IPART Issues Paper

Review of prices for Sydney Water Corporation from July 1 2016

Submission

12 October 2015

Contents

Contents	2
Foreword	3
Executive summary	4
Impact on Flow operations	6
Flow rejects IPART's proposed principles	8
A fledgling industry	13
Driving a competitive market	14
Undermining government policy in NSW	16
No certainty	19
Legal uncertainty	22
Flow: a non-residential customer	24
Value of the WICA market	26
Sydney Water proposed price reductions	28
Conclusion	29

Foreword

In September 2015, IPART published and sought submissions on its *Issues Paper - Review of prices for Sydney Water Corporation from 1 July 2016* setting out its preferred pricing approach for Sydney Water's customers, including WICA participants such as Flow. Specifically, the Issues Paper seeks submissions on the following three questions:

59. What is the most appropriate methodology or basis for setting wholesale prices?

60. What is a reasonable retail-minus avoidable costs price cap to apply to all wholesale customers?

61. Should wholesale prices be regulated under the WICA, IPART's price determination or a combination of both?

Flow's responses to these questions as well as the Issues Paper in general are set out in the discussion points below.

Executive summary

1. Flow Systems Pty Ltd (**Flow**) does not support Sydney Water's proposal, as apparently accepted by IPART in its *Review of prices for Sydney Water Corporation Issues Paper* dated September 2015, that WICA participants should become 'access seekers' under the WICA access regime.
2. Flow does not support IPART's view that wholesale pricing on a 'retail minus avoidable costs' basis be applied to WICA particpants, either until access agreements are established (as proposed in the Issues Paper), or indeed at all.
3. Flow does not support IPART's proposition that Sydney Water's proposal is intended to create a 'level playing field' for Sydney Water in response to an alleged arbitrage opportunity which WICA participants are allegedly exploiting.
4. Flow recommends IPART supports the current 'non-residential' approach to pricing for WICA particpants until such time as industry and Government can agree on an alternative.
5. Flow recommends that during the forthcoming four year pricing period, IPART participates in an in-depth industry and Government (including DPI Water) consultation process designed to identify all aspects of the 'level playing field' concern harboured by both Sydney Water and WICA participants in order to consider any resulting Sydney Water pricing proposal in the proper context and properly factoring in Government's stated objectives in encouraging competition in the water industry, innovation and sustainability.

An unviable industry

IPART's preferred 'retail minus avoidable costs' pricing approach will materially compromise water efficiency outcomes. It will unpick critical economic and innovation achievements developed and implemented over the past decade. It will terminally damage the transformative outcomes achieved by Integrated Water Cycle Management (IWCM) and the resulting economic, environmental and social benefits to communities and governments.

These pricing changes will ensure world's-best-practice WICA schemes such as Central Park and Barangaroo are not replicated. Harvesting multiple water sources for reuse within communities is the future. Innovation and technology allows for these self-sufficient approaches, but making them economically viable is challenging. Public utilities globally are generally unable to deliver IWCM, so the progress of WICA participants in achieving viability is being watched, awarded and showcased nationally and internationally.

The benefits of WICA projects have only begun to be realised. It is essential the market is fostered and enabled to grow, unencumbered by punitive pricing and regulatory levers, particularly over the next four years. During this time, IPART, Government and Sydney Water must work with the industry to quantify and acknowledge both the presence and the value of this new market across Government.

Should IPART accept Sydney Water's proposal, the outcomes will be devastating:

- Many WICA schemes will become unviable, leading to the potential collapse of the WICA market
- Negatively impact on private investment in water infrastructure
- Negative impacting on competition
- Negative impact on innovation
- Loss of world-leading IWCM urban regeneration precincts, such as Central Park and Barangaroo
- Loss of private sector investment
- Loss of water-efficient sustainable outcomes including best-of-breed IWCM solutions
- Decoupling of Flow's existing communities from the Sydney Water network and associated cartage/tankering disadvantages to the communities
- Customer confusion due to multiple water utilities in one precinct
- Compromise of the NSW Metropolitan Water Plan and City of Sydney 2030 Vision
- Inability to achieve a diverse water supply with loss of non-rainfall dependent water source
- Loss of innovative thinking, promotion of non-sustainable BAU water solutions and thinking
- Loss of new water infrastructure approaches that speed up land release, housing starts and associated eomplyment and economic benefits
- Failure to optimise closure of het housing supply deficit.

These losses need to be weighed carefully against what perceived interests are being protected by promoting such a pricing change, especially when the likely impact on Sydney Water's overall forecasts is negligible. This consideration must occur following detailed industry consultation.

Flow operates as a non-residential customer to Sydney Water, delivering a different service to Flow's customers within its communities; it does not simply operate as a stand-between opportunistic retailer taking advantage of some sort of alleged arbitrage, seeking to profit from the same without any value-add. IPART's adoption of Sydney Water's 'arbitrage opportunity' contention is based on a false premise. WICA schemes by their nature add services and improve overall efficiency of the water system.
The only viable pricing principle for WICA participants in the foreseeable future is the existing non-residential charge - based on the connection size, as set under the prevailing IPART price determination.

Flow does not support a shift to the WICA access regime. Given that Sydney Water is a competitor to WICA participants, there is a clear conflict of interest if WICA participants were forced to negotiate access with Sydney Water, resulting in unworkable risk, along with commercial, legal and process issues that render it an unviable framework. Any change to pricing needs to take into consideration the broader regulatory and market settings that enable and promote competition.

Impact on Flow operations

Flow Systems Pty Ltd (**Flow**) is licensed under the *Water Industry Competition Act 2006* (NSW) (**WICA**) to supply drinking water and recycled water and wastewater services to a number of communities in NSW. To date, Flow has been charged for drinking water and wastewater services it receives from Sydney Water as a non-residential customer, paying a fixed charge based essentially on pipe (and hence meter) size, together with volumetric usage charges[1].

Unlike Sydney Water, Flow's business model is decentralised, focussing on Integrated Water Cycle Management (**IWCM**) principles. It operates in both the urban infill sector, including developments such as the internationally award-winning five green star rated Central Park development, and the greenfield housing sector, including developments such

[1] See Chapter 10 of the Issues Paper for non-residential pricing.

as Huntlee, a new sustainable community of approximately 25,000 inhabitants aiming for self-sufficiency in the Hunter.

Sydney Water's pricing is determined every four years by IPART. The next determination takes effect from 1 July 2016 and applies for the four-year period until 30 June 2020. In September 2015, IPART published and sought submissions on its *Issues Paper - Review of prices for Sydney Water Corporation from 1 July 2016* setting out its preferred pricing approach for Sydney Water's customers, including WICA participants such as Flow. Chapter 12 and Appendix K of the Issues Paper outlines Sydney Water's pricing proposal and IPART's preliminary response on a new category called 'Wholesale Pricing'. The same comments apply in general to the determination by IPART of Hunter Water's pricing. IPART's preliminary position is that WICA participants should be dealt with as access seekers under the WICA access regime and that, in the meantime, pending finalisation of access agreements, from 1 July 2016 a maximum wholesale price will be determined for Sydney Water based on the 'retail price minus avoidable costs' model. This fundamentally different basis to the status quo under which WICA participants are charged on a non-residential customer basis by Sydney Water, will have an impact on all services, including drinking water, wastewater, trade waste, sewer mining, emergency overflow, and storm water services. It will also affect other Sydney Water arrangements - quality testing, development requirements, connection processing and other relationships governed by inter-utility agreements.

A forced shift to wholesale pricing determined on a 'retail minus avoidable cost' basis as an interim step towards a permanent access seeker regime would represent a new, highly complex and uncertain process for WICA participants just at a time when the new marketplace is embryonic, and delivering the benefits associated with competition. Such uncertainty will damage that marketplace rather than encourage it to grow, and eliminate the benefits that would otherwise accrue from healthy growth of the private sector. In effect, Sydney Water as the incumbent public water authority will achieve exactly what flexing its muscles is designed to achieve – suppression and likely removal of competition and all associated benefits that government is seeking to deliver to the community, together with perpetuating the inefficiencies of the past.

Flow has invested in schemes at Pitt Town, Central Park, Discovery Point, and Green Square and is in negotiations with a further ten developments within Sydney Water's area of operation on the basis of the previously agreed pricing methodology as a non-residential customer.

In accordance with our licence conditions, Flow will be obligated to advise the Minister of a significant potential change to the financial viability of existing schemes. Flow will also be bound to advise its developer clients of the uncertainty of pricing that may prevent us being able to honour utility proposals currently offered and under final consideration. All of which will cause uncertainty and concern in the industry amongst developers and other stakeholders, and stymie development and associated housing supply delivery and associated economic benefits; in effect, serving to effectively shut down the private sector competition and associated benefits which WICA is designed to promote.

Flow rejects IPART's proposed principles

1. No arbitrage opportunity

The Issues Paper states at page 184:

> *Properties within a multi-premises typically share a main connection to Sydney Water's network, and then have individual connections to the multi-premises' plumbing network. The shared main connection's capacity is typically smaller than the sum of the capacity of each connection to the multi-premises plumbing network. If Sydney Water were to charge wholesale customers the non- residential service charge (based on main connection size) and wholesale customers were then able to charge individual houses and apartments Sydney Water's residential service charges, an arbitrage (or riskless profit) opportunity would exist.*
>
> *An arbitrage opportunity would allow wholesale customers to enter the market without providing any additional services or improving overall system efficiency. The margin created by this arbitrage opportunity would ultimately need to be recovered from Sydney Water's wider customer base, which would increase prices to all remaining direct customers of Sydney Water.*

The assumption (regrettably it seems, shared by IPART) that WICA schemes provide no benefit to the Sydney Water customers is incorrect. That said, we accept a wholesale customer who enters the market only to buy Sydney Water's services to re-sell for profit and provide no other services, represents inefficient competition. However, this is Sydney Water's default position for all WICA participants, a premise that is entirely wrong.

It is not legally allowable for Flow or other WICA licensee to enter the market and just on-sell services *'without providing any additional services or improving overall system* efficiency': page 184 of the Issues Paper. Under section 10(4)(d) of the existing WICA an application for a licence to supply water may not be granted '*unless the Minister is satisfied that, if such a licence is granted, sufficient quantities of the water supplied by the licensee will have been obtained otherwise than from a public water utility.'*
This makes it impossible for a WICA licensee merely to on-sell services provided by Sydney Water or Hunter Water. Flow and all other WICA licensees are treating and purifying a range of water qualities including residential and industrial wastewater, effluent, stormwater and contaminated groundwater.

Under the Amending Act, despite the removal of section 10(4)(d), the effect is preserved. Retailers can only retail water or sewerage services in connection with a licensed scheme: see new section 9 combined with new section 20F(1). WICA licensees must therefore invest in the scheme infrastructure and are not permitted to sell services to customers that are not related to the approved WICA scheme.

In practice this has resulted in most WICA schemes generating recycled water from treating wastewater. This has key positive efficiency implications for Sydney Water:

- a significant (30-70%) reduction in drinking water demand;
- a major contribution to water security, consistent with the objectives in the Metropolitan Water Plan relating to diversification of water sources;
- a major reduction in the volumes of wastewater effluent for transportation and for treatment; and
- a reduction in the need for Sydney Water to amplify or construct new water or sewer mains.

Flow has been able to deliver global best practice IWCM-focussed schemes based on arguably the most important limb of sustainability: economic sustainability. By extracting value from multiple water sources it is possible to achieve this. Sydney Water's proposed pricing will materially compromise this outcome. In addition, the *Water Industry Competition Amendment (Review) Act 2014* introduces strong sustainability objectives, which will continue the Government's encouragement of schemes offering more sustainable sources of water than do the public water utilities.

20F Retailer's licence conditions

(1) It is a condition of a retailer's licence that the licensed retailer must not sell a water or sewerage service provided by means of prescribed water industry infrastructure to a small retail customer unless:

(a) the water or sewerage service is provided to the same premises as a water or sewerage service provided by means of a category A scheme to which this Part applies, and

(b) the customer has a contract with the licensed retailer for both services.

Category A scheme is defined as 'water industry infrastructure comprising an integrated system for providing water or sewerage services to 30 or more small retail customer premises in an area or building, including any treatment works, pumping stations and reticulation networks that form part of the system': section 5(1)(a).

2. IPART to set wholesale prices

IPART's preferred approach to wholesale pricing undermines the intention of the WICA (and its regulations) to drive a competitive marketplace in water. It is not possible for a WICA participant to properly gauge the feasibility of new schemes without knowing the price, or at least the methodology for calculating prices for any drinking water and/or wastewater services required from the relevant public water authority.

Flow does not agree with the proposed new pricing methodologies on the basis they leave out critical Government policy objectives relating to competition, sustainability, and water security. Further, in the case of the ultimate goal of moving to an access regime, they ignore commercial realities, including conflicts of interest and likely insurmountable hurdles and obstacles resulting from the same in attempting to negotiate access arrangements. **Flow strongly recommends that no new pricing regime (and associated methodologies) is supported by IPART until a comprehensive review of the marketplace is undertaken, including all Government objectives and related policy.**

3. Retail minus approach

Flow does not accept the premise that a retail minus avoidable costs basis enables wholesale customers to compete with incumbents on the cost of providing a contestable service/s.

Without a level playing field between Sydney Water and WICA participants, the retail minus pricing levers will not achieve competition. In fact, they will achieve the

opposite. IPART's preferred retail minus avoidable costs approach would, if implemented, cause substantial uncertainty for both Flow's revenue and cost models.

Postage stamp pricing

IPART notes [at Chapter 12.1.1] that Sydney Water refers to ensuring 'the maintenance of postage stamp pricing to Sydney Water's retail customers'. IPART explains that:

> *'Under postage stamp pricing, the same kinds of customers within Sydney Water's area of operations are charged the same price for the same service'. Footnote 449 on p181*

Maintenance of postage stamp pricing is not expressly relevant to public water authority pricing determinations. While it is mentioned in relation to pricing under access agreements (section 41 of WICA), it is not an absolute requirement, but only '*where applicable*'. *Section 41 (Pricing principles) of WICA states:*

(1) For the purposes of this Part:

(a) IPART must have regard to the pricing principles when deciding whether or not to approve an access undertaking for an infrastructure service, and

(b) an arbitrator must have regard to the pricing principles when determining a dispute in relation to the pricing of access to an infrastructure service the subject of a coverage declaration.

(2) For the purposes of this section, the pricing principles in relation to any infrastructure service are as follows:

(a) the price of access should generate expected revenue for the service that is at least sufficient to meet the efficient costs of providing access to the service, and include a return on investment commensurate with the regulatory and commercial risks involved,

(b) the price of access should allow multi-part pricing and price discrimination when it aids efficiency,

(c) the price of access should not allow a vertically integrated service provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent to which the cost of providing access to other operators is higher,

(d) the price of access should provide incentives to reduce costs or otherwise improve productivity.

(3) These principles must be implemented in a manner that is consistent with any relevant pricing determinations for the supply of water and the provision of sewerage services, including (where applicable) the maintenance of "postage stamp

pricing" (that is, a system of pricing in which the same kinds of customers within the same area of operations are charged the same price for the same service).

Under section 15(1) of the *Independent Pricing and Regulatory Tribunal Act 1992* (NSW) IPART is bound to 'have regard to the following matters (in addition to any other matters the Tribunal considers relevant) [highlighting added]:

- *(a) the cost of providing the services concerned,*
- *(b) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standard of services,*
- *(c) the appropriate rate of return on public sector assets, including appropriate payment of dividends to the Government for the benefit of the people of New South Wales,*
- *(d) the effect on general price inflation over the medium term,*
- *(e) the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers and taxpayers,*
- *(f) the need to maintain ecologically sustainable development (within the meaning of section 6 of the Protection of the Environment Administration Act 1991) by appropriate pricing policies that take account of all the feasible options available to protect the environment,*
- *(g) the impact on pricing policies of borrowing, capital and dividend requirements of the government agency concerned and, in particular, the impact of any need to renew or increase relevant assets,*
- *(h) the impact on pricing policies of any arrangements that the government agency concerned has entered into for the exercise of its functions by some other person or body,*
- *(i) the need to promote competition in the supply of the services concerned,*
- *(j) considerations of demand management (including levels of demand) and least cost planning,*
- *(k) the social impact of the determinations and recommendations,*
- *(l) standards of quality, reliability and safety of the services concerned (whether those standards are specified by legislation, agreement or otherwise).*

And, importantly, IPART is required to be transparent about what regard it has had to those matters: section 15(2). [In its current determination, IPART did not mention principle (i) at all. This is perhaps because IPART chose not to regulate a discrete category of pricing for Sydney Water's prices to WICA participants]. Therefore, maintenance of postage stamp pricing is not expressly relevant to public water authority pricing determinations. While it is mentioned in relation to the pricing principles to which IPART or an arbitrator must have regard in deciding approval of an access undertaking or when determining an access pricing dispute under a coverage declaration (section 41(3) of WICA), it is not an absolute requirement, but only *'where applicable'*. IPART has acknowledged that maintenance of postage stamp pricing is one of the 'impediments to more extensive competition for water markets, which could be removed.

4. Third party access

Sydney Water itself chose not to undertake a third party access process with Flow as a WICA licensee, instead choosing to develop a template USA across its sites. It chose this approach in partnership with Flow because it was a valid customer relationship that is in keeping with the current IPART Sydney Water pricing determination for 2012 – 2016, and beyond.

5. Tariff structure dictated by a single market participant

A single market participant should not dictate the tariff structure for the entire water and wastewater industry. Sydney Water cannot continue to operate on the assumption that it is entitled to all the retail revenue of NSW customers and use a 'retail-minus' approach to achieve this. IPART needs to develop a tariff structure that does not assume monopoly supply by Sydney Water.

A fledgling industry

Sydney Water projects it will have a total of 7,289,391 residential customers to serve over the four-year determination period 2016/17 to 2019/20. This excludes the communities of Central Park, Discovery Point and Barangaroo under current WICA licences.

Flow estimates that by the end of the four-year determination period in 2020 it will have 8,000 additional residential customers and that other WICA participants will have some 4,000 additional residential customers. When combined with existing customer numbers as at 1 July 2016, this yields a total of 12,000 customers served by the WICA industry, no greater than 0.2% of the Sydney Water's total customer base/revenue stream[2] projected by Sydney Water that it will serve by 2020. Even if this value more than doubled to 0.5 per

2 Flow growth estimates. These figures do not include WICA schemes where Sydney Water retails drinking water or where Sydney Water has no planned capacity to supply drinking water.

cent, it is inconsequential and well within the limits of accuracy IPART should expect of Sydney Water's assessment and effect on its pricing proposals.

Unfortunately, the WICA industry growth has not been calculated or considered by Sydney Water or IPART. This market cannot operate against a pricing framework that assumes all future WICA participant customers 'belong' to Sydney Water and are required to contribute to Sydney Water's cost to serve all of its customers, including those in new developments (in relation to which developer charges have generally been abolished since 2008).

An independent market has been established and is expected to grow with the support of State and local government policies.[3] This growth must be acknowledged and planned for and cannot continue to be calculated as an intrinsic component of Sydney Water's customer base. Remaining as a non-residential customer under a determined price alongside other commercial enterprise is an essential part of recognising the participation of WICA utilities.

The Sydney Water proposal is a heavy handed and inequitable policy for such a small number of customers at this point in the development of the new competitive marketplace.

Driving a competitive market

The presence of the WICA market creates competition in the NSW water market - reducing infrastructure costs, driving downward pressure on pricing, embracing technology and innovation, allowing new thinking and speeding up the release of new housing and construction jobs that go with new development. A whole-of-Government approach is required to create a competitive marketplace. This includes removing barriers to competition and resetting assumptions and practices that need to change in order to fully establish the market.

How Sydney Water interacts with the emerging competitive water market and the role it has to play in supporting implementation of government policy must be considered.

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3 NSW Metropolitan Water Plan recycled water targets. City of Sydney DWMP

Some of these considerations are beyond the scope of the present review, but are essential to ensuring any proposed changes in Sydney Water's pricing determinaition are fair, reasonable and properly considereed in the context of government policy and consumer outcomes.

Flow Systems, as a relatively new market entrant, is experiencing barriers and inefficiencies which if changed, would support innovation and alternative options for providing water services in NSW. The need for regulators and governments to encourage competition in urban water through appropriate pricing mechanisms was highlighted in the Competition Policy Review Final Report, March 2015 (the Harper Report), Recommendation 13 of which urged:

> Governments should focus on strengthening economic regulation in urban water and creating incentives for increased private participation in the sector through improved pricing practices. State and territory regulators should collectively develop best-practice pricing guidelines for urban water, with the capacity to reflect necessary jurisdictional differences.

Indeed, in its submissions to the Harper review, IPART itself identified barriers to competition in the WICA market[4]:

> In NSW, under the Water Industry Competition Act 2006 (NSW) (WICA) framework, there has been increased private interest in developing, owning and operating the water and wastewater infrastructure for entire communities. However, to date, private sector schemes have been relatively small and/or have served developments beyond the urban fringe (and beyond the immediate servicing plans of the large incumbent public water utility).
>
> There are a number of impediments to more extensive competition for water markets, which could be removed. These include, for example:
>
> - The ability of large, government owned incumbent water utilities to cross subsidise their provision of services to new development areas. Large incumbents are better positioned than smaller suppliers to run the necessary cross-subsidies, such as postage stamp pricing.
> - The tendency for government strategic land-use planners to rely on information from the incumbent public water utility to inform their decisions (e.g. in relation to the location and sequencing of land release), rather than also seek information or expressions of interest from the market.

4 Opportunities for further reform IPART's submission to the Competition Policy - Review Issues Paper, June 2014, pp 14-15

- Inconsistent rights or regulatory requirements of existing state-owned utilities relative to potential new entrants.

A retail minus approach would enable large incumbents to, in effect use WICA participant customers to cross-subsidise their provision of services to other areas, such as new developments where developer charges are not available. The need to promote competition in the supply of the services concerned, to which IPART must have regard in its pricing determinations, is absent from the principles applicable when IPART approves access undertakings and when an arbitrator determines an access pricing dispute under a coverage declaration.

Flow also points to its previous calls (IPART Review of Sydney Water's Operating Licence – Submission Flow Systems August 2014) for IPART to remove unnecessary duplication, creating consistent standards across the sector and supporting the effective development of a competitive water utility market.

Undermining government policy in NSW

Undermining NSW growth

Sydney Water's pricing proposal undermines the NSW Government's objectives and targets for sustainably growing Sydney, driving new housing stock, job growth and infrastructure delivery while protecting the significant and iconic natural environment and liveability of the city. 'A Plan for Growing Sydney' commits the Government to:

Maintain its continued investment in North West and South West Priority Growth Areas along with priority urban renewal precincts; and

Prioritise increasing the rate of housing delivery in new urban release areas.

As part of this plan, Government has nominated key priority growth areas to be delivered at 'no cost to state'. WICA participants can play a significant role in achieving this outcome by offering diversified off balance sheet sustainable water infrastructure solutions. WICA allows for flexible infrastructure phasing resulting in faster land release, bringing forward associated housing starts and construction employment opportunities for strategic growth corridors including not only Greater MacArthur but also Badgerys Creek and the South West Growth Centre. A retail minus pricing model will lead to high cost, less sustainable water infrastructure.

Undermining Integrated Water Cycle Management

Sydney Water's proposal reverses more than a decade of best practice collaboration that has led to the securing of financially viable IWCM projects. The Sydney Water proposal will undermine the fledgling WICA market and its additional recycled water supplies. This will undermine the Metropolitan Water Plan and drive a re-emphasis on desalination and dams – driving upward pressure on pricing yet again.

Undermining WICA

In 2008, the NSW Parliament established a competitive water market to encourage the take up of recycled water innovation and deliver more sustainable water outcomes for families, businesses and communities across the State.

The WICA regime (as amended by the *Water Industry Competition Amendment (Review) Act 2014*, which is scheduled to commence in mid-2016) is enabling, and will enable, global best practice recycled and drinking water schemes, including Central Park, Barangaroo and Green Square.

IPART regulates WICA and plays a critical role in protecting the viability of licensed utilities and the Act's objectives from the conduct of public water authorities which have a declared monopoly service. IPART's preferred approach to wholesale pricing undermines the intention of the WICA regime to drive a competitive marketplace in water.

Undermining Metropolitan Water Plan

The pricing proposal also undermines the planned outcomes of the Metropolitan Water Plan.

> 'The Metropolitan Water Plan sets out the mix of water supply and demand management measures that ensures a secure, cost effective and sustainable water supply for greater Sydney. The Plan also aims to support liveable and resilient urban communities and helps protect the health of rivers impacted by water supply dams. The 2010 Metropolitan Water Plan builds on the significant achievements of past plans by continuing to concentrate efforts on four major areas to secure Sydney's water supply now and in the future: dams, recycling, desalination and water efficiency.
>
> Dams – with continued investment in maintaining and upgrading Sydney's network of dams, which store more than 2,600 billion litres of water, to ensure they can continue to supply the majority of Sydney's drinking water.
>
> Recycling – with ongoing investment in water recycling and stormwater projects, including major

schemes at Hoxton Park, Rouse Hill and Rosehill-Camellia, to boost recycled water capacity to 70 billion litres of water a year or 12 per cent of our water needs.

Desalination - operating the desalination plant at full capacity to supply Sydney Water's area of operations when total dam storage level is below 70 percent and continue to do so until total dam storage level reaches 80 percent - with 100 percent of its power needs offset by a wind farm near Bungendore.

Water efficiency – with continued investment in water efficiency programs, including rebates and business programs, and trialing new water efficient technologies to save 145 billion litres of water a year or 24 per cent of Sydney's water needs.[5]

Undermining City of Sydney's Sustainable Sydney 2030 plan

Sustainable Sydney 2030[6] is the City of Sydney's vision for a green, global and connected future. Its targets reflect community demand for greater water efficiency and include:

- Efficient use of potable water and reduced reliance on the water network;
- Increased amenity and urban cooling through improved green space maintained by independent, climate resilient water supplies; and
- Improved quality of our local waterways though reduced pollution discharged via wastewater and stormwater outlets.

The Sydney Water proposal will negatively impact on these outcomes – which are a global best practice approach to dealing with increasing population and changing climatic conditions including warmer temperatures and changing rainfall patterns.

The City has also established an Australian-first *Decentralised Water Master Plan* (DWMP)[7] which will reduce mains water consumption by 10% of 2006 levels by 2030, and replace 30% of mains water demand across the City of Sydney local government area with recycled or alternative non-potable water generated from local water resources by 2030.

This plan is essential to Flow's business model and its ability to create viable retail and infrastructure services enabling the DWMP. Sydney Water's prices are critical to the ability of all WICA proponents to assist in realising the *Sustainable Sydney 2030* vision and DWMP targets.

5 http://www.metrowater.nsw.gov.au/planning-sydney/2010-metropolitan-water-plan
6 http://www.cityofsydney.nsw.gov.au/vision/sustainable-sydney-2030
7 http://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0005/122873/Final-Decentralised-Water-Master-Plan.pdf

No certainty

Sydney Water's proposal (as proposed to be adopted by IPART) causes substantial uncertainty for both Flow's revenue and cost models. Under the proposed changes, developers, councils and WICA participants cannot assess the viability of schemes without certainty. IPART's preferred pricing model and compulsory access agreements do not give the industry certainty. The WICA access regime is untested, clumsy and time-consuming and introduces unworkable legal, process and economic problems. It would be surprising, given the history of access agreements to date, if any were finalised over the next five years. Most importantly, there's an insoluble conflict of interest as Sydney Water would be given the opportunity to negotiate access arrangements on its terms for its competitors to its network. A ridiculous scenario.

Third party access is not a solution

Third party access arrangements fail to provide the security or solutions industry requires. As a result, Flow is not and has never been an access seeker, nor has any WICA licensee even attempted to use the WICA access regime, let alone secured such access.

Further, Sydney Water itself chose not to undertake a third party access process with Flow as a WICA licensee, instead choosing to develop a template Utility Services Agreement (USA) for interconnections with Sydney Water's networks where applicable to certain Flow schemes. It chose this approach in partnership with Flow because it was a valid customer relationship that is in keeping with the current IPART Sydney Water pricing determination for 2012 – 2016, and beyond.

Flow meets the definition of a Sydney Water non-residential customer because we are a connected property, conducting a businesss on our premises. Our properties are metered non-residential connections in accordance with IPART's Sydney Water pricing determination 2012 – 2016.

WICA licensees seek certainty in order to plan and assess feasibility. To date Flow has had certainty, as we have been billed by Sydney Water as a non-residential customer for drinking water and wastewater services. Becoming an access seeker with prices ultimately determined by IPART as an arbitrator (or by an arbitrator appointed by IPART) does not create certainty. Further, it is not just pricing that is at the centre of access negotiations, but also problematic risk allocation issues and related commercial terms and conditions. All of which render access an unworkable route.

The only way to create certainty would be to match the non-residential pricing framework currently in place. A retail minus approach introduces further risk, requiring Flow to amend all existing and future projects.

It is not possible for a WICA participant to properly gauge the feasibility of new schemes without knowing the price (or at least the methodology for calculating prices) for drinking water and wastewater services as may be required from the relevant public water authority.

At 12.2.2, IPART basically agrees with Sydney Water's position in concluding:

> *"In principle, our view is that wholesale prices should be regulated through the WICA's access regime. The WICA is the NSW Government's legislative framework for competition in the water industry, including the licensing of wholesale water customers.*
>
> *However, this requires an access undertaking to be approved (or a coverage declaration being made) and agreements in place that cover the relevant wholesale services. The WICA's access regime is discussed in more detail in Appendix K.*
> *Without an approved voluntary access undertaking in place (or a coverage declaration being made) covering relevant services, there may be barriers to entry, especially for smaller utilities.*
>
> *Our preliminary view, therefore, is that we should determine wholesale price caps under our price determination for a limited period, which would apply until a voluntary access undertaking has been approved by IPART and is in place or prices have been agreed between Sydney Water and the wholesale customer under the access regime of the WICA. Options for how to regulate wholesale prices are discussed further below."*

While Sydney Water proposes in its submission to IPART that it could progress its voluntary access undertaking under WICA submitted in 2012 (referred to at p185, footnote 460), Sydney Water has been understandably reluctant to do so. In commenting in 2012 on Flow's IPART application for WICA network operator and retail supplier's licences in relation to the Central Park scheme[8], Sydney Water rejected that it could be a wholesale provider of potable water and considered that private sector

8 Letter from Sydney Water's MD to CEO of IPART dated 18 April 2012

providers were required by the regulatory framework *"to purchase bulk water directly from the Sydney Catchment Authority, or another potable water licence network operator, such as the Sydney Desalination Plant Pty Limited'*.

Sydney Water noted that if Flow '*were to be connected to Sydney Water's wastewater network, the applicability of wastewater charges would …need to be determined by IPART'*. Flow advised Sydney Water that an access agreement for potable water was, for a variety of reasons inappropriate[9] and Sydney Water promptly accepted this. In August 2012, Sydney Water wrote to Flow[10] (formerly named 'The Water Factory Company Pty Ltd') advising that:

> 'Sydney Water supports CPWF[11] becoming a commercial customer of Sydney Water for the purposes of drinking water supply, trade waste and sewer mining. In principle, Sydney Water agrees to sell potable drinking [sic] water to CPWF at IPART determined prices, and we note that CPWF will on-sell the water to retail customers at the same rate… We note that [Flow] is not applying for 'third party access' to the Corporation's infrastructure. For wastewater, because of CPWF's unique circumstances we need to work with you and IPART to determine the precise charging arrangements, consistent with CPWF being charged as a commercial customer under the 2012 price determination'.

IPART's 2012 pricing determination

IPART's June 2012 determination of prices for Sydney Water's declared services applies for the four years from 1 July 2012 to 30 June 2016. It does not however, require that WICA participants who are to become customers of Sydney Water must do so as an access seeker. Indeed the 2012 determination expressly does '*not apply to any Infrastructure Services provided by Sydney Water to an access seeker pursuant to an access agreement under section 39 or an access determination under section 40 of the Water Industry Competition Act 2006*'[12]. 'Infrastructure service' is *defined in WICA as:*

> *'the storage, conveyance or reticulation of water or sewage by means of water industry infrastructure, and includes the provision of connections between any such infrastructure and the infrastructure of the person for whom water or sewage is stored, conveyed or reticulated, but:*
>
> *(a) does not include the storage of water behind a dam wall, and*
>
> *(b) does not include:*

9 Letter to Sydney Water dated 30 April 2012
10 Letter to Flow dated 2 August 2012
11 CPWF designated Central Park Water Factory, the Flow Systems Pty Ltd subsidiary established for its Central Park operations. In fact, Flow itself has the retail supplier's licence and is the customer of Sydney Water
12 Paragraph 2.4

(i) the filtering, treating or processing of water or sewage, or

(ii) the use of a production process, or

(iii) the use of intellectual property, or

(iv) the supply of goods (including the supply of water or sewage),

except to the extent to which it is a subsidiary but inseparable aspect of the storage, conveyance or reticulation of water or sewage.'

Flow notes that Sydney Water is prohibited from fixing a price below that determined in accordance with IPART's pricing determination without the Treasurer's approval[13].

'No benefit' assumption wrong

As mentioned above on p8 *(No arbitrage opportunity)* the assumption that WICA schemes provide no benefit to the Sydney Water customers is completely incorrect.

Legal uncertainty

'WICA Access Regime' misconceived

IPART's preliminary view is that the best way to regulate wholesale prices in the long term is via individual access agreements arrived at under the negotiate/mediate/arbitrate regime under a voluntary access undertaking approved by IPART: page 186 of the Issues Paper. The WICA access regime, contained in Part 3 of WICA, deals only with access to 'infrastructure services'. The definition is as follows:

infrastructure service means the storage, conveyance or reticulation of water or sewage by means of water industry infrastructure, and includes the provision of connections between any such infrastructure and the infrastructure of the person for whom water or sewage is stored, conveyed or reticulated, but:

(a) does not include the storage of water behind a dam wall, and

(b) does not include:

(i) the filtering, treating or processing of water or sewage, or

(ii) the use of a production process, or

(iii) the use of intellectual property, or

(iv) the supply of goods (including the supply of water or sewage),

except to the extent to which it is a subsidiary but inseparable aspect of the storage, conveyance or reticulation of water or sewage.

13 Section 18(2) of the IPART Act and mentioned at paragraph 2.5 of the Pricing Determination

The legislative scope of the WICA access regime, and any access undertaking approved or access agreement made under that regime, can in effect deal only with storage and transportation of water and sewage. This is because the supply and filtration/treatment (so that it becomes drinking water) of raw water as a 'good' and indeed the treatment of sewage is, in truth, not a 'subsidiary but inseparable aspect of the storage, conveyance or reticulation of water or sewage'.

And Sydney Water has agreed with this interpretation. In its one and only access undertaking, submitted to IPART in January 2012 (which did not cover the purchase or sourcing of drinking water, and nor did it cover water treatment services), Sydney Water considered that water treatment services are separable from the storage, conveyance and reticulation of water. However, IPART disagreed (while acknowledging some limits):

> *We recommend that Sydney Water should include water treatment services in the access undertaking and access agreement. This would ensure that access seekers can negotiate access to these services from Sydney Water, and the terms of that access will be transparent. Alternatively, if this is not possible, we consider that Sydney Water should undertake not to refuse any access holder access to water treatment services.* [page 3 Water – Preliminary View, July 2012]

In our submission to IPART in June 2012 on Sydney Water's undertaking, we noted:

> *'Based on the fact that WFC and its subsidiaries will be seeking to purchase only small amounts of drinking water it would be uneconomic and punitive to force WFC to source through a third party access arrangement. The overhead costs to arrange, monitor and manage a bulk water and access arrangement will be much greater than commercial customers' costs.'*

IPART's proposed recommendation 41 was:

> *Amend the access undertaking and the access agreement to include water treatment services. Alternatively, if this is not possible, Sydney Water should undertake not to refuse any access holder access to water treatment services.*

This would hardly have given sufficient certainty to an access seeker to plan and deliver WICA schemes on the basis of such an undertaking. In order for a WICA participant to purchase water or sewage services, a multiplicity of parties and transactions is therefore required, including bulk raw water sourcing, filtration and treatment as well as transportation and connection (and sewage treatment).

The third party access regime is a highly inappropriate 'force fit' into the supply of bulk drinking water and periodic wastewater services to WICA retailers, and is designed for quite different services such as rail access. The WICA access regime is not broad enough to deal with:

- additional parties;
- the supply or disposal of goods (such as water and sewage); nor
- additional services, such as filtration and treatment of raw water or treatment of effluent.

If an access agreement purportedly entered into under the WICA access regime includes matters outside the scope of 'infrastructure services' it will likely be invalid. So there is very real doubt as to whether IPART has jurisdiction to approve an access undertaking which extends beyond 'infrastructure services', or arbitrate (or appoint an arbitrator) to determine a dispute under a relevant access agreement. This uncertainty in turn creates doubt over the jurisdiction of a court to determine any appeal under the *Commercial Arbitration Act 1986* (NSW) from an award of an arbitrator.

A further problem with the WICA access regime is that its pricing principles[14] do not reflect the pricing principles applicable to IPART's pricing determinations[15], especially in relation to the need to promote competition in the supply of the services concerned, and the need to encourage sustainable development and demand management. These are absent from the pricing principles required to be followed by an arbitrator when determining a dispute in relation to an access agreement under the WICA regime. This almost guarantees that an access agreement determined under the WICA regime will contain pricing which is adverse to sustainable water solutions and hostile to (rather than encouraging of) a water market which promotes efficient competition.

Flow: a non-residential customer

Flow meets the definition of a Sydney Water non-residential customer because we are a connected property, conducting a business on our premises. Our properties are metered non-residential connections in accordance with IPART's Sydney Water pricing

14 Set out in section 14(1) of WICA
15 Set out in section 15(1) of the Independent Pricing and Regulatory Tribunal Act 1992 (NSW)

determination 2012 – 2016.

Sydney Water's proposal supported by IPART's Issues Paper that WICA participants be charged on a retail minus basis is inconsistent with the proper application of the non-residential property tariff. Flow urges IPART to consider the impact of this move by Sydney Water, and ensure adequate protection of the new WICA market. Flow needs to remain a non-residential customer of Sydney Water for drinking water, trade waste, sewer mining and periodic wastewater discharge, in order for its urban renewal precinct (high-rise) schemes to remain viable.

Water Industry Code of Conduct

As an aside, Flow notes that the *Water Industry Competition (General) Regulation 2008*[16] provides for the establishment of a water industry code of conduct in relation to the responsibilities of licensed network operators, licensed retail suppliers and public water utilities for matters including:

(a) responsibility for water quality,
(b) liability in the event of the unavailability of water,
(c) liability in the event of infrastructure failure,
(d) fees and charges payable in respect of the use of infrastructure, and
(e) responsibility for handling customer complaints.

Sydney Water's Operating Licence 2015-2020 requires Sydney Water to use *"its best endeavours to cooperate with each Licensed Network Operator and Licensed Retail Supplier"*[17] within the Area of Operations that seeks to establish with Sydney Water a code of conduct of the kind referred to in clause 25 of the WICA Regulation. Despite this requirement and a similar condition in its previous Operating Licence, a water industry code of conduct has not been initiated. If it is, Flow trusts it will address, in a positive and ongoing manner, some of the anti-competitive pricing issues highlighted in this submission.

16 Clause 25
17 Section 5.8 of Sydney Water Operating Licence 2015-2020

Value of the WICA market

Before any new pricing framework is applied to the WICA market, it is essential that the true benefits of recycled water schemes to centralised systems and more broadly to the community are correctly qualified and quantified. Once identified, these values must be offset against any cost analysis. Flow quantifies the value of the WICA marketplace according to the following:

1. Investment opportunity for recycled water infrastructure to 2030

Flow estimates the investment opportunity in recycled water infrastructure across Sydney over the next 15 years to be $1.4B to $1.74B – if the industry can remain economically viable. A breakdown is provided in Flow's confidential APPENDIX A.

Importantly, the need for augmentation is sometimes completely eliminated in both urban infill and greenfield projects as a result of a WICA decentralised recycled water solution.

This approach reduces, defers or eliminates the need for augmentation, removing major cost risks associated with infrastructure construction in populated urban areas, especially where service conduits cannot be easily accessed and excavation costs are higher and construction takes longer. Cost and time implications can run into the tens of millions. These are critical avoided costs to public utilities/taxpayers that need to be quantified by IPART/Government.

Additional effluent loads

Avoided costs of additional effluent loads on the system are also crucial considerations to be applied to the WICA market.

Flow's WICA schemes remove wastewater treatment loads from incumbent utilities systems, including Sydney Water. This allows that capacity to be utilised by that utility for other non-WICA customers as well as the deferment of capital costs, reducing the need to upgrade existing wastewater treatment facilities. This in turn increases the life of the infrastructure, allowing for a higher return on the initial investment for that asset. Also maintenance can be staggered and congestion better managed.

In 2006, IPART assessed the Rouse Hill avoided costs for additional effluent loads to be \$9.2M[18] - detailed in the table below. These are conservative estimates based on an average treatment head-works cost per Equivalent Tenements (ET) of about \$4,000 to \$5,000. Based on these figures, each WICA scheme the size of Central Park can save approx. \$12.5M in avoided upgrade of existing treatment capacity. When applied to Flow's current schemes within the Sydney Water network, this will save the NSW Government/taxpayers up to \$50M in avoided costs.

Table 1 Avoided sewerage expenditure: calculating avoided costs

	FY	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Price determination period		t-3	t-2	t-1	t	t+1	t+2	t+3	t+4	t+5	t+6	t+7	t+8
1: CALCULATION OF AVOIDED COSTS													
Without recycled water scheme	$'000												
Wastewater capex			-	5,000	5,000	-	-	-	-	-	-	-	-
Wastewater operating costs			-	-	50	50	50	50	50	50	50	50	50
Total relevant cashflows			-	5,000	5,050	50	50	50	50	50	50	50	50
With recycled water scheme													
Wastewater capex			-	-	-	-	-	-	-	-	-	-	-
Wastewater operating costs			-	-	-	-	-	-	-	-	-	-	-
Total relevant cashflows			-	-	-	-	-	-	-	-	-	-	-
Calculation of avoided costs													
Difference in cashflows			-	5,000	5,050	50	50	50	50	50	50	50	50
PV of avoided wastewater scheme costs	**9,236**												

2. Water security

Diversified water sources

Water security relies on a diversified water supply - both rainfall dependent water sources and rainfall independent sources, of which recycled water is the most valuable. The removal of recycled water from this mix puts upward pressure on pricing as we have seen when Government was forced to construct a desalination plant to respond to the drought, translating to a customer subsidy reported as an additional \$100 per household per year. Any alleged subsidy by Sydney Water customers for WICA schemes would be insignificant compared to this subsidy supporting desalination as a water security source.

Saving drinking water supplies

Recycled water also reduces drinking water demand by 40 – 50% in urban infill and up to 70% in land release/housing supply areas. This secures drinking water supplies, enabling additional capacity and preserving rainwater dependent drinking water supplies. This benefit must be valued and included by IPART.

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18 IPART's Sewage Regulatory Asset Base (RAB).

Aging Sydney Water infrastructure is presenting itself as a substantial and costly problem, exacerbated by urbanisation and growth. In Sydney it is adversely affecting the health and liveability of the community.

> *'Being Australia's first colonial settlement, Sydney has the oldest and most intricate networks of water mains, sewage pipes and drainage pipes and pits in Australia… a significant proportion of them are reaching their structural life and/or hydraulic capacity to deal with increased water demand and volumes of sewage and stormwater run-off anticipated by 2030. In addition, infiltration of groundwater in the cracks in the old and ageing wastewater pipes (sewer pipes) also contributes to reduced capacity. In some cases sewage leaks out of the pipes and contaminates the stormwater runoff with faecal matter making its way to the waterways and adversely impacting their environmental and recreational value'* [19]

Decentralised IWCM-style schemes reduce the load on the existing centralised infrastructure, thereby extending its life and deferring capital and operating expenditure incurred by Sydney Water, which is a direct impost on the public purse. Reducing the load on ageing infrastructure as the city grows must be part of any solution moving forward. Decentralised recycled water schemes delivered by WICA participants not only achieves this but also reduce drinking water demand which underpins water security in a cost-effective way. Accordingly, the value of these benefits must be quantified.

Sydney Water proposed price reductions

Flow supports Sydney Water's proposed drop in prices, which would represent a reduction in average household bills of around $100 per household per year, minus inflation. Flow's price parity policy means any reductions in Sydney Water pricing will be passed on to Flow customers.

19 http://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0005/122873/Final-Decentralised-Water-Master-Plan.pdf

Conclusion

Flow urgently seeks IPART's intervention to ensure the fledgling WICA market is not closed down before the benefits of competition, innovation, sustainability, water security, accelerated housing release and associated economic stimulus can be achieved. It is essential Government work towards creating a level playing field that allows recycled water investment opportunities and innovation uptake to be realised within the WICA market, before pricing levers are engaged.

A flexible and dynamic water industry will be essential in meeting the challenges of NSW's rapidly growing population, drought and extreme climate events – all of which will put additional burden and stress on existing water supplies.

IPART has the opportunity to facilitate an outcome that will ensure a dynamic, innovative and diverse market, delivering better outcomes to the NSW Government and the community.

Flow would like the opportunity to address the Tribunal directly during the November 2015 hearings. There is no other issue more significant in its impact on water recycling and innovation in NSW.

[redacted]

TERRY LECKIE
Managing Director