
 - Also enables transition to competition if desired



Value chain



2. Measures of performance by customer group

- Cost*-per-customer by each value chain section
- For bulk water, additional measures of water availability per customer
- Customers grouped by commonality in costs to serve
- Simplicity and transparency is key

* Cost to be recovered through revenue allowance







Implications

- Bulk-water
 - Any increase in cost-per-customer due to growth should be offset by improved water availability
- Treatment & distribution, retail
 - Cost-per-customer shouldn't increase with growth
 - ...could change due to:
 - Unexpected change in cost of renewals
 - Changes in quality of service
 - Improved technology
 - Change in factor inputs



3. Framework for managing changes to usage prices

- What happens to connection charges when usage prices change?
- How does this vary by customer group?



Example

	Residential			Non-	Average
	Bottom income quintile	Top income quintile	Average of all	residential use	per connection
Actual for Melbourne 2005-06 (wghtd average)					
Average consumption / connection (kL/year)	174	255	202	1,126	271
Water usage charge (at average)	\$138	\$212	\$164	\$950	\$222
Fixed charge	\$60	\$60	\$60	\$90	\$62
Total water bill	\$198	\$272	\$223	\$1,040	\$284

Consider change in usage prices to reduce demand by 10%

Data taken from PC Draft Report on Urban Water. Assumptions: price elasticity of demand =-0.2, excess revenue redistributed in accordance with current fixed charges.



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Scenario: pricing to reduce demand by 10%					
New demand	157	229	182	1014	244
New water use charge	\$224	\$327	\$259	\$1,447	\$348
Fixed water charge (rebate)	-\$61	-\$61	-\$61	-\$92	-\$64
Total bill	\$162	\$266	\$198	\$1,355	\$284
Impact of pricing change on average total bill to achieve 10% reduction	-\$35	-\$6	-\$25	\$315	\$0

Data taken from PC Draft Report on Urban Water. Assumptions: price elasticity of demand =-0.2, excess revenue redistributed in accordance with current fixed charges.



What we propose

- Require utilities to publish the framework
- Guiding principle
 - A customer group should be no worse off from a change in usage of another group
 - In effect: Determine how the value of assets and liabilities allocated among customer groups



4. More lighted-handed process for determining revenue allowance

... for sections other than bulk-water

- Some considerations
 - Benefits of transparency achieved by reporting costper-customer measures (by customer-group)
 - Current governance arrangements
 - Benchmarking impractical



A possible lighter-handed approach - for treatment and distribution

Default price quality path (DPP)

- Default revenue allowance by customer group
 = cost-per-customer X number of customers
- 2. Adjust for variable volumetric costs
- 3. ESC calculates a default growth rate for cost-per-customer based on submissions
- 4. Customised price path available



Retail

- Much greater potential for a benchmark pricing approach ...
- ...but limited benefit and some risks
- So recommend DPP approach



Bulk water – a different proposition

- Key considerations
 - Two key measures cost and water-availability
 - Large variation in costs by location
 - Very difficult to compare
- We propose
 - Cost-based regulation i.e. stick with building-block
 - Greater scrutiny of cost and benefits of augmentation
 - Require benchmark includes efficient pricing



A quick word on pricing and customer engagement

- Any departure from efficient prices will result in higher average costs (for same level of service)
- Tend to impact those on lowest incomes most (relative to reasonable alternatives)
- Propose: Businesses should present the impact of deviating from efficient price structures



Summary

- Changes in reporting focussed on improving transparency and encouraging efficiency
- Shouldn't be a large administrative burden
- But potentially significant implications





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