SUBMISSION ON IPART REVIEW OF WHOLESALE WATER AND WASTEWATER CHARGES – DRAFT DETERMINATION

MAXIMUM PRICES FOR WHOLESALE WATER, SEWERAGE AND TRADE WASTE SERVICES FROM 1 MARCH 2017



Document History

		Date	Signature
Prepared By:	Frazer Hill	02.12.2016	
Reviewed By:	Andy Carr, Alan Daly	09.12.2016	
Approved By:	Scott Taylor	12.12.2016	

Document Control

Issue	Addendum	Revision	Date
A	0.1	Original draft	02.12.2016
В	0.2	Updated to accommodate comments	09.12.2016
С	0.3	Final draft for submission	12.12.2016
D			
E			
F			

General Enquiries	
Name:	Scott Taylor
Telephone:	
Mobile:	+61 407 137 364
Email:	scott.n.taylor@lendlease.com

Table of Content

1.	Execu	Executive Summary	
2.	Background and context		9
	2.1.	Who is Living Utilities?	9
	2.2.	What does Living Utilities represent and why is his a good thing for customers?	9
	2.3.	Where should the NSW water market be going?	10
	2.3.1.	Competition is not solely about low prices in the short term	11
	2.3.2.	Customers are prepared to (but may not have to) pay more for liveability	13
	2.3.3.	Integrated water cycle management	15
3.	Conte	xt for this price determination - what this determination can provide for productivity and prosperity.	19
	3.1.	Recognise the investment decision making processes for private businesses	19
	3.1.1.	The length of a scheme-specific price determination	20
	3.1.2.	Treatment of wholesale customers during development	21
	3.1.3.	The role of potable water supply for integrated schemes	21
	3.3. develo	Ensure greater equality of information when negotiating facilitation costs (and recognise the urban opment process goes well beyond a regulatory price determination period)	
	3.4. water	Align the price determinations for retail and wholesale and ensure that they incentivise effective resource management	25
	3.5.	Clarify IPART's intention on price setting frameworks for future price determinations	26
	3.6. mono	Do more to recognise (and reduce) the prevailing policy advantages that the incumbent water polies have	27
4.	The D	raft Determination risks being a missed opportunity	29
	4.1. good	A retail-minus pricing methodology, combined with system-wide pricing, could do more harm than 29	۱
	4.2. comp	The approach to facilitation costs in the Draft Determination does not address the incentive and etitive advantage issues	30
	4.3.	Scheme-specific pricing reviews are unlikely to be workable	31
	4.5.	Existing schemes could be affected	33
	4.6.	Unregulated agreements are not a credible alternative	34
	4.7.	The risk to efficient investment and competition	34
	4.8.	A proposed way forward	36
5.	Speci	fic issues relating to the draft price methodologies	37
	5.1.	Holistic application of IPART's charging method	37
		Non-residential retail prices apply holistically as a price cap where material value-adding is taken	37

5.1.2.	Pricing for drinking water top-up services	37
5.1.3.	Pricing for recycled scheme wastewater and trade waste disposal	38
5.2.	Application of a 'retail-minus' approach to setting wholesale (access) prices	39
	'Reasonably efficient competitor' standard has substantial regulatory precedent but it is not clear th andard has been applied	
5.2.2.	Bad debts have been excluded from the calculation of operating expenditure	43
5.2.3.	The "minus factors" should be more flexible in order to reduce the need for scheme-specific review 43	s
	"Minus factors" should reflect the cost of a reasonably efficient competitor in supplying a scheme Sydney Water's standard practice	46
5.3.	Process for scheme-specific price determinations	46

1. Executive Summary

Lendlease welcomes the opportunity to comment on Independent Pricing and Regulatory Tribunal (IPART)'s Draft Determination and draft report on pricing for wholesale water, sewerage and trade waste services (Draft Report).

This determination process represents a major opportunity for IPART to establish regulatory settings and prices that will foster effective competition in the provision of new infrastructure for the ultimate benefit of NSW water consumers. NSW, and Sydney in particular, is going through the largest infrastructure and housing boom in its history. Now is the time to encourage competition and efficient entry into the water market.

Lendlease considers that it is critical for all stakeholders in this review to be clear on the objective for wholesale price regulation. It is only when we are clear on the ultimate objective that the wholesale pricing mechanism can be appropriately designed. For our part, we consider that the end goal should be a market in which efficient investment and innovation in integrated water management is encouraged, for the ultimate benefit of customers and the broader community.

The critical issue for this price review is how we get from the current market structure to that end goal. There is the potential for wholesale price settings to drive efficient investment and innovation by the incumbent and wholesale customers. However, there is also a very real risk that these price settings actually stifle innovation in new water management schemes, to the detriment of customers and the broader community.

Retail-minus pricing should be carefully targeted

It is important to recognise that, in the water industry, competition may come in different forms. One form of competition involves a wholesale customer simply competing at the retail layer, and seeking to profit from providing a retail function that is more efficient than that of the incumbent. An alternative form of competition involves a new entrant developing an integrated water management scheme to supply value-adding and transformative water and wastewater services to a new development.

Retail-minus pricing has a role in fostering resale-based competition – that is, competition at the retail layer only. Where the objective is to promote this form of competition and discourage simple arbitrage opportunists, retail-minus pricing will promote efficient entry and competition.

However, retail-minus pricing is not well suited to promoting competition from integrated service providers. For integrated service providers providing value-adding and transformative services, a retail-minus price will not provide appropriate signals for efficient investment in new schemes and does not encourage innovation. The retail-minus pricing approach also ignores the benefits to the wholesale service provider which could be generated by the infrastructure created by the wholesale customer – for example, a wholesale customer's investment in water recycling infrastructure may allow the wholesale service provider to defer augmentation capital expenditure associated with water or wastewater.

Lendlease is concerned that the pricing approach set out in the Draft Report is unduly focused on fostering retail competition, potentially at the expense of competition from integrated service providers. This is because retail-minus pricing is applied too broadly – it is applied to both resale-focused competitors (that is, entities seeking to compete in the retail function only) and integrated scheme developers.

Unnecessary complexity in wholesale pricing arrangements will not promote efficiency

Under the Draft Determination pricing approach, a wholesale customer operating an integrated water management scheme could face a multitude of different charges for essentially the same service, at the same location, depending on what the service is used for. For example:

 for supply of potable water in a location where the wholesale customer has a recycled water scheme, the customer could either pay a retail-minus price or a non-residential price, or a combination of these two prices, depending on whether (and to what extent) that potable water is being used for on-selling to end-customers or for topping up the recycled water plant;

 for waste disposal services in the same location, the customer could pay up to four different sets of charges, depending on whether (and to what extent) the customer is on-selling sewerage services, disposing of wastewater and trade waste from a recycled water plant or sewer mining.

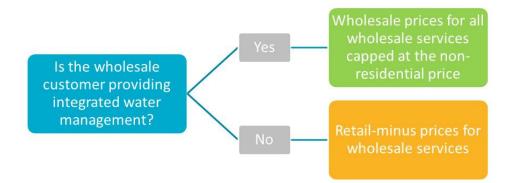
This complexity in wholesale pricing arrangements for integrated schemes is entirely unnecessary and will not advance economic efficiency.

Where potable water and sewerage services are being on-sold to end-users in an integrated scheme, this is not being done for the purposes of cherry-picking the incumbent's retail customers. Rather, this is being done as part of the management of the integrated scheme, either because the scheme is in its development phase or because the ability to optimise the water resource management benefits from a single supplier. Through the ability to send the right pricing signals to customers, the integrated water management scheme can both reduce the demands on potable water supply and wastewater infrastructure as well as manage the risks of the investment. Therefore, in the case of an integrated scheme, the economic rationale for retailminus pricing falls away.

Lendlease sees no reason why a customer should face different pricing for the same service (the supply of potable water or sewerage), at the same location, depending on what the wholesale customer is using it for. This additional complexity will only raise barriers to new investment in integrated water management schemes.

Rather, the price for the supply of potable water and sewerage services to integrated water management schemes should be set at the lowest sustainable level – that is, the level that allows Sydney Water to recover its efficient costs. Evidently, the non-residential price for these services is a sustainable price, and therefore this should set a cap on the price for supply of potable water and sewerage services to integrated water management schemes, regardless of how those services are being used within the scheme. However, non-residential prices should apply as a cap only, because the appropriate price may be lower due to material negative facilitation costs associated with the scheme and other benefits to the wholesale service provider.

Put simply, Lendlease see that prices for wholesale services charge by Sydney Water should be determined through the answer to one simple question.



Scheme-specific reviews and unregulated arrangements should not be relied upon as a solution

It appears that IPART is itself aware of the limitations of its retail-minus model in meeting the needs for wholesale developer customers. This is reflected in the fact that the Draft Report sets out a proposed process for exclusion of scheme-specific pricing from its general system-wide retail-minus pricing model, and proposes considering applications for scheme-specific determinations and the process for IPART in making those determinations.

Lendlease is concerned that IPART may be relying too heavily on the potential for scheme-specific determinations to resolve the problems created by its application of retail-minus pricing to integrated schemes. Based on the commercial practicalities in the negotiation of scheme-specific agreements with Sydney Water, IPART's proposal is not suitable for Lendlease or other new scheme developers. The process set out in chapter 9 of the Report is unsuitable in its design and does not fit with the commercial realities of the scheme-specific negotiation process.

Similarly, we consider that unregulated arrangements cannot be relied upon to resolve the problems created by retail-minus pricing. Our view (and based on our experience) is that it is highly unlikely that Sydney Water will willingly agree to any unregulated pricing agreements, notwithstanding encouragement from IPART. Accordingly, this decision – whilst made with the best intentions – is not likely to shift behaviour or practice.

A proposed way forward

Lendlease accepts that there is a limited place for retail-minus pricing. Where a wholesale customer's business model simply involves replicating the incumbent's offering and profiting from retailing that offering in a more efficient way or arbitrage, a retail-minus pricing approach will encourage efficient entry and competition. In other words, a retail-minus pricing approach will encourage efficient competition, where that competition is limited to the retailing function only. Therefore, we accept that retail-minus pricing can be applied in some cases. However, we consider that it ought to have more limited application than is contemplated in the draft determination.

Lendlease proposes that whether retail-minus pricing is to apply should be based on where the wholesale service is being supplied, not what it is being used for. Specifically, retail-minus pricing should not apply in locations where the wholesale customer has developed an integrated water management scheme to provide value-adding and transformative services (for example, a recycled water scheme), regardless of what the service is being used for in that location. Retail-minus pricing should only apply in locations where there is no integrated water management scheme, and the only way the wholesale customer can supply end-users is by merely on-selling the services supplied by Sydney Water.

Where supply is to an integrated water management scheme, the non-residential price cap for potable water should apply regardless of whether the potable water is being used to top up the recycled water plant or to on-sell to end-users during the plant start-up phase or in emergencies or throughout the life of the scheme where a wholesale customer is trying to promote integrated water cycle management to reduce the impact on precious water resources and infrastructure. Similarly, the non-residential price cap for waste disposal should apply regardless of whether the wholesale customer is disposing of plant waste or on-selling sewerage services.

In brief, the two major changes we are proposing from the Draft Determination are the maximum price that Sydney Water can charge for the wholesale supply of:

- wholesale supply of water services to a wholesale customer who is providing integrated water management is the non-residential price, and
- wastewater services to a wholesale customer who is providing integrated water management is the non-residential price.

Lendlease would be pleased to discuss the details of this alternative proposal with IPART for consideration into the final determination.

The 'minus' needs to be properly calculated

To the extent that retail-minus pricing is to be applied, the 'minus' component needs to be calculated in a way that ensures appropriate signals for new entry by resale-focused competitors.

In section 5.2 of this submission, we set out some suggestions to improve on the methodology set out in the Draft Report. These include:

- adjustments to financing cost assumptions, to ensure that these reflect the financing costs of a reasonably efficient competitor; and
- adjustments on account of estimated system-wide facilitation costs.

A more streamlined process for scheme-specific determinations

We also consider that the process for scheme-specific determinations needs to be streamlined to ensure that they provide an effective backstop for dealing with scheme-specific issues. Some suggestions in this regard are set out in section 5.3.

2. Background and context

2.1. Who is Living Utilities?

Living Utilities is Lendlease's private utility business that leverages Lendlease's people and integrated business capabilities to:

- provide leadership in the development of the best utility solutions; and
- manage the delivery of utility infrastructure assets and services to benefit those living and working in our places.

Our business model is to examine each project on a case-by-case basis and offer solutions informed by financial and economic considerations, sustainability aspirations and the most productive use of the resource. Our goal is to get the best solution, in pursuit of creating the best places for our customers.

Living Utilities helps unlock the financial and economic potential in the infrastructure investment to provide better utility solutions. Lendlease's developers benefit from having access to a dedicated expert resource that can assess opportunities and risks, manage regulatory and compliance requirements, improve bid outcomes and deliver a more sustainable and profitable result. Investors can enjoy a range of financial advantages, including reduced capital expenditure and access to attractive investment returns, while consumers and the wider community appreciate smart, sensible utilities that keep them connected, secure, sustainable and productive.

2.2. What does Living Utilities represent and why is his a good thing for customers?

Lendlease believes that it is necessary to create a dynamic water industry capable of meeting the challenge through improvements in water resource productivity, innovation and collaboration between both government and private participants. This includes adopting integrated water cycle management.

Lendlease continues to support the water industry competition and investment objectives of the regulatory framework, and in particular fostering innovative recycling projects and dynamic efficiency in the provision of water and wastewater services.

To illustrate the role of Lendlease and Living Utilities, it is useful to look at one of Sydney's growth corridors.

'A Plan for Growing Sydney' is the NSW Government's plan to identify how Sydney can create this required additional housing stock, as well as providing the necessary employment opportunities and infrastructure delivery, while protecting the significant and iconic natural environment and improving the liveability of the city.

As part of meeting this challenge, the NSW Government will:

- 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.

On 22 September 2015, as part of 'A Plan for Growing Sydney', the Greater Macarthur area was confirmed as a priority, creating three new growth centres, Mount Gilead, Menangle Park and Wilton Junction. The land nominated would provide opportunities to deliver up to 34,700 homes for over 86,000 people supporting Sydney's growing population.

In the immediate term, the current Sydney Water infrastructure has insufficient capacity to service Mount Gilead and is not readily available to Wilton Junction. The NSW Government's imperative is to have a no cost to state model.

Whilst the Greater Sydney Commission identifies that the planning system is a constraint to the current step-change in growth that Sydney is experiencing, the availability of utility infrastructure is also a constraint.¹ In order to unlock this land in the short to medium term, there is a need for a diversified approach to infrastructure investment and delivery with decentralised solutions contemplated for water and wastewater delivery. This is where Lendlease and Living Utilities can take the lead.

With the right incentives, a wholesale customer like Lendlease would be able to offer sustainable solutions that meet the phasing requirements of the NSW Government and ultimately meet market expectations to deliver serviced lots. The Greater MacArthur land release is a high-cost area which is not reflective of the actual cost of Sydney Water to service but cost-reflective prices will be detrimental to the perception of housing affordability. The presence of this postage-stamp pricing has the potential to disincentivise Lendlease from playing a proper role.

There will be a range of solutions for localised wastewater treatment across the growth corridor including demand-based, total wastewater collection and treatment options. In order to facilitate options, which work within the constraints of the existing catchment areas to absorb excess recycled water production, an integrated water cycle management approach is needed. Furthermore, innovation and a customer-centric approach will be critical.

These solutions are not only necessary to supply residential customers with their water services. Land developers can concurrently develop non-residential land with local water solutions rather than the release of non-residential land being constrained by waiting for public utility services. This means that many of those 86,000 people will also be able to work near where they live taking pressure off road and public transport infrastructure.

2.3. Where should the NSW water market be going?

Some economists have concluded that "the prospects for the development of competition in the water industry should be good, but the reality is that they are quite possibly not good."² Whether or not the prospects for NSW fall into the 'good' or 'not good' category depends on the coherence of regulation, policy and pricing, which need a clear vision of the future that they are each setting on the path to achieve.

Setting prices for wholesale services provided by Sydney Water Corporation and Hunter Water Corporation (hereafter, for convenience only, referred to as **Sydney Water**) goes right to the heart of competition in the NSW water market. These prices are not so much about the protection of small residential customers from monopolies in the provision of drinking water – they are about the costs Sydney Water can charge its competitors and the implications of this for competition. Get the prices wrong in Sydney Water's favour and competition is stifled, private investment dries up and the status quo remains. Get the prices wrong in favour of the wholesale customers and the playing field will be tilted, temporarily, in favour of wholesale customers until the next price determination period. The risk, nonetheless, is asymmetric – the cost of getting prices wrong in favour of Sydney Water is much higher than getting prices wrong in favour of wholesale customers.

In setting out to contribute to the consideration and ultimate determination by IPART of the wholesale water, wastewater and trade waste prices for Sydney Water, Lendlease initially considered the words of Lewis Carrol:

Alice: Would you tell me, please, which way I ought to go from here?

¹ Greater Sydney Commission, Towards our Greater Sydney 2056, November 2016, p 8.

² Yarrow, G., Appleyard, T., Decker, C., & Keyworth, T., "Competition in the Provision of Water Services", Regulatory Policy Institute, 2008, p 92.

The Cheshire Cat: That depends a good deal on where you want to get to.

IPART have acknowledged in their Discussion Paper, in their Draft Determination and in the public hearings on wholesale prices that there is a need for a broader market review. At the same time, they say, they do not feel that this review of wholesale pricing should be put on hold or delayed until a broader review of the water industry occurs. According to IPART, the current review of wholesale prices and a broader industry review "are not mutually exclusive."³ At this point, however, to make a full assessment of the decision to set wholesale prices prior to a broader review, Lendlease (and Lewis Carrol) considers that it is critical to know where you want to get to.

As identified in section 2.3, Lendlease sees itself as being able to make important contributions to the NSW water market in terms of its capital, its agility and innovation and its desire to create the best places for its customers. On that basis, Lendlease sees that one success criterion for assessing 'where you want to get to' is the participation of Lendlease and similar companies.

However, it is important reconcile the participation of Lendlease and similar companies against the amount of instability in the NSW water market at this time. If there is a desire for private investment, IPART needs to ensure that they do as much as they can to create an environment of reasonable certainty for long-term investments. Reviews of legislation, the cycle of price determinations and other potential changes as the market for wholesale customers evolves create a heightened sense of risk for private participants.

When it all boils down, this pricing determination represents a significant junction for the NSW water market, as shown by the table below.

	Either	Or
If you want	overconsumption of potable water	resource productivity
and	to spend public funds	to encourage private investment
and	to maintain the status quo	benefit from innovation
and	build desalination plants	flourishing water-positive communities
encourage	incumbent monopolies	vibrant water competition
and	singular focus	integrated water management
and	postage-stamp pricing	cost-reflective pricing
and	zero-developer charges	efficient capital investment
and	short-term thinking	providing long-term stability

Table 1: An important choice for the NSW water market

2.3.1. Competition is not solely about low prices in the short term

Groshinski and Clark, in considering how to promote investment in the water sector, query whether the fixation on uniformly low prices is "in the long-term interest of consumers, or whether consumers' interests may be better served by pricing methodologies that focus on promoting consumer choice, promoting (private) infrastructure investment and avoiding long-term price shocks."⁴

It is right that IPART considers the impact of decisions made today on the short-term and longterm prices for all NSW water consumers. However, as identified by Ofwat, "the challenge (is) not only about doing things at lower cost, but about making the best overall use of resources and

³ IPART, Draft Report, 2016, p 25.

⁴ Groshinski & Clark, "Promoting investment in the water sector", MinterEllison, p 9.

about finding new and different ways of doing things."⁵ The Greater Sydney Commission identifies that "a more efficient Greater Sydney will analyse the most cost effective and efficient ways to reduce environmental impacts, reduce reliance on carbon and influence the design and location of water, energy and waste systems."⁶

There ought to be the right incentives that drive people to be efficient – especially where there are inherent divergent incentives that may equally drive a business to implement practices which make it less efficient. This economic incentive is required when dealing with monopoly businesses. Lendlease, however, is not a business that operates in an environment where inefficiency can be tolerated. Lendlease operates in a competitive market; it does not need incentives to be efficient as it needs to be efficient to succeed.

A focus solely on low prices when combined with low margins leads to exactly the thing that the NSW water market doesn't need right now – traditional, risk adverse and infrastructure-centric investment. In the absence of competition, low prices are needed to drive efficiency and, possibly but not always, innovation. Competition, on the other hand, will also deliver efficiency benefits to consumers. Wright and Cave identify that "rivalry between firms is likely to increase efficiency, by creating pressure to lower costs, through a better relation between price and costs and through increased innovation."⁷ These efficiency gains should in the long run be passed on to consumers, as well as benefits of increased supply security and improved resilience.⁸

At this stage in the development of competition within the NSW water market – especially given Sydney Water's claim that they are the lowest cost supplier of retail water in Australia⁹ – it seems permissible, even necessary, to trade off an element of productive efficiency for dynamic efficiency and the longer-term benefits that vibrant competition will bring about. As stated by Ofwat, "a successful market needs competitors"¹⁰, so IPART should do what it can to ensure the presence of a sufficient number of competitors in the NSW water market.

It is for this reason that Lendlease supports IPART's preference, in theory, for using the cost assumptions of a 'reasonably efficient competitor' in determining its retail-minus prices, should IPART continue to pursue a retail-minus pricing structure for certain wholesale services provided by Sydney Water. However, this will need to be calculated with care and in a way that ensures appropriate signals for new entry by resale-focused customers. Lendlease considers that a 'reasonably efficient competitor' ought to be less efficient than Lendlease, given Lendlease's scale, capability and experience, and that this may allow Lendlease's competitors to enter the water market in NSW. That said, the retail-minus prices proposed by IPART are prices that Lendlease, with its procurement power and scale, are unable to obtain from the market – assuming that the intention is not to ensure that water market participants can only afford to compete by engaging back-yard contractors with dubious safety and quality credentials.

8 ibid

⁹ Kevin Young, transcript of the IPART Public Hearing into wholesale prices for water and sewerage services, 27 November 2016.

¹⁰ Ofwat, Costs and benefits of introducing competition to residential customers in England, 2016, p 48.

⁵ Ofwat, Water 2020: Regulatory framework for wholesale markets and the 2019 price review, 2015, p 14.

⁶ Greater Sydney Commission, Towards our Greater Sydney 2056, November 2016, p 12.

Wright, J. & Cave, M. "The Development of Upstream Competition in the England and Wales Water Industry", Intereconomics, 3, 2013, p 156.

At the same time, in relation to the opportunity to encourage competition in the NSW water market, it is opportune that this price determination is being made at the time when NSW is experiencing unprecedented investment in housing and infrastructure. This massive investment in housing and infrastructure is also occurring when affordability, liveability and productivity need to be key considerations for anyone choosing to make those investments. Ofwat caution that "given the long-term nature of the assets, but also the inherent long-term nature of water and environmental resources, decisions made today – by companies, customers and by (regulators) – can have implications that may last well beyond the length of price control periods."¹¹ The timing means that this wholesale pricing determination will create an indelible legacy one way or the other for the NSW water market.

Once again, we emphasise that it is important to understand where we want to get to, in terms of the form of competition that will best promote the long-term interests of NSW water consumers. It is important to recognise that, in the water industry, competition may come in different forms:

- One form of competition may involve a wholesale customer simply competing at the retail layer and seeking to profit from providing a retail function that is more efficient than that of the incumbent.
- An alternative form of competition may involve a new entrant developing an integrated water management scheme to supply water and wastewater services to a new development which will bring benefits upstream and downstream of the connection point to the incumbent.

In our view, the latter form of competition is critical to promote efficient investment and innovation in water management for the ultimate benefit of NSW water consumers and the broader community. Therefore, the approach to wholesale pricing ought to recognise this more dynamic form of competition and ensure that it is not stifled.

We accept that retail-minus pricing may have a role to play in promoting the first form of competition – that is, competition at the retail layer only. However, retail-minus pricing is not well suited to promoting the latter form of competition, and indeed is likely to stifle it.

2.3.2. Customers are prepared to (but may not have to) pay more for liveability

According to IPART, most stakeholder input on Sydney Water's proposed price and bill reductions from their retail price determination suggested that, rather than providing deep price reductions, the excess revenue could be retained to spend on the environment and recycled water in order to achieve better liveability outcomes.¹² From this and Lendlease's own customer engagement, it is evident that there may be a customer willingness to accept higher prices in the short-term for more sustainable outcomes. In the context of wholesale prices, this ought to give IPART confidence to implement a 'reasonably efficient competitor' threshold should IPART choose to persist with the retail-minus pricing methodology for the current price determination period. If customers' prices actually rise, as long as better environmental outcomes can be identified, it can be argued that they are responding to the requests of those stakeholders who contributed to Sydney Water's retail price review. However, as explained below, in practice this will be costless recognising that there will not actually be short-term higher prices for customers and they will benefit from better environmental outcomes.

¹¹ Ofwat, Water 2020: Regulatory framework for wholesale markets and the 2019 price review, 2015, p 17.

¹² IPART, Review of prices for Sydney Water Corporation, Final Report, p 34

Despite that fact that customers may be willing to pay for higher liveability standards¹³, the realworld actuality of competitive pressures on retail pricing by wholesale customers is that customers within the communities serviced by those wholesale customers rarely pay more.

Recycled water, under any circumstances, is naturally capped at the price of potable water, with a discount necessary to drive consumption. However, given the competitive market in which wholesale customers operate – not the competitive market with Sydney Water but with other property developers – many wholesale customers are required to commit to match or beat Sydney Water's prices or at least commit that customers will be no worse off for all other prices. This informal 'shadow regulation' often comes as a consequence of either (a) the initial land owner (who may be the NSW Government) requiring that any utility solutions are pegged to those of the incumbent monopoly utilities or (b) the competition to sell housing stock requires that developers themselves commit to price matching as part of the sales process.¹⁴

'Shadow regulation' is a reality for wholesale customers¹⁵, yet as property developers, Lendlease has continued to invest in recycled water infrastructure in order to provide the sustainability and liveability benefits that create demand for the best places. Within the context of prices pegged to Sydney Water, there is a clear commercial incentive to be efficient and to innovate.

The benefit of the market that has emerged since the introduction of wholesale customers is investment in water resource productivity, sustainability and liveability at no extra cost to customers.

¹³ IPART, Review of prices for Sydney Water Corporation, Final Report, p 37

¹⁴ For example, in a letter to Bingara Gorge residents, Lendlease committed to getting the services of a private consulting firm to determine, among other things, that *there is no capital recovery or profit margin to Lendlease* associated with the wastewater and recycled water scheme – which provides sewerage service to the Bingara Gorge residents when Sydney Water refused to provide this service – and that *Lendlease is providing a substantial subsidy in the order of \$1m over the first three years* (emphasis added).

¹⁵ Shadow regulation goes further than pricing as *Water Industry Competition Act (NSW) 2006* requirements place community service obligations and other requirements on to wholesale customers to ensure that they are no worse off than if they were customers of Sydney Water.

2.3.3. Integrated water cycle management

Groshinski and Clark assert that "most of the fundamental elements of an effective water market coincide with the principles of good water management."¹⁶ Lendlease agrees with this view, and wants to see NSW strive to develop a market that seeks to optimise all of the water resources available within each location to provide customers with the prices and levels of service that they want, as well as the liveability and sustainability outcomes they and their future generations need. This is known as integrated water cycle management and is depicted in Figure 1. Vibrant competition will get NSW to that destination significantly faster and at a lower cost than if it were left to Sydney Water complying with the requirements of their Operating Licence. In Lendlease's view, IPART's role is to let the market (rather than regulation) facilitate the best approaches.

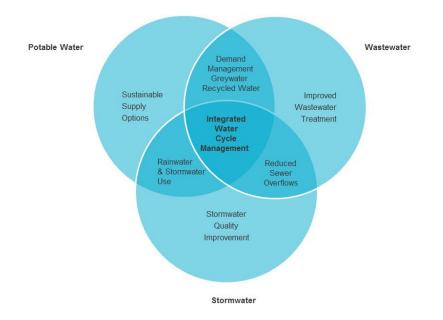


Figure 1: Integrated water cycle management

There are several impediments to reaching this destination, not least of which is treating prices for each part of the water cycle as independent of each other. Integrated water cycle management means that water services are treated collectively, not as individual components, saving resources and improving services to consumers.¹⁷ Integrated water cycle management needs integrated water pricing. It also needs suppliers of services who are incentivised to work to achieve resource productivity through the pricing and non-pricing signals that they send to consumers. Sydney Water, themselves, identify that they have "very little private financial incentive to influence customer's water use to avoid expensive augmentations to the bulk water supply system" as reductions in customer's water use "are likely to reduce revenue more than costs."¹⁸ Notwithstanding comments made at the Public Hearing¹⁹, Sydney Water have

¹⁶ Groshinski & Clark, "Promoting investment in the water sector", MinterEllison, p 14.

¹⁷ NSW Office of Water, Integrated Water Cycle Management – helping local utilities provide better services (information sheet), 2010, p 1.

¹⁸ Sydney Water Corporation, Economic Level of Water Conservation – Issues Paper, 2016, p 15.

also acknowledged that they have a disincentive to undertake water conservation projects during a pricing period due to a loss of profit margin on water sales.²⁰

Where a company has a strong incentive to sell water rather than water services, the environment and consumers may suffer.²¹ As such, the NSW water market should be designed so that incentives clearly focus participants on resource productivity, liveability and sustainability, but in a way that continuously responds to the needs of customers.

As a practical example of this, a wholesale customer who promotes integrated water cycle management (and provides recycled water to offset potable water demand) should be excluded from any increase in costs if the Sydney Desalination Plant (**SDP**) is turned on. The price signal that "demonstrates to customers the value of conserving water" is not necessary for those customers who make the choice to conserve water every day or for those wholesale customers who enable end-use consumers to make that choice.²² It is highly unlikely that these customers have contributed to the need for the SDP to be turned on and so they should not be penalised for it – especially given the fact that one quarter of the SDP is passed on in a customer's fixed charges which a recycled water user could not avoid.²³

Sadly, given the nature of Sydney Water's retail pricing, and the subsequent broad-based application of retail-minus for wholesale services, a wholesale customer will have little incentive to encourage the reduction in potable water consumption or wastewater production. This is because the service charges (as compared to volumetric charges) are such a significant proportion of the wholesale prices and that the minus component has practically no regard for volume. Indeed, to reduce the wholesale prices, wholesale customers have an incentive to lay longer reticulation networks. We feel that this is a perverse outcome if the Draft Determination were to be replicated in the Final Determination.

Some stakeholders submitted to IPART in the retail price determination process that the water usage price should be higher to discourage consumption because too much water is being consumed at the expense of the environment and/or that too much water or wastewater is being discharged to the environment.²⁴ For various reasons, including not wanting to drive a behaviour of less-than-efficient water consumption, IPART chose to retain low prices for water.²⁵ IPART determined that it was not appropriate to inflate the water usage price to encourage investment in alternative water sources.²⁶ Whilst the merits of that decision can be debated at another time, IPART should consider the impact of its wholesale prices. Retail

- ¹⁹ Kevin Young, transcript of the IPART Public Hearing into wholesale prices for water and sewerage services, 27 November 2016.
- ²⁰ Sydney Water Corporation, Economic Level of Water Conservation Issues Paper, 2016, p 55.
- ²¹ Cave, M. Independent Review of Competition and Innovation in Water Markets: Final report, 2009.
- ²² Sydney Water Corporation, Economic Level of Water Conservation Issues Paper, 2016, p 5.
- ²³ This inequality is further compounded by the fact that a person living in new residential development, which is required under NSW Government's sustainability requirements to use up to 40% less potable water than the average home 'pre-BASIX' home benchmark of 90,340 litres of water per person per year or 247 litres per person per day, will still pay the SDP charges.
- ²⁴ IPART, Review of prices for Sydney Water Corporation, Final Report, p 38.
- ²⁵ IPART, Review of prices for Sydney Water Corporation, Final Report, p 39.
- ²⁶ ibid

prices represent a revenue stream for a wholesale customer, and wholesale prices represent a cost for wholesale customers. In isolation, it may be appropriate to keep the former low and the latter high, but together they represent the key components for investing in the NSW water market for private participants.

In lieu of increasing the prices for potable water, an alternative is for operators of recycled water schemes to reduce their prices well below the commonly-held 90-percent price threshold – in turn encouraging consumption of recycled water in lieu of potable water and reducing wastewater discharges into the sewer system or the environment. Unfortunately, given the cost of producing recycled water, very few schemes would survive investment due diligence if their basis was to charge prices significantly less than \$1.80 kL (in nominal terms) for any length of time.²⁷ Wholesale customers often rely on recycled water revenue from a customer choosing to consume recycled water where they do not have to do so. It is entirely appropriate that the economics of an investment in recycled water infrastructure should also have an incentive to drive up recycled water consumption, rather than indifference to it. Within the context of low water prices and increasing wholesale prices (and a lack of integrated water pricing generally), the risks of an investment of the magnitude of a recycled water scheme may be too high.

Whilst Sydney Water may only need to demonstrate that an investment in recycled water infrastructure was a prudent and efficient investment at the time, a wholesale customer, without the regulatory protections afforded to Sydney Water, needs to be able to continuously demonstrate to its shareholders that the same investment is sensible over the total life of the asset.

Despite those regulatory protections afforded to Sydney Water, they have had a relatively subdued level of investment in recycled water infrastructure and water conservation. Some of the reasons for this have been discussed above. In response, IPART has included in Sydney Water's Operating Licence a number of requirements to conserve water on the basis that it will (a) avoid the need of inefficient augmentation of the water supply system and (b) ensure customers do not face unnecessarily long or frequent water use restrictions.²⁸

Sydney Water's rationalisation of these requirements, among other things, is to "promote, foster and encourage the production and use of recycled water" where it is "*financially viable*" and "the *most efficient* way to service new growth areas (emphasis added)."²⁹ This illustrates the behaviour that is encouraged by unduly focusing on efficient investment.

Unfortunately, the sum of the parts of the current pricing (wholesale combined with retail), to the extent that competitors may still choose to enter but also on the basis that Sydney Water retains a significant share of the NSW water market, appears to lead to higher water consumption and serve to weaken any moves to provide more integrated water resource management. This would be different if wholesale prices reflected the role of recycled water as part of an integrated water resource planning system as suggested by the National Pricing Principles.³⁰

²⁷ IPART, in a letter to Bingara Gorge residents, identified that "recycled water generally costs more to produce than potable water as a result of the greater level of treatment required to produce it" as well as the fact that "Sydney Water's larger treatment systems can spread treatment for Sydney Water customers across tens of thousands of customers."

²⁸ IPART, Cost Benefit Analysis of Proposed Changes to Sydney Water Corporation's Operating Licence, 2015, p 26.

²⁹ Sydney Water Corporation, Economic Level of Water Conservation – Issues Paper, 2016, p 6.

³⁰ COAG, National Water Initiative pricing principles, Regulation Impact Statement, 2010, p 23.

Recognition of recycled water within integrated water cycle management and consideration of a wholesale customer providing integrated water management is, in Lendlease's view, only the first step towards the ideal future for the NSW water market.

It is, nonetheless, a critical first step to develop a customer-centric market offering an increasing number of products and services, with improved management of precious water resources.

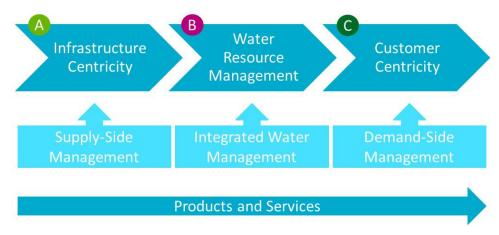


Figure 2: NSW water market transition

- 3. Context for this price determination what this determination can provide for productivity and prosperity
 - 3.1. Recognise the investment decision making processes for private businesses

Wastewater and recycled water schemes require long-term investment planning. The investment decision to build a wastewater recycled water scheme for Lendlease's development in Barangaroo South was made in 2011 – Barangaroo South is planned to be completed in 2023. The combination of infrastructure in Barangaroo South makes it the first 6-star, water-positive and carbon-neutral precinct in Australia. Through Lendlease's leadership, Barangaroo South will be capable of exporting more recycled water to surrounding areas than the amount of drinkable water consumed within the precinct. The recycled water plant reduces potable water supply at Barangaroo South (estimated at 100 million litres per year) and allows the precinct to be water positive. The district cooling plant within Barangaroo South uses water from Sydney Harbour for heat rejection instead of cooling towers to reduce water consumption and provide public health benefits associated with the absence of cooling towers. Barangaroo South is a water-wise precinct with water efficient appliances, as well as using captured rainwater and treated water for toilet flushing, irrigation, wash down and fire suppression.

Similarly, the investment decision to build a wastewater and recycled water scheme for the Bingara Gorge community was made in 2006 and not likely to achieve its full size of 1800 homes before 2025. Bingara Gorge residents benefit from access to potable water and recycled water and have access to a sewer network in a region that was once home to little more than herds of cattle. Indeed, the nearby customers in Wilton Village (Sydney Water customers) now also have access to a sewer network for their wastewater (but do not yet have recycled water).

In general, under the non-residential pricing regime in place today, a stand-alone wastewater and recycled water scheme may not break even until the community or development is fully built out. The fact that the economics of these schemes is tight has been acknowledged by IPART itself:³¹

"It is a matter of fact that, relative to Sydney Water's total infrastructure, the Bingara Gorge development is a small, isolated estate which uses a high level of sewage treatment. Due to the small scale of this treatment system and the high level of treatment, the sewerage costs per customer at Bingara Gorge are likely to be significantly higher than the costs per customer of Sydney Water."

Putting aside the degree of control a wholesale customer may or may not have over the prices it charges its customers, and the fact that recycled water is a product of choice that is in competition with potable water and even rainfall, for the first 10-12 years after a wholesale customer has committed to an investment in a wastewater and recycled water scheme, a wholesale customer is likely to be making a loss. The deeper the loss is in the initial period, the longer it takes to break even and the greater the risks for investors of not recovering their capital investment.

The nature of investment in a wastewater and recycled water schemes is that a wastewater treatment plant will generally be able to be constructed in modules, but not so much as to be able to gradually expand with every new home. Wastewater treatment plants are generally constructed in 300-500 ML/day increments. At the same time, most of the fixed costs of providing a service to customers are necessary to be there from day one (eg billing, customer service and customer communications, membership of ombudsman schemes and bank guarantee requirements to satisfy IPART etc). Reticulation and metering can be expanded as the community expands.

The economics of these first 10-12 years are critical. Under most circumstances, as evidenced with Lendlease's Bingara Gorge community development, the number of homes or connections within the development is under some degree of uncertainty due to the reliance on land sales and home

³¹ IPART, Bingara Gorge Development – customer fees and charges, September 2011.

construction. This uncertainty is compounded by the fact that the occupancy and demographics associated with those connections is likely to change over the life of the investment.

At this point, it takes fierce commitment from a developer to choose to invest in a wastewater and recycled water scheme. Any downwards shift in the economics of a scheme over this period (or, really, over the 30-year life of an investment) will likely lead to the investment not meeting the hurdle requirements of an investor like Lendlease.

This is in stark contrast to Sydney Water, where each new customer is an increment on top of their entire customer base and any changes in the economics of the specific investment can be addressed within the next price determination process. To the extent that Sydney Water can demonstrate that the investment was prudent and efficient at the time the decision was made, they are generally protected by the regulatory regime from the consequences of getting that decision wrong.

Given the headwinds that investments into wastewater and recycled water schemes already face, IPART should reconsider several aspects of the Draft Determination that do not provide sufficient certainty to a private business choosing to invest their scarce capital into the NSW water market.

3.1.1. The length of a scheme-specific price determination

IPART indicated that they would consider and decide on the length of time for which a period a scheme-specific determination would apply at the time of making the determination, taking into account views of the stakeholders.³² IPART would consider in making this decision:

- the confidence they can place on cost forecasts,
- the risk of significant changes to the scheme,
- the need for price flexibility and incentives to increase efficiency and encourage efficient entry, and
- the need for regulatory certainty and financial stability.³³

Lendlease assumes that this flexibility is not intended to provide the same regulatory protections to wholesale customers as provided to Sydney Water, where, to the extent that Sydney Water can determine that the investment was prudent and efficient *at the point in time* that the decision was made, Sydney Water can roll the investment into its asset base and use it as a basis for calculating prices in future price determinations to ensure a reasonable return.

Wholesale customers have neither the benefit of regulatory protections nor necessarily the benefit of resetting prices at convenient intervals to ensure that they generate a reasonable return to shareholders irrespective of the accuracy of their investment decisions, changes in their operating costs or shifts in the number or consumption patterns of their customers.

Whilst the market is still emerging, wholesale customers are choosing to make significant investments in long-term assets and infrastructure. Given wholesale prices have the potential to be a significant cost for a wholesale customer, the potential for there to be a material adverse shift in these costs would create sufficient uncertainty to deter entry. This is supported by the fact that IPART has chosen not to apply this price determination to existing schemes.

Recognising that wastewater and recycled water schemes are 30-year investments many of which only break even after 10-12 years, if IPART wish to retain the right to revisit the wholesale price decisions at intervals of its choosing, the increased risk for wholesale customers should be

³³ ibid.

³² IPART, Draft Report, p 95.

accommodated. Ofwat identify that water companies and their investors should receive a return related to the risk involved.³⁴ In considering the need to promote efficient entry into the NSW water market, IPART should give careful consideration to the 'regulatory' risk exposure for a wholesale customer – rather than assuming that they face the same degree of risk as Sydney Water.

To that end, Lendlease requests that IPART provides greater clarity on its criteria for deciding on the length of a scheme-specific determination as well as the extent to which it has considered the risks that this flexibility represents to a wholesale customer. The fact is, despite being there to provide a level of stability and protection for customers, Lendlease sees 'regulatory' risk as a significant risk to its investments.

3.1.2. Treatment of wholesale customers during development

IPART have undertaken to determine the costs of a 'reasonably efficient competitor' for wholesale customers by calculating against example schemes. However, the example schemes chosen are not useful because IPART have considered:

- a 'reasonably efficient' cost base as one which services 10,000 customers, and
- the fully-developed costs and revenues for each scheme.

Firstly, Lendlease queries the logic in choosing 10,000 customers as a basis for setting 'reasonably efficient competitor' costs. It is not an accurate measure for either Sydney Water or developers as wholesale customers. Sydney Water appears to have only one wastewater and recycled water scheme that services as many as 10,000 customers³⁵. For wholesale customers, it would take a significant time (more than 10 years) to get to full scale of 10,000 customers.

Treating a wholesale customer as a 'reasonably efficient competitor' (at best) or a party exploiting arbitrage (at worst) in the period during which a development is only partially complete would be disastrous to the financial survival of a wastewater and recycled water scheme. Under the current pricing determination, wholesale customers would be exposed to retail-minus prices from Sydney Water based on a cost base of 10,000 customers when they only have as few as 100 customers.

This appears to be an accidental oversight by IPART rather than a deliberate decision to ignore the fact that wholesale customer schemes reach a scale of 10,000 in the short to medium term (and, indeed, may never reach that scale). Wastewater and recycled water schemes are generally designed to be profitable when a community reaches its full size – as discussed, components are generally not sufficiently scalable to allow a scheme to be profitable from day one. Wholesale customers will not have the scale benefit of absorbing the loss making across a broader customer base.

3.1.3. The role of potable water supply for integrated schemes

The Draft Determination appears to proceed on the basis of a misunderstanding of the role of potable water supply for integrated water management schemes. The Draft Report states that potable water is a relatively minor input into recycled water production. The Draft Report also appears to proceed on the basis that, where an integrated water management scheme developer is on-selling potable water or sewerage services (ie bypassing its recycled water plant, it is doing

³⁴ Ofwat, Water 2020: Regulatory framework for wholesale markets and the 2019 price review, 2015, p 19.

³⁵ The Rouse Hill Recycled Water Scheme supplies treated water to 18,000 local homes to flush toilets, wash cars and water gardens

so for the same reasons that a pure reseller would, and so should face the same prices of a pure reseller (that is, a retail-minus price).

Potable water top-up is mainly used in the early stages of the development of a scheme or in the circumstances of an equipment breakdown or emergency – in both instances, potable water will be on-sold by the wholesale customer at the prevailing recycled water price (generally 90 percent of the volumetric price charged by Sydney Water for potable water). In the early stages that a recycled water scheme is being developed, potable water top is essential.

Potable water supply, however, may be an essential component throughout the life of an integrated water management scheme. Where potable water and sewerage services are being 'on-sold' to end users in an integrated water management scheme, this is not being done for the purposes of cherry-picking the incumbent's retail customers. Rather, this is being done as part of the management of the integrated scheme, either because the scheme is in its development phase or because the ability to optimise the water resource management benefits from a single supplier. Through the ability to send the right pricing signals to customers, the integrated water management scheme can both reduce the demands on potable water supply and wastewater infrastructure as well as manage the risks of the investment.

Given, in many instances, end-use customers have the choice of accepting recycled water supply and then, on a daily basis, the choice to use recycled water, wholesale customers do not have the luxury of passing on the full cost of the potable water top up to their end-use customers. Under the current (and future paradigm under this determination), wholesale customers will have very limited opportunity to provide price signals to end-use consumers to drive consumption of recycled water in the early years of a scheme.

Lendlease notes that IPART have retained the non-residential price for potable water top-up. However, similar characteristics apply to the provision of water and particularly wastewater onselling during the 10-12 year development window of a wastewater and recycled water scheme. This is a critical and high-risk time for wholesale customers, and Lendlease believes that more can be done by IPART in recognising the material difference in risk for a wholesale customer as compared to Sydney Water during the development window of a community or a place.

This would best be achieved by ensuring wholesale prices reflect the efficient costs that Sydney Water incur in providing wholesale services as well as through cost stability. It ought to result in prices significantly lower than those retail-minus prices proposed by IPART.

3.3. Ensure greater equality of information when negotiating facilitation costs (and recognise the urban development process goes well beyond a regulatory price determination period)

IPART decided that facilitation costs could not be accurately set on a system-wide or average basis – they should be set on a scheme-specific basis.³⁶ Lendlease believes that this is a reasonable position – facilitation costs need to consider the physical and geological aspects of the site and the upstream costs and benefits for the water supply system as a whole. They will be bespoke to each site. Equally, through the benefit of competition and innovation, the nature of facilitation costs are likely to be dynamic, evolving within any price determination period.

Lendlease considers that facilitation costs, on balance, will be consistently skewed towards negative costs. This cost category is where the real efficiencies and innovation opportunities lie and where developers will look to bring their ideas and energy to make schemes work. Absent facilitation costs, retail-minus simply challenges a wholesale customer to be more efficient than Sydney Water at its own game. Notwithstanding allowance for a 'reasonably efficient competitor' (if this can be accurately determined), most wholesale customers will not be in the business of trying to replicate the incumbent monopoly, but instead be seeking to look at how things can be done better. Doing things better will not be limited to the downstream connection to Sydney Water; wholesale customers will naturally look upstream to the benefits for the whole water supply system.

Accordingly, Lendlease believes that prices for the vast majority of schemes will need to consider facilitation costs. To do this, a scheme-specific determination is required. However, a scheme-specific determination, as currently proposed by IPART, is unlikely to be acceptable to Lendlease or other private wholesale customers given the competitive environment in which it operates.

Lendlease's issues with scheme-specific determinations are discussed further in section 4.3.

In order to determine whether there will be opportunities to assess facilitation costs, a wholesale customer will need to assess Sydney Water's 'business as usual' growth plans. Lendlease does not consider that the 'business as usual' growth plans contain sufficient detail to enable positive and negative facilitation costs to be effectively determined – particularly over the planning and development horizon needed for a wastewater and recycled water scheme to service a new community. 'Business as usual' growth plans are currently, principally produced every 4-5 years and only in sufficient detail to justify (to IPART) future capital expenditure over the next regulatory period. They are not fit for purpose to base a meaningful negotiation around facilitation costs.

In the absence of detail in these growth plans, there is material information asymmetry in favour of Sydney Water. Groshinski and Clark observe that decisions associated with investment and growth plans are generally "made within the utilities themselves (with) private sector participants (having) little visibility into this process."³⁷ The timetable for these investment and growth plans are set to fit Sydney Water's agenda and commercial drivers.

In the worst case, the decision to exclude facilitation costs from wholesale prices may drive a behaviour from Sydney Water to provide only the bare minimum information with a view that Sydney Water retains the sole right to determine what is and what is not in their 'business as usual' growth plans. As it stands, if a specific detail is not included explicitly, then it is considered to be developer driven.

³⁶ IPART, Draft Report, p 12.

³⁷ Groshinski & Clark, "Promoting investment in the water sector", MinterEllison, p 3.

In the best case, even if Sydney Water had the best intentions, there will still be a level of detail missing, as it is not practical for Sydney Water to produce 'business as usual' growth plans that go to a level of detail that deals with the facilitation cost specifics of each potential wholesale customer's scheme. This is exacerbated when the planning horizons for wholesale customers considering whether to develop wastewater and recycled water schemes are factored in. These 'business as usual' growth plans do little to inform a 30-year investment decision by a developer.

Accordingly, should IPART retain its decision to not include any allowance for facilitation costs in the system-wide wholesale prices, it should affect a significant improvement in the level of detail – and the time horizons – of the 'business as usual' growth plans produced by Sydney Water.

In Sydney Water's Economic Level of Water Conservation - Issues Paper, Sydney Water promote for themselves, in dealing with facilitation and other avoided costs, a methodology that "enables costs and benefits... to be consistently assessed" so as to avoid "subjective judgements being used to assess activities".³⁸ Given they control the methodology and the vast majority of information, it is clear in their own thinking that these costs "may potentially be a significant cost category, but that accurately identifying them may be difficult."³⁹

The presence of a wholesale customer providing integrated water management will result in benefits for Sydney Water which, in the absence of a benefits sharing regime, would result in windfall for Sydney Water. In relation to a wholesale customer providing potable and recycled water, for example, Sydney Water's benefits include:

- direct benefits, which include financial savings from not having to purchase water from WaterNSW to replenish leaks;
- avoided operating costs, such as savings associated with reduced pumping and treatment costs; and
- avoided capital costs, generally relating to deferred upstream augmentation costs for water and wastewater pipe and pumping stations.⁴⁰

IPART should consider appropriately apportioning to wholesale customers who provide integrated water management the benefits of water conservation through substitution by recycled water where the wholesale customer develops a recycled water scheme. This could be accommodated in the wastewater volume charge for wholesale customers or provided as a separate subsidy provided by Sydney Water to offset wholesale charges. Sydney Water have stated that "if we account for the value of water conserved in our wastewater planning processes, it might justify a decision to recycle more water, or make recycling projects that address wastewater impacts more attractive than otherwise."⁴¹ It is our view that this subsidy would contribute to the economics of investing in a wastewater and recycled water scheme to provide integrated water management – as it currently stands, these benefits are inappropriately retained by Sydney Water (as windfall) or passed on to Sydney Water's customers through future price resets.

³⁸ Sydney Water Corporation, Economic Level of Water Conservation – Issues Paper, 2016, p 9.

³⁹ Sydney Water Corporation, Economic Level of Water Conservation – Issues Paper, 2016, p 37.

⁴⁰ Sydney Water Corporation, Economic Level of Water Conservation – Issues Paper, 2016, p 37.

⁴¹ Sydney Water Corporation, Economic Level of Water Conservation – Issues Paper, 2016, p 41.

In considering the replenishment of water from leaks, IPART should consider this in any retail-minus calculation for potable water on-selling (if it were to retain its decision to pursue a retail-minus methodology for water on-selling), given leaks will occur downstream of the connection to Sydney Water at a proportionally higher rate than for the upstream network. Hence, we believe that the non-residential prices should be the *cap* on prices charged for wholesale customers providing integrated water management and that facilitation costs and other benefits to Sydney Water should lead to prices lower than non-residential prices.

3.4. Align the price determinations for retail and wholesale and ensure that they incentivise effective water resource management

Lendlease would prefer not to create an entire regulatory function, in the same guise of Sydney Water or its kin. However, the practical reality of the segmentation of price determinations and the potential need for scheme-specific price determinations is that Lendlease will need to participate in almost every water price determination and review conducted by IPART.

As far as Lendlease can see, to be an active participant in the NSW water market and given they each have the potential to impact the viability of our investments and the outcomes we can deliver for our customers, a wholesale customer will need to participate in:

- water, wastewater and trade waste retail price determinations;
- water, wastewater and tradewaste wholesale price determinations;
- recycled water and sewer mining price determinations;
- reviews of developer servicing plans and charges;
- scheme-specific wholesale price determinations; and
- possibly, reviews of Sydney Water's licence, reviews into the Sydney Desalination Plant and any other relevant reviews or industry consultation

Active participation in price determinations and reviews represents a significant cost to a business which may also need to be recovered through margins remaining after retail-minus prices have been accommodated. This cost impact may lead to a wholesale customer limiting its contribution and participation, which would be to the detriment of the debate and dialogue necessary to determine the best outcome for NSW water consumers.

Putting aside the fact that Lendlease may need to start resembling Sydney Water in ways we would prefer not to, the segmentation of pricing determinations means that it is impossible to set prices having regard to the impact of that price on the whole water cycle and system. Each separate pricing determination might be a step forward in absolute terms, but there is a reasonable degree of likelihood that, relative to the steps taken for a different pricing determinations, we remain in exactly the same place.

The National Water Initiative (**NWI**) pricing principles suggest that wastewater and recycled water schemes need to be "considered in a system-wide context and prices should reflect avoided or deferred costs and externalities so that any net social benefits of recycled water can be realised."⁴² This implies, clearly, that prices should be set relative to each other. At the same time, the NWI identifies that prices for recycled water should also "reflect underlying cost differences associated with providing product of different quality and fit for a range of different uses."⁴³ These pricing principles cannot be achieved under the current separate approach to price determinations.

⁴² COAG, National Water Initiative pricing principles, Regulation Impact Statement, 2010, p 12.

If it is genuinely necessary to separate price determinations in order to make the workload manageable for IPART and Sydney Water, the negative consequences of this must be acknowledged. Absent an overarching policy or strategic framework to tie each of the pricing decisions together to ensure cost effective and efficient water resource management, this approach will entrench the siloed approach to setting prices and the negative externalities that this creates: competition, innovation and real step changes in efficiency will be stifled. As the same time, water conservation and environmental outcomes are likely to be at odds with the commercial drivers of Sydney Water, and Sydney Water will continue to invest in infrastructure for the next 50 years that assumes that customers will want the same services and levels of service that they get today.⁴⁴ In the end, it is the NSW water consumer who will suffer the most.

To the extent that this is a plausible strategy that Sydney Water may pursue, aligning the price reviews would ensure that the total impact on wholesale customers can be determined along with the impacts on other customers. If not, IPART should pay particular heed to the impact on prices for all customers at each price determination – retail customer and wholesale customers. Alternatively, given a staggered approach to retail and wholesale price determinations, the wholesale determination may also need to have regard to the impact on competition that the retail prices set in the earlier determination may have and address these impacts, somehow, in the wholesale price determination. Extrapolating this further, the time difference between retail price reviews and wholesale price reviews may create unintended margin squeeze if there were to be a change in WACC assumptions between the two reviews. If retail and wholesale price reviews cannot be aligned, IPART should ensure the WACC for the wholesale price reviews matches exactly the WACC used for the retail prices set immediately prior.

There is a further consequence of separate price reviews that are conducted with little regard for the integrated puzzle that each price piece represents. Given Sydney Water is able to propose its retail prices – including the mix between service and volumetric charges – and is a keen participant in the setting of wholesale prices, a savvy, strategic pricing manager within Sydney Water may look to address the threat of competition from wholesale customers through changes in the structure of prices, if not the value of the prices themselves.⁴⁵ This is a reasonable tactic for a business that is under competitive threat and performs two roles within the market, and is made possible given they practically control the levers that set the revenue and costs for their competitors.

3.5. Clarify IPART's intention on price setting frameworks for future price determinations

Notwithstanding Lendlease's firm view that there is a need for a broader review of the NSW water market, Lendlease also desires a stable and sensible economic regulatory environment. Our hope is that a broader review creates the clarity for the economic regulatory regime to more forward confidently and assertively. At this point in time, we do not consider that this wholesale price determination is confident it has the balance right.

Groshinski and Clark identify that "the economic regulatory framework should be designed to promote consistent and predictable decision making."⁴⁶ Lendlease acknowledges that this is the first

⁴⁴ It is important to consider how the investment decisions made by Sydney Water 10, 25 and 50 years ago shape what investments may be prudent and efficient for them to make today.

⁴⁵ This is a genuine strategy contemplated by electricity networks who have the benefit of formal 'shadow pricing' for embedded networks. Subtle changes in the fixed and volumetric mix can close the opportunity for arbitrage. Whilst not an exact replica here, Sydney Water do have the ability to consider the impact on their competitors when proposing its prices across its range of services.

⁴⁶ Groshinski & Clark, "Promoting investment in the water sector", MinterEllison, p 9.

wholesale price determination, and has empathy for the fact that IPART is trying to set prices without the policy certainty or the information it needs to make confident decisions.

We encourage IPART to identify and, if possible, move quickly and decisively towards their preferred long-term regulatory and price-determination framework. This is in the interests of Sydney Water as much as it is in the interests of Lendlease and its fellow wholesale customers. In the long-run, it is in the interests of NSW water consumers, taxpayers and citizens.

IPART identified that they considered retail-minus pricing to be the only achievable pricing approach that could "enable efficient entry and competition for the benefit of end-use customers over time *given the current retail postage-stamp pricing policy* (emphasis added)."⁴⁷ Notwithstanding the fact that IPART must accommodate the postage-stamp pricing policy into their consideration, Lendlease queries whether this would be the best pricing approach were the postage-stamp pricing policy to be removed.

IPART also revealed that it plans to review developer charge determinations in 2017-18⁴⁸, the outcomes of which may have an impact on the price determination methodology and process for wholesale customers given its impact on facilitation costs and calculation of return on assets within the minus of each retail-minus price.

As a further potential change, IPART indicated in its Draft Report that it may choose to use component pricing in future retail price reviews.⁴⁹ This will enable the minus components to be more accurately determined. To do this, IPART will require a level of detail that is not currently provided by Sydney Water. Producing information to this level of detail will take time and effort, and given the current approach to scheme-specific determinations, it is highly unlikely that Sydney Water will choose to provide this level of detail without direction from IPART. To that end, Lendlease encourages IPART to consider the information that it may need to consider different price-determination approaches in the future and provide this guidance to Sydney Water as soon as possible.

3.6. Do more to recognise (and reduce) the prevailing policy advantages that the incumbent water monopolies have

New entrants may face, or perceive they face, price or non-price discrimination if the incumbent retailer could be treated preferentially.⁵⁰ IPART expressly identifies that the combined effect of postage stamp pricing and zero developer charges is to provide Sydney Water with a competitive advantage.

It also puts into perspective the subtleties of whether Sydney Water and Lendlease each argue whether a particular percentage should be half a percent higher or lower. The fact of the matter is that Sydney Water has a competitive advantage before wholesale prices come into play.

Despite this competitive advantage, wholesale customers have entered the NSW water market. Should the wholesale price determination increase or be perceived to increase the competitive advantage of Sydney Water, then future participation in the NSW water market by wholesale

⁴⁷ IPART, Draft Report, p 6.

⁴⁸ IPART, Draft Report, p 26.

⁴⁹ IPART, Draft Report, p 26.

⁵⁰ Cave, M. Independent Review of Competition and Innovation in Water Markets: Final report, 2009

customers cannot be assured. If wholesale customers, particularly those providing integrated water management, exit the market this would be a poor outcome for NSW water consumers.⁵¹

As a further matter, postage-stamp pricing does not reflect the real costs to supply customers in greenfield developments versus brownfield developments due to cross subsidies. Lendlease vehemently opposes postage-stamp pricing as this distorts the true costs of providing a service to one area at the expense of others, and has scant regard for the fact that, for example in high-cost water supply areas, there are likely to be offsetting cost reductions that lead to a similar (or better) total cost of living (such as lower costs of land).

⁵¹ ibid.

4. The Draft Determination risks being a missed opportunity

This determination process represents a major opportunity for IPART to establish regulatory settings that will foster effective competition in the provision of new infrastructure, for the ultimate benefit of end-users. NSW, and Sydney in particular, is going through the largest infrastructure and housing boom in its history. The NSW Planning Minister has stated that NSW will have over 185,000 new homes by 2021 and Sydney will grow by 2.1 million people in the next two decades.⁵² Now is the time to encourage competition and efficient entry into the water market.

Lendlease is therefore concerned that IPART's Draft Determination does not create the right conditions for competition to flourish. Indeed, there is a real risk that competition may be harmed if the approach to pricing that is proposed in the Draft Determination is replicated in IPART's Final Determination.

4.1. A retail-minus pricing methodology, combined with system-wide pricing, could do more harm than good

IPART has proposed a retail-minus methodology for setting the prices for on-selling water services and sewerage services. The "minus" in the methodology is based on the costs of a reasonably efficient competitor, aligned with those of a vertically integrated competitor, such that it can compete with the vertically integrated competitor.

While there may potentially be some benefits to the use of a retail-minus pricing methodology in some cases, it is not a well-adapted methodology in the context of the types of wholesale customers who are the focus of this review. Retail-minus pricing is a simple methodology which can be well suited to a resale market with an established customer base. However, the actual market for these wholesale services, and their customers, is not well suited to a retail-minus pricing approach. By defining the wholesale service pricing by reference to the retail pricing, the retail-minus model assumes an homogenous service to both the wholesale and the retail customer. It assumes that the provision of a potable water service by Sydney Water involves the same amount of costs and infrastructure as the provision of that service by Lendlease or another wholesale provider, who is likely to be a developer. In practice, it is extremely difficult to identify the components of the "costs of the reasonably efficient competitor", and it is a subject of contention as to which costs are those which would be necessarily assumed by a competitor who is installing new infrastructure, and which costs are in excess of that.

The retail-minus pricing approach also ignores the benefits to the wholesale provider which could be generated by the infrastructure created by the wholesale customer. For example, a wholesale customer's investment in water recycling infrastructure may allow the wholesale service provider to defer augmentation capital expenditure.

Retail-minus is poorly suited to environments where wholesale customers are producing different retail outputs from the same wholesale input. The wholesale customer product for the water services considered by the review is a whole-of-system output and involves significant infrastructure development. Retail-minus does not encourage efficient investment in infrastructure and does not encourage innovation. This is because by focusing on the retail price component, and how to most "efficiently" provide that singular service, there is no consideration given to innovation of new products and what they can deliver – including, benefits they could deliver to the wholesale service provider.

Retail-minus has been tried in various jurisdictions with limited success. For instance, a form of retail-minus applied in New Zealand in the telecommunications sector (using the efficient component

⁵² http://www.smh.com.au/nsw/biggest-housing-construction-boom-in-sydneys-history-on-the-way-20161118-gsspwo.html

pricing rule for the minus calculation⁵³) was shown to have adverse effects for competitive infrastructure builds and be highly favourable to the incumbent, leading to it being prohibited as a form of pricing in use in the telecommunications sector in New Zealand. Similarly in Australia, the ACCC has moved away from use of retail-minus methodologies for pricing of resale telecommunications access services supplied by Telstra.

4.2. The approach to facilitation costs in the Draft Determination does not address the incentive and competitive advantage issues

The effect of retail-minus pricing will be to:

- provide an artificial competitive advantage for Sydney Water in servicing new developments in areas that are higher than average cost to service, since Sydney Water can cross-subsidise growth infrastructure in these areas using revenue from the broader customer base; and
- reduce incentives for efficient investment by Sydney Water in high-cost areas, since Sydney Water can expect to face limited (or no) competition for servicing new developments in these areas.

IPART recognises these issues in the Draft Report, but considers that it is resolved through the treatment of facilitation costs. IPART states:⁵⁴

"The combined effect of postage stamp pricing and zero developer charges is that Sydney Water and Hunter Water can use revenue from the broader customer base to cross-subsidise growth infrastructure in areas that are higher than average cost to service. That is, provided IPART considers this expenditure prudent and efficient, Sydney Water and Hunter Water can recover the costs of servicing new development areas through their retail postage stamp prices.

This can provide Sydney Water and Hunter Water with a competitive advantage over other providers (including wholesale customers), as other providers may have to recoup all the costs of servicing a new development area through charges to customers in these new areas (rather than spread the costs a cross a broader 'postage stamp' pricing customer base). This can effectively limit new entrants to growth areas where they can identify servicing solutions that are viable at the retail price caps set by Sydney Water's or Hunter Water's average costs, rather than incremental connection costs. This means the incumbent utilities can have no or little threat of competition in higher cost growth areas, which can reduce their incentive to find the most efficient servicing solution.

However, having outlined this concern, our approach to facilitation costs seeks to address this issue and create a level playing field in the context of the current policy framework for developer charges."

This issue is revisited later in the Draft Report, where IPART states:55

"As outlined in Chapter 2, the ability of Sydney Water and Hunter Water to recover their additional system costs from their wider customer base through an uplift to postage stamp retail prices provides them with a competitive advantage over other competing providers (such as wholesale customers).

We maintain our position in the Discussion Paper that to remove this advantage and allow competition on a level playing field it is necessary to extend an equivalent subsidy to wholesale customers."

⁵³ Although IPART do not propose to use the specific efficient component pricing rule in their retail-minus model, it was as much the general features of the retail-minus model (not specifically the ECPR rule), that was unsuitable for use in fostering a competitive market based on facilitating and encouraging new infrastructure developments.

⁵⁴ IPART, Draft Report, p 23.

⁵⁵ IPART, Draft Report, p 85.

Lendlease agrees that the issue of an uneven playing field is a critical issue for this determination process. We welcome IPART's recognition of this issue.

However, we are concerned that IPART's approach to facilitation costs does not adequately address the uneven playing field issue. The Draft Report recognises that in order to allow competition on a level playing field it is necessary to extend a subsidy to wholesale customers that is equivalent to the subsidy provided to Sydney Water under postage stamp pricing. However no such subsidy is provided for in the Draft Determination. Rather, net facilitation costs (the mechanism by which IPART says it will address this issue) are set to zero. As a result, the playing field remains uneven.

Lendlease understands that IPART may be intending to address this issue through scheme-specific reviews, rather than as part of this determination process. However, as discussed below, we are concerned that scheme-specific reviews are likely to be unworkable and therefore will not adequately address the uneven playing field issue.

In section **Error! Reference source not found.** below, we put forward a proposal to adjust the pricing methodology in a way that recognises this issue and potentially reduces the need for scheme-specific determinations.

4.3. Scheme-specific pricing reviews are unlikely to be workable

It appears that IPART is itself aware of the limitations of its retail-minus model in meeting the needs for wholesale developer customers.

This is reflected in the fact that the IPART draft report sets out a proposed process for exclusion of scheme-specific pricing from its general retail-minus pricing model, and proposes considering applications for scheme-specific determinations and the process for IPART in making those determinations. The intention of the system-wide pricing scheme is said by IPART to be to reduce the need for "potentially costly scheme-specific reviews of every scheme", but where that pricing is not appropriate to the characteristics of the scheme.

Lendlease notes that a major flaw in this approach is that unique scheme-specific features will be the norm, not the exception, implying if the IPART proposal was workable that such reviews would be routinely triggered to resolve scheme-specific commercial negotiations. Lendlease notes that schemes are where the value can be created and where innovation will occur. It is therefore crucial that the pricing approach that IPART adopts for schemes is not cumbersome and allows parties the flexibility they need to negotiate for novel technologies, but not be at risk of monopoly hold up.

Based on the commercial practicalities in the negotiation of scheme-specific agreements with Sydney Water, IPART's proposal is not suitable for Lendlease or other new scheme developers. The process set out in chapter 9 of the Report is unsuitable in its design and does not fit with the commercial realities of the scheme negotiation process. For developers who need certainty and confidentiality in the bid process to compete for development rights, the process for scheme-specific determinations may either lead to the developer defaulting to Sydney Water for water and wastewater services or to pursue infrastructure-centric, traditional solutions.

This process which is entirely public is expected to take a maximum of 12 months to complete (but could take longer), depending on the complexity of the scheme proposed. It also presumes that facilitation costs of the scheme (which may in fact be the central commercial point in dispute) have already been agreed or are in an advanced stage of negotiations. As a further complication, scheme-specific determinations to determine facilitation costs will result in a transfer of intellectual property and competitive information to Sydney Water. Sydney Water may or may not be able to use that information to compete for the specific scheme in question, but it would receive the benefit of this information to compete for future schemes.

The process relies on a number of steps which are not appropriate for commercial negotiations:

 either the wholesale customer or wholesale service provider must request that IPART undertake a review, and the parties do not have certainty about whether or not the review

will occur. The draft report does not provide any guidance on the factors IPART will take into consideration when considering whether to undertake a review.

- the preparation of a Wholesale Pricing Proposal within 1-3 months adds an extra layer of complexity on which the report gives limited guidance. The Wholesale Pricing Proposal is to be provided by the wholesale provider, giving the wholesale customer limited control over the process. Furthermore, starting with Sydney Water's growth plans provides Sydney Water with the first-mover advantage in any consideration of how best to service an area. This provides material advantage to Sydney Water in how the negotiations with its competitors pan out.
- the publishing of the proposal and submission for stakeholder comment is inappropriate for the bi-lateral confidential commercial negotiations which may still be taking shape when determining the pricing. In the development context, water pricing will not be the only aspect that the developer will be negotiating in relation to the build and there will be highly confidential aspects to those negotiations.

The natural consequence of Sydney Water being a competitor and a wholesale service provider requires, in principle, ring-fencing within Sydney Water to ensure confidentiality is maintained between the teams within Sydney Water assessing the facilitation costs and the teams within Sydney Water providing solutions that compete with the wholesale customer. Whilst competition is intended to promote innovation, this is intended to be achieved through competitive pressures and the fight for customers rather than leveraging off being the gate keeper through which every new market entrant must pass.

The process is cumbersome and does not provide guidance of the type that would be of use to the wholesale service provider and wholesale customer; namely; what are the commercial principles that should be used to guide the scheme negotiation.

Although it is usual for Sydney Water to operate in an environment which requires transparency in reporting, and each party requires visibility of the other's long term plans for the purposes of planning their schemes, this does not mean that a particular proponent's scheme should be reviewed via, and subject to, a public consultation process. It also risks the wholesale customer being required to divulge valuable information regarding their innovative approaches, processes and technologies.

The IPART report also states that parties who do not want to be subject to scheme-specific reviews can choose to enter into unregulated agreements. Lendlease notes that the likelihood of competitively efficient and appropriate agreements being entered into is very small. Sydney Water, in the absence of clear principles for and a clear path to a scheme-specific determination, have little incentive to support outcomes through an unregulated agreement between wholesale customers which don't reflect their monopoly market position.

4.5. Existing schemes could be affected

IPART states in the report that they considered that the determination to pricing should not apply to existing commercial agreements. The determination sets out at 3(b) that "Maximum prices under this determination do not apply to:

- any Existing Services;⁵⁶
- any services that are supplied under a Negotiated Services Agreement; or
- any Infrastructure Services provided by Sydney Water to an access seeker pursuant to an access agreement under section 39 of the WIC Act or an access determination under section 40 of the WIC Act."

As such, the clear intent of IPART in making the determination is that the determination will not apply to Existing Services. However, it is not clear if the determination will apply to prices as they are reset throughout the term of the existing agreement. Under the existing agreements, Sydney Water have broad rights to change the prices as long as the prices stay within the rights of Sydney Water under the Operating Licence, the Sydney Water Act and an IPART determination.

As IPART has clearly stated that the determination is not to apply in respect of Existing Services, such as those supplied under existing commercial agreements, it is our view that this determination does not give wholesale suppliers any new right to vary the basis of the charges or the charging rates under existing commercial agreements. Moreover, it does not give the parties a new reference point for negotiations under their existing agreements, which have long terms during which the prices for the various services supplied under those agreements may be renegotiated from time to time.

To align with the intent of the IPART decision, IPART should clarify the effect of its determination on Existing Agreements. These agreements have a longer running time than what is envisaged in the determination period proposed by the IPART. IPART therefore must make clear that the agreements are intended to be classified as "Existing Services" throughout their whole term, notwithstanding any future negotiations which might occur.

On a related matter, the length of the determination does not provide certainty for the interested parties. The commercial agreements for wholesale services have terms of [10] years, and the determination only sets prices for 4 years. This creates uncertainty for existing agreements, as outlined above, and also future agreements where it is unclear how the IPART regulation might affect their pricing in the latter years of the term of the agreement.

At the same time, IPART should have regard to the behaviour change the precedent of excluding existing agreements will drive. Here forthwith, absent a scheme-specific determination by IPART directing otherwise, it is unlikely that Sydney Water will agree to any arrangement with a wholesale customer that extends beyond the current price determination period. This obviously creates uncertainty for a wholesale customer, but given the 4-year price determination process, this is not an unreasonable position to take.

- "A Monopoly Service is an Existing Service if, before the Commencement Date:
- (a) Sydney Water has commenced supplying that Monopoly Service to a Wholesale Customer; and
- (b) the price levied or to be levied under an agreement by Sydney Water for that Monopoly Service is not:

as the case may be."

⁵⁶ Existing Services is defined in Schedule 5, clause 1.3:

⁽i) the maximum price set out in this determination for that Monopoly Service; or

⁽ii) a maximum price fixed in accordance with the methodology for fixing a maximum price set out in this determination for that Monopoly Service.

Whilst several submissions to the Discussion Paper asked for existing agreements to be 'grandfathered' from this price determination (and IPART listened), if the decision were the right decision, grandfathering should not be required (now or at any time in the future). To that end, if IPART reflect the changes that Lendlease is proposing – specifically that prices for all wholesale customers who are providing materially value-adding or transformative services (that is, integrated water management) are capped at non-residential prices – we would accept our that current agreements should fall under this determination.

4.6. Unregulated agreements are not a credible alternative

IPART acknowledges that in some cases wholesale customers or wholesale service providers may not consider that determined prices reflect a particular wholesale scheme's characteristics. However IPART states that in such cases, wholesale service providers and wholesale customers could "opt out of the determined prices", by entering into unregulated pricing agreements.

Our view (and based on our experience) is that it is highly unlikely that Sydney Water will willingly agree to any unregulated pricing agreements, notwithstanding encouragement from IPART. This is reinforced within Sydney Water's own submissions, where Sydney Water mentions the need for "regulatory safeguards".⁵⁷ The lack of incentive to enter into an unregulated agreement was also made clear by Sydney Water at the public hearing. Accordingly, this decision – whilst made with the best intentions – is not likely to shift behaviour or practice.

One issue in this regard is that Sydney Water is unlikely to be able to offer bespoke arrangements for individual wholesale customer schemes. For example, while wholesale customers may be prepared to accept a lower level of service from Sydney Water in exchange for bespoke pricing, it is unlikely that Sydney Water would be agile enough to provide this level of customisation.

Therefore, while unregulated agreements may be possible in some circumstances, they should not be relied upon as a credible option to resolve all scheme-specific issues created by regulated pricing of the scheme-specific price determination pathway.

As a further clarification, section 3.2.2 of the Review of prices for Sydney Water Corporation - Final Report excludes trade waste, stormwater and miscellaneous charges from unregulated pricing agreements. This Draft Determination and Draft Report are silent as to the ability to include trade waste charges in unregulated agreements between Sydney Water and wholesale customers. Can IPART please clarify whether it intends for trade waste to be included or excluded in those services that can be set out in an unregulated agreement. Our view is that, if they were to be excluded, it would be a further impediment to Sydney Water agreeing to unregulated agreements.

4.7. The risk to efficient investment and competition

IPART states that it is aiming to create an environment (or at least leave room for the creation of the environment through legislative development) where private investment, development and innovation is able to grow and competition is promoted. Lendlease agrees that this should be a central objective for this review.

However, we are concerned that the pricing approach proposed in the Draft Determination will not achieve this objective. As discussed above, there is the potential for the retail-minus pricing methodology to stifle innovation in the development context when it is applied to complex infrastructure projects. IPART's retail-minus pricing methodology is intended to apply to on-selling of water and sewerage services, but does not take into account the true transactional benefits (and costs) as between a wholesale provider and the wholesale customer as they relate to a particular scheme.

⁵⁷ Sydney Water submission to Draft Report, April 2016, pp 112-113.

Fundamentally, we are concerned that the approach in the Draft Determination is unduly focussed on individual services which may be delivered by the incumbent service provider. This approach does not recognise that there is scope for innovation in service delivery models by wholesale customers which span multiple parts of the supply chain (that is, innovation is not limited to the delivery of a single service that closely replicates services supplied by the incumbent). We consider that scope for innovation and effective competition will be maximised when the regulatory model takes into account the whole water cycle, rather than focusing on a single service.

IPART should recognise the efficiency and resource management benefits of the wholesale customer (or one party) to provide the full suite of services to a community, for the benefit of customers and to ensure that the most sustainable and efficient use of water resources can be achieved. This would be supported by better integration of pricing to drive the right behaviours. This could include, on a macro scale, a revenue cap for potable water, but also freedom for that 'one party' to have the freedom to optimise price signals to drive the right behaviours

Instead, the Draft Determination provides for a complex pricing structure, and one which will lead to integrated water management scheme developers paying more than the cost of supply. Under the Draft Determination pricing approach, a wholesale customer operating an integrated water management scheme could face a multitude of different charges for essentially the same service, at the same location, depending on what the service is used for. For example:

- for supply of potable water in a location where the wholesale customer has a recycled water scheme, the customer could either pay a retail-minus price or a non-residential price, or a combination of these two prices, depending on whether (and to what extent) that potable water is being used for on-selling to end-customers or for topping up the recycled water plant;
- for waste disposal services in the same location, the customer could pay up to four different charges, depending on whether (and to what extent) the customer is on-selling sewerage services, disposing of waste from a recycled water plant and sewer mining.

This complexity in wholesale pricing arrangements for integrated schemes is entirely unnecessary and will not advance economic efficiency.

Where potable water and sewerage services are being on-sold to end-users in an integrated scheme, this is not being done for the purposes of cherry-picking the incumbent's retail customers. Rather, this is being done as part of the management of the integrated scheme, either because the scheme is in its development phase or because the ability to optimise the water resource management benefits from a single supplier. Through the ability to send the right pricing signals to customers, the integrated water management scheme can both reduce the demands on potable water supply and wastewater infrastructure as well as manage the risks of the investment. Therefore in the case of an integrated scheme, the economic rationale for retail-minus pricing falls away.

Lendlease sees no reason why a customer should face different pricing for the same service (the supply of potable water or sewerage), at the same location, depending on what the wholesale customer is using it for. This additional complexity will only raise barriers to new investment in integrated water management schemes.

Instead, the price for supply of potable water and sewerage services to integrated water management schemes should be set at the lowest sustainable level – that is, the level that allows Sydney Water to recover its efficient costs. Evidently, the non-residential price for these services is a sustainable price, and therefore this should set a cap on the price for supply of potable water and sewerage services to integrated water management schemes, regardless of how those services are being used within the scheme. However, non-residential prices should apply as a cap only, because the appropriate price may be lower due to material negative facilitation costs and other benefits to the wholesale service provider associated with the scheme.

Providing a wholesale service should be simpler and cheaper than providing a retail service. With the complexity inherent in this pricing approach, the perverse outcome is that providing a wholesale service will become significantly more expensive – in terms of the infrastructure and the administration required. IPART identify that matters such as levels of service are outside the scope of this price review and will be considered as part of Sydney Water's Operating Licence review; however, this price review casts a die for the licence review.

Whilst there is, notionally, a potential for a wholesale customer to negotiate lower levels of service which may result in less infrastructure and lower administration overhead for Sydney Water within an unregulated agreement, given Sydney Water's stated resistance to entering into unregulated agreements, this will not materialise. They will only consider regulated services and are indifferent to the inefficiency that this creates.

4.8. A proposed way forward

Lendlease accepts that there is a place for retail-minus pricing. Where a wholesale customer's business model simply involves replicating the incumbent's offering and profiting from retailing that offering in a more efficient way, a retail-minus pricing approach will encourage efficient entry and competition. In other words, a retail-minus pricing approach will encourage efficient competition, where that competition is limited to the retailing function only.

Therefore, we accept that retail-minus pricing can be applied in some cases. However, we consider that it ought to have more-limited application than is contemplated in the Draft Determination.

Lendlease proposes that whether retail-minus pricing is to apply should be based on where the wholesale service is being supplied, not what it is being used for. Specifically, retail-minus pricing should not apply in locations where the wholesale customer has developed an integrated water management scheme (for example, a wastewater and recycled water scheme), regardless of what the service is being used for in that location. Retail-minus pricing should only apply in locations where there is no integrated water management scheme, and the only way the wholesale customer can supply end-users is by on-selling the services supplied by Sydney Water.

Where supply is to an integrated water management scheme, the non-residential price cap for potable water should apply regardless of whether the potable water is being used to top up the recycled water plant or to on-sell to end-users during the plant start-up phase, in emergencies or throughout the life of the scheme where a wholesale customer is trying to promote integrated water cycle management to reduce the impact on precious water resources and infrastructure. Similarly, the non-residential price cap for waste disposal should apply regardless of whether the wholesale customer is disposing of plant waste or on-selling sewerage services.

Alternatively, and in the absence of a more fundamental overhaul of the pricing approach, we consider that a number of refinements could be made to the approach proposed by IPART, in to achieve greater alignment with the regulatory objectives. These refinements are discussed in section 5 below.

5. Specific issues relating to the draft price methodologies

5.1. Holistic application of IPART's charging method

5.1.1.Non-residential retail prices apply holistically as a price cap where material value-adding is undertaken

IPART has proposed that where inputs have been purchased from a wholesale provider and not merely resold – meaning that some form of value adding or transformative activity has taken place – that the applicable non-residential retail price should be applied rather than a 'retail-minus' price. The two services that IPART has identified in this regard are where potable water is purchased to top-up recycled water output and for the discharge of waste processed by a recycling plant. However, IPART proposes that the 'retail-minus' charge would apply to water purchased for potable water supply as well as for wastewater that does not go through a recycling plant (although there is some uncertainty as to how this would apply in practice – see below).

While Lendlease's preferred model (as discussed in the previous chapters) is one where the wholesale charge for water and wastewater services is set at the applicable non-residential retail rate irrespective of how that service is used, Lendlease accepts that a second-best outcome would be to apply the non-residential retail prices where the wholesale customer engages in material value-adding rather than just on-selling water and wastewater services in a manner that is indistinguishable from the incumbent utility. However, there are substantial shortcomings in IPART's proposal, which are as follows.

- First and foremost, a critical assumption under IPART's proposed wholesale pricing model is that the different water services are independent so that materially different pricing paradigms can be applied across the services without fear of creating perverse incentives. In contrast, however, as we describe above, the efficient provision of water services requires a holistic consideration of all services and the interactions between each, and the application of different paradigms has the potential to pose a material barrier to efficiency and innovation.
- Secondly, IPART's proposal for different pricing paradigms to apply to potable water depending upon how it is used and to wastewater depending upon whether the recycling plant is operating will create substantial and unnecessary complexity in the pricing regime.

In Lendlease's view, IPART's proposed wholesale pricing regime would be substantially improved if the wholesale prices were capped at the non-residential retail prices for all purposes where the wholesale customer undertakes material value-adding or transformative activities. This would recognise that the purpose of constructing a recycled water plant changes the nature of both the wastewater service that is purchased as well as the nature of the potable water service given that a central purpose of such a plant is to reduce potable water use.

The effect of pricing in this manner is that the proposed 'retail-minus' scheme would apply in circumstances where the wholesale customer was just on-selling water and wastewater services. While we retain a concern about the 'retail-minus' method, it is accepted that the risk of impeding true innovation in the case of mere on-selling is low.

5.1.2. Pricing for drinking water top-up services

It is important that, in setting prices for services that are inputs into the development of recycled water schemes, IPART recognises the importance of this pricing to the viability of such schemes. In particular, IPART needs to recognise that the viability of wastewater and recycled water schemes is highly sensitive to the pricing of drinking water top-up services in the early years of

the development of those schemes. Pricing methodologies need to provide relief to wholesale customer schemes in the early development phases of those schemes.

It is incorrect to suggest that drinking water top-up is only "a relatively minor input" into recycled water production.⁵⁸ In the early stages that a recycled water scheme is being developed, potable water top-up is essential. Recycled water schemes are generally designed to be profitable when a community reaches its full size, and components are generally not sufficiently scalable to allow a scheme to be profitable from day 1. Wholesale customers will not have the scale benefit of absorbing the loss making across a broader customer base, nor will it have the ability to reset its costs and revenues in 5-yearly intervals to ensure that a profit margin is retained. As such, investment cases are very sensitive to the input costs of potable water top-up in the early years.

5.1.3. Pricing for recycled scheme wastewater and trade waste disposal

Lendlease agrees that, where sewage is discharged from a recycled water plant, it is reasonable that, under some circumstances this should not be seen or treated differently to a discharge from any other industrial customer. Accordingly it is appropriate that the non-residential price be applied to this discharge as a price cap.

However, it is possible if IPART's Final Determination were to be substantially similar to its Draft Determination that a wholesale customer, for waste disposal services in the same location, could pay up to four different sets of charges, depending on whether (and to what extent) the customer is on-selling sewerage services, disposing of wastewater and trade waste from a recycled water plant or sewer mining.⁵⁹

As a further complication, the complexity of the current pricing scheme appears to create a level of inefficiency that is distorted relative to the supposed inefficiency that it is trying to prevent. Providing a wholesale service should be simpler and cheaper than providing a retail service. With the complexity inherent in this pricing approach, the perverse outcome is that providing a wholesale service will become significantly more expensive – in terms of the infrastructure and the administration required.

IPART notes that the wholesale price would be based on (among other things) any applicable trade waste charges for the sewerage discharged.⁶⁰ We ask that IPART please clarify the application of trade waste charges for a wholesale customer. Specifically, we ask that IPART clarify in what circumstances the wholesale customer would have to pay the commercial trade waste charge and/or the industrial trade waste charge. Our view is that industrial trade waste charges should only apply when the recycled water plant is operating, while commercial trade waste charges should only apply if the recycled water plant is not operating.

⁵⁸ IPART, Draft Report, p 68.

⁵⁹ Due to the lack of certainty as to how prices would be practically calculated in instances where some wastewater may be discharged directly into Sydney Water's sewer (so called, "on-selling") and some wastewater may be discharged having been treated by a wastewater treatment/recycled water plant, Lendlease has not been able to determine the exact impact of IPART's Draft Determination on the viability of its schemes. Should IPART adopt our proposed alternative where prices for a wholesale customer providing integrated water management are capped at the non-residential price at all times, this complexity and the potential impacts go away. However, should IPART continue on its path to introduce the unnecessary complexity inherent in its Draft Determination, Lendlease requests that IPART releases guidance on how it sees the pricing for the "two" services will work prior to releasing the Final Determination for input from Sydney Water and wholesale customers.

⁶⁰ IPART, Draft Report, p 77.

IPART identify that matters such as levels of service are outside the scope of this price review and will be considered as part of Sydney Water's Operating Licence review; however, this price review casts a die for the licence review.

Whilst there is, notionally, a potential for a wholesale customer to negotiate lower levels of service which may result in less infrastructure and lower administration overhead for Sydney Water within an unregulated agreement, given Sydney Water's stated resistance to entering into unregulated agreements, this will not materialise. They will only consider regulated services and are indifferent to the inefficiency that may be created from the complexity of a determination such as this one.

5.2. Application of a 'retail-minus' approach to setting wholesale (access) prices

Without prejudice to Lendlease's objection to the broad and imprecise application of a 'retail-minus' approach to setting access prices, this section explains where we think that IPART's application of the method could be improved to better achieve the objectives.

5.2.1. 'Reasonably efficient competitor' standard has substantial regulatory precedent but it is not clear that this standard has been applied

Regulatory precedent for the 'reasonably efficient competitor' standard

To the extent that wholesale prices are determined using a "retail-minus" approach, Lendlease supports IPART's proposed application of what has been termed in other sectors the "reasonably efficient operator" cost standard. Under this standard, the "minus" factor is calculated with reference to the costs that a reasonably efficient firm would incur in providing the competitive activity, and embodies a recognition that such a firm may not benefit from the economies of scale and scope that the incumbent firm is able to achieve.

It is submitted that IPART's choice of the reasonably efficient competitor standard is consistent with the regulatory framework, noting that:

- it is clear the incumbents will enjoy scale economies beyond the point of the wholesale service
- the regulatory framework accords important weight to dynamic efficiency, in recognition that this is likely to provide benefits over the long term that will more than offset any short term cost inefficiency, and
- promoting competition in this market is likely to generate substantial efficiency gains over the long term – and most notably from innovation in supply arrangements – and where the new entrants should achieve scale and scope economies over time.

In addition, Lendlease also notes that there is substantial regulatory precedent for the application of the reasonably efficient competitor standard and the implicit favouring of dynamic efficiency. The most numerous regulatory precedents have arisen in the telecommunications sector⁶¹ in the context of the equivalent regulatory issue in margin squeeze cases.⁶² As an example, when preparing its guidance paper on the common approach to applying "economic

⁶¹ This reflects the fact that vertical integration of the incumbent into the competitive parts of the market has been common, whereas in the energy sector networks have typically withdrawn from the competitive sectors.

⁶² The objective of a 'retail-minus' access price is to determine an access price that permits competition in the competitive part of the service, for a given a retail price. The objective of a "margin squeeze" inquiry is to establish the retail price that permits competition for a given an access price. A focal point of each is the cost associated with the competitive part of the service.

replicability tests" (ERT, a component of the margin squeeze test), the Body of European Regulators for Electronic Communications (BEREC, the coordinating body for telecommunications regulators) conducted a survey of EU telecoms regulators of their actual practice on this matter. The results reported showed that a clear majority of regulators adopt the reasonably efficient competitor standard:⁶³

"Most of the NRAs [National Regulatory Authorities] who answered the questionnaire and implemented a margin squeeze test, have stated that they use the REO/adjusted EEO test (12 NRAs), while 9 NRAs answered that they use the EEO test."

In its guidance about the application of an EC Recommendation, BEREC concluded (in substance) that a REO standard should be applied:⁶⁴

According to the [relevant EC] Recommendation the ERT should assess whether the SMP operator's own downstream retail arm is profitable on the basis of the upstream price charged to its competitors by the upstream operating arm of the SMP. For that reason the level of efficiency of the operator to be used according to the Recommendation is the equally efficient operator (EEO) test. But the Recommendation also foresees that NRAs may make adjustments for scale to the SMP operator's costs to ensure that there is a realistic prospect that alternative operators can profitably replicate the SMP operator's retail services. The reasonably efficient scale identified by the NRA should not go beyond that of a market structure with a sufficient number of qualifying operators to ensure effective competition, bearing in mind competition from other platforms.

The REO/adjusted EEO approach of allowing higher downstream costs facilitates market entry whereas the EEO approach emphasises preventing anti-competitive foreclosure. This needs to be assessed on a case-by-case basis depending on market conditions by the [regulator]. [emphasis added]

Consistent with the advice of BEREC, Ofcom (the UK communications regulator) has consistently applied the reasonably efficient competitor standard in relevant matters, commenting in a recent margin squeeze decision as follows:⁶⁵

The appropriate imputation test depends on the purpose of the regulation, but it is noteworthy that we have previously applied either an adjusted EEO or REO test when we are seeking to support effective retail competition in the future.

...

An EEO approach is not effective in achieving our aim:

We do not consider that an EEO approach would be effective in achieving our aim. Setting a minimum VULA margin based on BT's costs would prevent an operator that has slightly higher costs than BT (or some other slight commercial drawback relative to BT) being able to profitably match BT's retail superfast broadband offers.

It is not clear that the reasonably efficient competitor standard has been applied in practice

Adjustment for economies of scale not included or based upon evidence

⁶⁵ Ofcom, 2015, Fixed Access Market Reviews: Approach to the VULA margin, Final Statement, p.81. "VULA" is just the name for a particular wholesale telecommunications product.

⁶³ BEREC, 2014, BEREC Guidance on the regulatory accounting approach to the economic replicability test (i.e. ex-ante/sector specific margin squeeze tests), December, p.31.

⁶⁴ BEREC, 2014, BEREC Guidance on the regulatory accounting approach to the economic replicability test (i.e. ex-ante/sector specific margin squeeze tests), December, p.31.

It is not clear from IPART's draft decision, however, that the reasonably efficient competitor standard has been applied in practice.

As the regulatory precedent summarises above notes, the objective should be to set the "minus" factor with reference to the costs that would ensure 'a sufficient number of ... operators to ensure effective competition'. However, under the "minus factors" that have been calculated, it is difficult to see that more firms than the two large, current wholesale customers could profitably enter the market, which would not achieve the objective of creating a market that is conducive to effective competition.

Moreover, it would not appear that an adjustment for the relative efficiency of a reasonably efficient competitor actually has been factored into IPART's calculation of the "minus factors" or that the amount embedded is evidence-based.

- One of the pieces of evidence to which IPART has had regard is the NERA report, which
 recommends an efficiency adjustment of 1.5 percent. However, this adjustment is based on
 the annual change in the operating expenditure allowance that IPART has provided for
 Sydney Water over their current regulatory periods. There is no reason to believe that this
 figure would provide any indication of the difference in the level of efficiency between the
 incumbents and a wholesale customer with respect to capital costs (which comprise the
 majority of the "minus factor").
- The second piece of evidence to which IPART has had regard is the Oakley Greenwood report (OGW). However, this report only appears to factor in any adjustment for scale economies with respect to the retail billing and call centre functions (which comprise only a small share of the "minus factor"). For the reticulation and meter infrastructure, OGW simply have applied unit rates from the "NSW Reference Rates Manual", which reflect water asset contract rates that have been obtained by the NSW water utilities and public authorities,⁶⁶ including what is stated to be an appropriate mark up for survey, investigation, design and project management costs.⁶⁷ It is unrealistic to assume that a reasonably efficient competitor could obtain construction at the same rates that are available to very large buyers like the NSW water utilities. Moreover, it would be expected that a reasonably efficient competitor would not have access to the same economies of scale in relation to survey, investigation, design and project management costs as a large water utility.

Lendlease recommends that IPART review its approach to applying the reasonably efficient competitor standard and ensure that the assumptions it adopts are in fact consistent with its intention to provide for effective competition in the relevant market.

Application of financing cost assumptions of an incumbent water utility rather than a firm in a competitive market

IPART has applied its standard regulatory WACC to calculate the reasonably efficient competitor's cost. IPART's calculations also assume that the reasonably efficient competitor would recover its investment costs over the technical lives of the assets, which from the OGW spreadsheet appears assumed to be 100 years for water and sewerage mains (even though the

⁶⁶ Department of Primary Industries, 2014, NSW Reference Rates Manual - Valuation of Water Supply, Sewerage and Stormwater Assets, June, p 5.

⁶⁷ Department of Primary Industries, 2014, NSW Reference Rates Manual - Valuation of Water Supply, Sewerage and Stormwater Assets, June, p 6.

NSW Reference Rates Manual – the source for unit rates – specifies an indicative useful life of 70 years for the same assets).⁶⁸ In explaining its position on WACC, IPART reasoned as follows:

In forming this decision we considered whether we should use a different WACC in calculating the 'reasonably efficient competitor costs', noting that the wholesale customers are likely to have a smaller scale than the incumbent utilities. However, we decided that the issue of scale was better dealt with explicitly in considering the operating and capital expenditure in establishing the 'reasonably efficient competitor costs' rather than applying an additional uplift in the WACC.

Lendlease disagrees with IPART's application of the regulatory WACC and the technical lives of the assets in the calculation of the minus factors.

For projects that stretch over a longer period, Sydney Water itself has proposed more appropriate long-term WACC estimate as the discount factor, such as the long-term WACC used in their Statement of Corporate Intent that they submit to NSW Treasury. Sydney Water propose to decide on the long-term discount factor for each long-term investment in consultation with NSW Treasury.⁶⁹

In relation to the WACC, the relevant difference between the reasonably efficient competitor and the incumbent water businesses is not the scale of the operations, but rather that the reasonably efficient competitor's business will be inherently more risky than that of the incumbent water businesses. The regulatory regime provides the incumbent water businesses with substantial certainty that the costs they incur will be recovered, with any errors in the allowances for operating or capital expenditure corrected from the next periodic price review. Similarly, any errors in the forecast demand for services are also corrected from the next review, with any shortfall smeared across the general customer base. In contrast, as discussed earlier, the ability of a new entrant provider to recover its investment would depend critically upon:

- whether or not a particular scheme proved to be successful, and
- how IPART calculated the "minus factors" from review to review, with changes to the method having the potential to substantially affect profitability.

The additional risk that is borne by a new entrant are material, and would need to be reflected in the "minus factor" in order to create the prospect of competition.

In relation to assumed asset lives, IPART's calculations assume that a reasonably efficient competitor would be happy to invest in an asset whose costs are to be recovered (depreciated) over a 100 year timeframe, and structured as a real annuity (which is an even more back ended form of depreciation than IPART applies to Sydney Water).⁷⁰ It would be impossible for a reasonably efficient competitor – or indeed, any firm that is relying upon private finance – to attract capital to an investment that offers such a deferred cash flow. The NSW Best-Practice Management of Water Supply and Sewerage Framework identifies a planning and decision-

⁶⁸ Department of Primary Industries, 2014, NSW Reference Rates Manual - Valuation of Water Supply, Sewerage and Stormwater Assets, June, p 64.

⁶⁹ Sydney Water Corporation, Economic Level of Water Conservation – Issues Paper, 2016, p 34.

⁷⁰ IPART states that it first derives a building block revenue by applying straight line depreciation over a period of 125 years, and then calculates the annual (inflation-indexed) annuity that generates a cost stream with the same present value (IPART, Draft Decision, Appendix E). The effect of this second stage of the calculation is to convert a return of capital that is based on straight line depreciation (as applies to Sydney Water) to a return of capital that reflects real annuity depreciation, which is a more back-ended depreciation method.

making horizon for local water utilities of 30 years.⁷¹ This coincidentally aligns to Lendlease's asset life of a wastewater plant.

In addition, it is not clear from IPART's calculations how it has factored in the deferral in time between the construction of the assets serving a new development and when the wholesale customer can expect to commence receiving revenue from its ultimate customers.⁷² Unlike the incumbent water utilities, a wholesale customer cannot recover its financing costs from a broader customer base during the period of time when costs are incurred and consumption commences, but rather would be required to bear this cost. It follows that an allowance for this cost of funds during construction needs to be factored into the reasonably efficient competitor's cost of provision.

5.2.2. Bad debts have been excluded from the calculation of operating expenditure

As also noted already above, the operating cost allowance in the "minus factor" omits any allowance for bad debts, which are a material portion of operating expenses. Ofwat have identified that, in England, bad debt costs are currently 44 percent of the total retail costs and that the total stock of bad debt in water currently stands at 22 percent of total revenue.⁷³ No allowance has been made in the minus for the fact that, for the wholesale service providers, bad debt exposure reduces significantly and transfers to the wholesale customer. In addition, as also discussed above, these costs would also be expected to be high for a reasonably efficient competitor given that the latter will be focused upon growing demand in the relevant scheme, so that the threat of disconnection is not a viable means of encouraging customers to pay bills. For wholesale customers relying on recycled water consumption, the threat of disconnection is entirely inappropriate, so bad debt levels (relative to a utility who had at their disposal the threat of disconnecting potable water) would be higher than those generally experienced by Sydney Water.

5.2.3. The "minus factors" should be more flexible in order to reduce the need for scheme-specific reviews

As discussed elsewhere in this submission, Lendlease considers that IPART's proposed mechanism for scheme-specific reviews has material shortcomings, and certain improvements have been proposed. In addition, Lendlease also considers that it is possible to build in more flexibility into the system wide minus factor calculations and in doing so to reduce the need for parties to seek a scheme-specific review. The two improvements that are feasible are to:

- provide benchmark rates for avoided costs wholesale customer will create in water and wastewater infrastructure where a local water recycling plant is included within a development, and
- specify a range of "minus factors" so that the wholesale prices are able to take account of a wider range of cost conditions rather than specifying a single, system wide minus factor.

These are elaborated upon in turn.

⁷¹ DPI Water, NSW Best-Practice Management of Water Supply and Sewerage Framework, July 2016.

⁷² Wholesale customers operating integrated water management schemes often have the requirement to obtain a Water Industry Competition Act licence which requires assessment by IPART and approval by the Minister after construction has been completed but before 'commercial operations' can commence.

⁷³ Ofwat, Costs and benefits of introducing competition to residential customers in England, 2016, pp 20-21.

Net facilitation costs

One of the main benefits expected from competition for the provision of water services to new developments is the prospect of new innovation in the local sourcing and treatment of water. A principal benefit of such developments is the prospect permitting the deferral – or complete avoidance – of augmentations to the centralised water production and water and wastewater treatment plants and the associated trunk mains infrastructure. It is disappointing, therefore, that IPART has not sought to derive a system wide (or series of sub system wide) allowances for such avoided costs where local sourcing and treatment occurs, but rather has left this to be resolved through a scheme-specific review.

Given that the costs that would be avoided by local sourcing and treatment (including recycling) of water and wastewater would relate to the deferral of major augmentations at a small number of at the centralised plants, or in relation to a relatively small number of key trunk main routes, it should be feasible to establish a small number of avoided cost parameters that would be appropriate for the majority of schemes. By undertaking this work upfront, a substantial barrier to the most beneficial types of new entry could be substantially alleviated.

IPART's reason for not including allowances for net facilitation costs in the system wide wholesale prices was not set out in any detail, but a reference was included to the report from NERA.⁷⁴ We have reviewed NERA's treatment of the issue and note that much of its discussion – and the in-principle concerns to which IPART referred – appeared were off-topic, relating to advancements or deferrals of infrastructure within a scheme (which would become the concern of the wholesale customer rather than the incumbent water business). NERA did acknowledge that recycled water projects could affect the timing of trunk and treatment infrastructure, but dismissed an allowance for this on the following basis:⁷⁵

We also recommend that the facilitation charge excludes major bulk water transport, water treatment, or water source assets. Similarly for wastewater we recommend that the facilitation charge excludes bulk transport assets, treatment assets and disposal assets. These large headworks and tailworks assets are relatively long lived and it is inherently difficult to subscribe augmentations to such assets as resulting from changes in the timing of individual developments. The long lives of such assets means that deferrals or bring-forwards could be referring to long run costs that are not anticipated for significant periods of time, some of which may extend beyond the 20 to 25 year costing horizons envisaged in LRMC and LRIC estimations.

With respect, there are well-known analytical methods for estimating the effect that a change in demand from a particular development will have on cost, even where the augmentations come in large, discreet lumps.⁷⁶ In addition, it is not clear what implications NERA considers flow from the possibility of planned augmentations being some time distant and in any event is speculation and warrants a proper empirical assessment.

Greater sensitivity to local cost conditions

The cost to a reasonably efficient competitor of providing water services is likely to vary substantially across service areas. It should be feasible for IPART to determine a range of

⁷⁴ IPART, Draft Report, 2016, pp 88-89.

⁷⁵ NERA, 2016, p 89.

⁷⁶ A common method – the Hankey-Turvey method – involves testing how a modest change in demand will affect the timing of an augmentation (and hence the present value of future costs), and then translating this into a cost per unit. Once the per unit cost is established, this can be applied to single development or even a single household.

wholesale prices that were better able to follow differences in cost in different areas and so enhance the prospects for competition.

Turning first to capital and capital replacement costs, as noted above, the source that IPART's consultants have applied to determine the minus factors in relation to infrastructure costs is the "NSW Reference Rates Manual". This manual describes the rates it has produced as follows:⁷⁷

"As noted above, the Reference Rates are a 'general' guide covering the whole of NSW and have been determined from a generalised curve fitted through the available data points. For some assets the range of available prices is large and therefore the Reference Rates should be applied with caution, with due allowance for local or site-specific conditions and for specific projects."

The manual elaborates on the relevance of site specific conditions further, as follows:⁷⁸

"The Reference Rates for **water mains, sewer mains and stormwater mains** in this manual are for "normal" conditions (ie. typical residential areas). Where the mains are constructed in congested urban areas (eg. town centres) or where there is rock or groundwater, additional costs may be required. These additional costs arise from factors such as:

- Rock excavation
- Construction difficulty including
 - traffic control
 - congestion/relocation of existing services
 - restricted access
 - special compaction and restoration under roads
 - particular environmental requirements
 - Dewatering

These factors, particularly construction difficulty, can add significantly to the capital cost of the water, sewer or stormwater main and should be considered carefully.

It clear from the data source upon which IPART's draft decision is based that the rates will not be compatible with competition in higher cost areas which is likely to create a bias against competition for such developments.

The manual itself sets out specific upward adjustments to the reference rates for a number of conditions, including where there is rock and where construction takes place in a suburban setting. While the range of conditions set out in the reference rates manual and limited, the range of conditions set out in the specific increments stated could be taken as a starting point for a more comprehensive set of "minus factors".

It should also be possible to identify the key factors that would cause the operating expenses of a reasonably efficient competitor to vary across areas and to factor this also into the wholesale prices.

Economically, the combination of system-wide retail-minus pricing for wholesale customers, postage stamp pricing and zero developer charges means that incumbent utilities have little or

⁷⁷ Department of Primary Industries, 2014, NSW Reference Rates Manual - Valuation of Water Supply, Sewerage and Stormwater Assets, June, p 6.

⁷⁸ Department of Primary Industries, 2014, NSW Reference Rates Manual - Valuation of Water Supply, Sewerage and Stormwater Assets, June, pp 8-9.

no threat of competition in higher cost growth areas and they have diminished incentives to find the most efficient servicing scheme. This fact is acknowledged by IPART.⁷⁹

Lendlease considers that wholesale prices need to have regard to higher-cost growth areas (and the existence of cross subsidies) to encourage competition and innovation from wholesale customers. As it currently stands, IPART's wholesale pricing approach, combined with NSW Government policy, will entrench the status quo with Sydney Water being left to serve those higher-cost growth areas without any innovation and other improvements in efficiency. This will result in higher average prices for Sydney Water (and wholesale customers') customers. This is a natural limitation of system-wide average prices.

As alternative view, high value system-wide efficiencies may be able to be achieved in high-cost growth areas – rather than provide a pricing determination which inevitably leaves these to Sydney Water, IPART should actively encourage wholesale customer entry into high-cost growth areas with the capital and innovation that they bring. It is generally recognised that private sector participation would bring with it expertise, innovation and capital to the water sector⁸⁰ – where better to encourage that capability set but in high-cost growth areas.

5.2.4. "Minus factors" should reflect the cost of a reasonably efficient competitor in supplying a scheme using Sydney Water's standard practice

The "minus factors" that are set out in the draft decision are intended to be based upon the length of mains that a wholesale customer lays within the scheme.

An immediate implication of this method of calculating the "minus factors" is that the wholesale customer could have an incentive to over build the mains within the scheme, given that this would have a direct impact upon its wholesale price. A second implication is that a wholesale customer would not benefit to the extent that it was able to serve the scheme in a more efficient manner than Sydney Water, which in turn would reduce the prospect of innovation.

Lendlease proposes, instead, that the minus factors should be based upon the length of mains that Sydney Water would have constructed if they were to serve the scheme using their standard practice. While this may require an upfront effort to make feasible – for example, Sydney Water would need to document their practices to an extent that there was little subsequent dispute as to how much main they would construct – it could substantially improve the prospect of success of the new regime.

5.3. Process for scheme-specific price determinations

As explained in section 4.3 above, Lendlease is concerned that the scheme-specific determination process will be unworkable.

In section 5.2.3 above, we explain how making "minus factors" more flexible could reduce the need for these scheme-specific determinations.

In addition, we consider that the process for scheme-specific determinations should be streamlined, to ensure that they can be used effectively. In particular, Lendlease considers that the process should be designed so as to:

- minimise the costs of participation for scheme participants;
- ensure timely decision-making, recognising investment decision timeframes;

⁷⁹ IPART, Draft Report, p 23.

⁸⁰ Groshinski & Clark, "Promoting investment in the water sector", MinterEllison, p 2.

- avoid information asymmetries between the wholesale service provider and the wholesale customer (and regulator); and
- minimise the need for time-consuming public consultation.

We ask that IPART consider how the process to for scheme-specific determination be streamlined so as to ensure that they provide an effective backstop for dealing with scheme-specific issues.

Whilst our submission identifies that prices for a wholesale customer providing integrated water management should be capped at the non-residential prices, we note that there will still be facilitation costs and other benefits to the wholesale service provider that may need to be considered within a scheme-specific determination. Non-residential prices do not reflect the 'upstream' benefits that are unlocked by the wholesale customer.