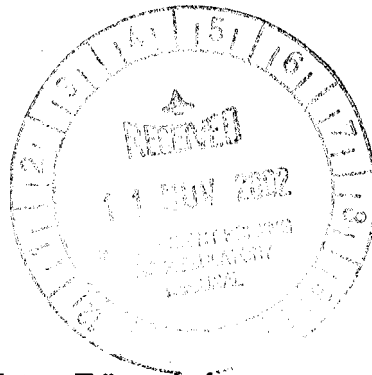


Your Reference : 02/39
Our Reference : EXF24950/HO5397
Contact : Natasha Lee, 9995 6030



Director General

Dr T Parry
Chairman
Independent Pricing and Regulatory Tribunal of
NSW
Level 2
44 Market Street
SYDNEY NSW 2000

Dear Dr Parry

A handwritten signature in black ink, dated 7/11/02.

REVIEW OF MAXIMUM PRICES CHARGED BY THE METRO

WATER AGENCIES

Thank you for your letter dated 6 June 2002 enclosing the issues paper on the Review of Maximum Prices Charged by the Metropolitan Water Agencies. The Environment Protection Authority (EPA) is pleased to provide the following comments on the maximum charges to apply from 1 July 2003 to Sydney Water Corporation and Hunter Water Corporation and the mid term review of Sydney Catchment Authority's price path.

The EPA considers that this is a timely opportunity to review the price structure of metropolitan water charges given current concerns about a severe drought in NSW and the strong population growth in Sydney. The EPA is concerned that Sydney's urban population is consuming above the long term safe (sustainable) supply of water and that the continued strong population growth in Sydney will place ever increasing pressures on the demand for water. In addition, there is the Government commitment to additional provision for future environmental flows.

It is accepted by the EPA that price increases on their own may not have a significant impact on changing customer's behaviour. However, pricing can be used effectively when combined with other policy tools such as education campaigns and offering viable alternatives to reduce water usage. Therefore it is important to view water use as an integrated cycle and price as one tool that can augment the non-price demand management initiatives being undertaken.

The EPA believes investigations should begin now to develop a pricing system that serves the goal of a long term sustainable water supply for Sydney. The pricing system should moderate consumption by providing appropriate signals to:

- Sydney Water in drawing raw water;
- Households; and
- Users of recycled versus potable water.

Each of these components need to be considered together as part of an integrated pricing system.

While more work may need to be done before these signals can be translated into specific structural and quantified changes to prices, investigations need to begin now. Delaying this work will make the task of ensuring Sydney is able to live within its finite resources more difficult.

A more detailed submission is attached but the main recommendations are:

Sydney Catchment Authority

- The EPA agrees with the proposal for the current price at which Sydney Catchment Authority sells water to Sydney Water Corporation to be increased by CPI.
- The EPA believes that investigations should begin now into structural signals that increase price when consumption exceeds the safe yield. For example, a higher price could kick in removing Sydney Water's financial incentive to sell more than the safe yield. It is acknowledged that Sydney Water is currently undertaking a considerable demand management effort. However, structural changes should be investigated to ensure clear signals exist for the future.

Sydney Water Corporation

- The EPA supports a CPI adjustment to the variable unit cost of water, which is currently \$0.94 per kilolitre.
- The EPA recommends that investigations begin now into structural changes that provide clear signals to households to moderate consumption. The potential for a step tariff for households should be investigated as one option. This would ensure that those properties that consume water beyond a defined limit pay a higher price for that water.
- The EPA recommends that investigations begin now on how to reduce Sydney Water's fixed charge component and compensate this loss of revenues by marginally increasing the usage charges so that the overall water bill for the average household would largely remain unchanged.

Hunter Water Corporation

- The EPA supports Hunter Water Corporation's pricing proposal as it reinforces the conservation signal for all water users and applies a simple pay-as-you-use principle.

Waste water/sewerage Pricing

- The EPA recommends that IPART examine incentives such as a reduction in developer charges and/or a reduction in the sewerage charge for new developments that utilise grey water for appropriate purposes.
- The EPA recommends that the bulk water price determinations and metropolitan water price determinations be aligned in the future to allow the cost to irrigators of utilising treated waste water to be better linked to bulk water prices.

Yours sincerely



JOE WOODWARD
Acting Director General

IPART Review of Maximum Prices Charged by the Metropolitan Water Agencies

BACKGROUND

Sydney faces finite water resources and the Government's decision to indefinitely defer Welcome Reef Dam means that Sydney is reliant on the capacity of the existing water supply system. In 1995 the safe yield of Sydney's water resources was estimated to be 720Gl pa. As a result of the mid-1990s drought the safe yield was reduced to 600Gl pa.

Currently an expert panel is considering the amount of water that should be released as environmental river flows and this has the potential to reduce the safe yield further to approximately 540Gl pa. There is further downward pressure on the safe yield, in the form of arguments from communities in the Shoalhaven that Sydney should not be able to continue to access "their" water during dry spells as currently provided. If this argument is accepted, the safe yield would be further reduced to 485 GL pa. Finally if recent dry weather reflects another severe drought, there is the potential for the estimate of the safe yield to be further revised downwards.

At present, Sydney Water is drawing approximately 625Gl pa, which is above the estimated safe yield. While it is possible to draw more water than the safe yield in the short term, it also raises the risk of more severe and longer water restrictions in the longer term. With Sydney's population growing by around 75,000 additional residents each year, if current per capita water consumption were to continue, an additional 115Gl pa would be required by 2020.

It is acknowledged that Sydney Water has been undertaking considerable work on their demand management programs to reduce water consumption to meet the 2005 and 2011 targets. If Sydney Water meets its 2005 target (of 364 litres per capita per day) then this is projected to reduce total demand of water to marginally below 540Gl pa. The key driver for water demand is population growth and the latest data suggests Sydney's population will grow to 4.5 million in 2010, rather than 2021 as previously estimated. This faster growth rate will place significant pressures on water supply. Ultimately the strong population growth in Sydney could result in Sydney Water achieving the per household water reduction targets but total demand still exceeding the safe yield.

So that the population can operate within the safe yield, an integrated approach to managing the water cycle is required. This includes reducing potable water consumption through demand management, conducting leakage reduction programs and education campaigns, as well as using recycled water or harvesting rainwater for non-potable uses. Initiatives such as these would also reduce the volume of wastewater and stormwater discharged to receiving waters and their impact on water quality.

Drivers to encourage the adoption of integrated water management include pricing, education, incentives for installing water efficient appliances and regulatory reform. The choice for Sydney if it cannot live within the safe yield is a range of supply alternatives, such as desalination of ocean water, which are financially expensive and have significant environmental impacts.

SYDNEY CATCHMENT AUTHORITY

Sydney Catchment Authority is seeking no major changes during the 2003-2005 price determination except for a CPI adjustment to charges. **The EPA supports Sydney Catchment Authority's proposal and recommends that the current water charge be increased by CPI.**

Sydney Catchment Authority has noted in their submission to IPART that the safe yield of their storages has been calculated at 600 Gl pa and that the demands placed on the system by urban Sydney amount to approximately 625 Gl pa. Sydney Catchment Authority has also suggested an

inclining block tariff arrangement on the water sold to Sydney Water. It is noted there is a substantial differential between the bulk water price of 11 cents per kilolitre and the retail price of 94 cents per kilolitre. Given this substantial price differential, there is a powerful incentive for Sydney Water to seek to sell more water.

While Sydney Catchment Authority is not seeking the introduction of mechanisms such as step tariffs until after 2005, the EPA believes that urgent action needs to be taken to reduce water demand to the safe yield. A delay of two years represents a lost opportunity and could potentially make the task of reducing consumption to the safe yield more difficult and/or expensive. **Therefore the EPA recommends that investigations should begin into structural signals that increase the price of water when consumption exceeds that long run reliable yield. This could involve a higher price that removes the financial incentive for Sydney Water to draw more than the safe yield from Sydney Catchment Authority.** This approach is also consistent with PART's terms of reference to maintain ecologically sustainable development and provide a strong incentive for Sydney Water to ensure its demand management strategy is successful.

SYDNEY WATER CORPORATION

Sydney Water is seeking no real change to its price path except for a CPI adjustment.

For this price determination the EPA believes that for the majority of Sydney Water's customers the variable charge for water should remain constant in real terms. **Therefore the EPA supports a CPI adjustment to the variable unit cost of water, which is currently \$0.94 per kilolitre.**

The EPA accepts that using price alone is likely to only have a limited impact on water consumption. At present there are education campaigns being undertaken such as "It's a Living Thing" which is aimed at changing customer behaviour towards water conservation. A pricing signal used in combination with other integrated water management approaches including demand management, promotion of water reuse and education is more likely to positively influence the behaviours of water uses.

Average residential consumption per property is around 250kLpa. While it is accepted that a certain amount of water consumption is non-discretionary, there is a portion of water use that is discretionary and whose use may be more responsive to price (and non-price tools). Clearly the EPA does not want to disadvantage low income households and those with large families but there is a need to signal that infinite consumption of water at a flat rate is not possible. Given current concerns about the drought throughout NSW, it is the EPA's view that methods to encourage households to moderate excessive discretionary water consumption need to be investigated. Advice from Sydney Water estimates that approximately 10 per cent of households use in excess of 500kLpa, while it has recently been reported that Woollahra has the highest average household water consumption at 404 kLpa, followed by Hunters Hill (380), Ku-ring-gai (370), Baulkham Hills (365) and Mosman (363). **Therefore it is recommended that investigations now begin into structural changes that provide a clear signal to households to moderate consumption. The potential for a step tariff arrangement should be investigated as one option. This would ensure that those properties that consume water beyond a defined limit pays a higher unit price for that water.**

Consideration should also be given to the proportion of the fixed charges in relation to the variable costs in a household water bill. While the EPA accepts there are strong economic grounds to link the fixed component of the bill to the fixed costs, the experience of Hunter Water Corporation, for example, shows the water conservation benefits from reducing the fixed charges and marginally increasing the usage (variable) charge. The main benefit from this approach is that actions taken

by households to reduce water usage become more apparent on the water bill and this may influence decisions on whether households purchase water savings devices.

While in theory a reduction in the fixed charges may expose the water utility to greater revenue uncertainty, the reality is that households will always have a certain portion of water usage that is non-discretionary and therefore the revenues to the utility are not at risk. This approach has been taken by Hunter Water without any apparent adverse consequences. **The EPA therefore recommends that IPART investigates how to reduce Sydney Water's fixed charge component and compensate this loss of revenues by marginally increasing the usage charges so that the overall water bill for the average household would largely remain unchanged.**

HUNTER WATER CORPORATION

Hunter Water Corporation is seeking a CPI adjustment to water charges combined with a minor price reduction for low residential water users and a minor increase for high use residential customers.

Hunter Water has for a number of years (in accordance with IPART's price determinations) applied the water charges to convey a strong conservation signal. In addition, Hunter Water has been increasing the use charges while reducing the fixed service charges. The combination of these two mechanisms may be responsible for Hunter Water's residential customers having one of the lowest levels of annual consumption per household in Australia.

The EPA supports Hunter Water Corporation's pricing proposal as it reinforces the conservation signal for all water users and applies a simple pay-as-you-use principle. The EPA recommends that IPART accept Hunter Water Corporation's price structure.

Consideration should also be given to more formally applying an increasing block tariff for Hunter Water's domestic customers, similar to that being proposed for Sydney Water.

WASTE WATER/SEWERAGE PRICING

The treatment and discharge of waste water imposes significant environmental costs on society. To achieve the broad objectives of ecologically sustainable development it is important to move away from the idea that waste water has no value. The EPA considers that it makes little sense to dispose of grey water (from showers, laundry and kitchen) when this water is adequate for purposes such as flushing toilets or watering gardens. **Therefore the EPA recommends that a range of incentives be offered in new developments to encourage the utilisation of grey water for appropriate purposes.** IPART could consider reducing developer charges where developments utilise grey water use and/or reducing the sewerage charges to households that utilise grey water.

The thinking on treated waste water needs to change to view it as a resource that can be utilised in particular niche markets such as for irrigation and industrial uses. However, given the current demands on potable supply it is necessary to encourage the use of treated waste water where appropriate. This has the effect of freeing up potable water for household consumption. However, the current pricing arrangements for treated waste generally do not provide a strong incentive for agriculture or industry to switch to waste water from potable water.

The EPA agrees with IPART's approach to align the price paths of Sydney Water Corporation and Sydney Catchment Authority from 2005. While currently outside the scope of this determination, the EPA considers that it would also be desirable to also align bulk water price determinations with

metropolitan water price determinations so that irrigation and urban water can be viewed as an integrated cycle and the cost of utilising treated waste water by irrigators can be linked to how bulk water is priced. **Therefore the EPA recommends that the bulk water price determinations and metropolitan water price determinations be aligned in the future.**