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Dear IPART

The Institute for Sustainable Futures at the University of Technology Sydney appreciates the opportunity to comment on the 'Prices for wholesale water and sewerage services – Discussion Paper April 2016'.

The Institute for Sustainable Futures (ISF) has provided expert advice on integrated water planning and management nationally and internationally for over 15 years. ISF have worked closely with Sydney Water and various government departments over that time on integrated water planning in Sydney. We have undertaken leading research on the long term sustainable delivery of alternative water and wastewater delivery mechanisms and are concerned that, in absence of good data, changes to the status quo could potentially undo the progress made to date. It is for this reason that we provide comment on the Discussion Paper.

Our submission asserts the following:

1. Wholesale pricing should remain as non-residential retail until finalisation of a wider industry review
2. Competition for water and wastewater services under the WIC Act should not be viewed as simple 'on-selling'
3. The proposed methods for wholesale pricing are complex and therefore costly to administer and implement for both agencies and proponents: the cost-benefit is difficult to assess without data or illustrative examples.

Over the last decade, the NSW Water Industry has undergone substantial changes in response to environmental, technical and social challenges. In particular the introduction of competition, through the Water Industry Competition Act, has led to private sector delivery of integrated and innovative water solutions at both the site and community level. We recognise that the regulatory and policy framework in this area can be complex and currently lacks clarity and certainty for both the public utilities and the private entrants. We acknowledge, therefore, the role IPART has played in identifying and initiating a process to provide clarity and certainty in this area.

While we agree that wholesale pricing should provide certainty and facilitate efficient entry into the water market within the existing policy and legal framework (IPART pg 25), our view is that none of the proposed models will meet either the certainty or efficient entry criterion.

In addition, we reiterate our position put forward in last year's review of Sydney Water's prices 2016-2020 - that by addressing only some of the available levers in this complex situation, the proposed wholesale pricing structures have the potential to create significant deleterious changes to the emerging water market in Sydney. A broader review of the provision of integrated water, wastewater and stormwater services and outcomes is warranted, and would avoid the dangers of single lever responses. It is clear that the WIC Act has led to increased diversity in the urban water sector – a

broader review could include revisiting the manner in which servicing plans are developed to ensure that process is appropriately inclusive and delivers least cost outcomes.

Our submission suggests that the interim pricing method of non-residential retail prices be continued until a full industry review is completed. While we recognise that using the non-residential retail price for wholesale customers does not recognise their contribution to resilience or broader liveability outcomes, we believe its simplicity and predictability benefits outweigh its limitations. We do not support any of the proposed methods in their current form. The absence of tangible examples to assess the proposed costs and benefits to all parties, including Sydney Water, Hunter Water, the private utilities, the regulators and of course the customers, makes it difficult to comment on the efficiency or appropriateness of the proposed methods.

Sincerely



Cynthia Mitchell FTSE FIEAust

Deputy Director and Professor of Sustainability

On behalf of the Institute for Sustainable Futures at the University of Technology Sydney

1 Submission summary and outline

The Institute for Sustainable Futures (ISF) does not support the proposed wholesale price structures proposed in the IPART discussion paper, for three main reasons:

Firstly, we believe setting wholesale prices outside of a wider industry review is likely to reinforce the disjointed regulatory approach to what is becoming an increasingly integrated water sector. There is an increased risk of deleterious outcomes by addressing single levers in what is a complex, and at times conflicting, policy and regulatory environment.

Secondly, we disagree that the current wholesale market is engaged in “on-selling” and suggest that the integrated and innovative services they currently provide under the WIC Act are a substantial transformation of conventional water and wastewater services provided by the public water utilities.

Finally, it is our view that none of the proposed models will successfully provide certainty and efficient entry, particularly in relation to the increased administrative burden and transaction costs. In this respect we question whether the limited quantum of the problem this review is seeking to address warrants the level of effort and cost of both this review and the proposed alternatives.

Although we do not support either the models and or the methods proposed by IPART at this time, we have included our position on a number of the structured questions proposed in the discussion paper (See Table 1).

In conclusion, if IPART does proceed with wholesale pricing at this time we strongly advise that the current non-residential retail price should be maintained not only because it is consistent with the current policy and legal regime, but also because it can meet the criteria of predictability and certainty, and it allows the maintenance of postage stamp pricing.

2. Wholesale pricing should remain as non-residential retail until finalisation of a wider industry review

The dispute on the nature of wholesale pricing is symptomatic of the need for a broader review of the NSW urban water market, as has already been acknowledged by a range of stakeholders (for example see submissions by Flow Systems, Department of Primary Industries Water, City of Sydney Council and ISF to IPART’s 2016-2020 review of Sydney Water and Hunter Water’s prices). By seeking to adjust just one of the levers, in this instance wholesale pricing, there may be significant and deleterious impacts on the limited amount of competition that has emerged to date.

We continue to support using non-residential pricing for WIC licensees, until a full industry review is complete. We find the rationale for not continuing with this method inconsistent with current government policy and inconsistent with the arguments used to support other methods of pricing outlined in the discussion paper. The main issues relate to customer definitions, the potential for arbitrage and the risk of change in the regulatory environment.

Customer definition: IPART identify that WICA licensees may not meet the definition of customers as they are not landholders (pp22-23). We suggest there are more simple and cost efficient ways of overcoming this limitation than implementing the proposed wholesale pricing regime. Firstly there is precedent for tenants (residential or commercial) paying water utility bills –

set out in the existing customer contracts, so ownership of land does not seem to be a strict limitation. Secondly IPART has noted that this could be addressed in Hunter Water's operating licence review, so presumably this could also be done for Sydney Water. It may also be possible to address this issue by revising the definitions used in the Sydney Water and Hunter Water price determinations.

Once these issues are resolved, wholesale customers would fit in the definition of non-residential customers, by virtue of not being 'residential customers' (current definition of non-residential customer).

Potential for and scale of arbitrage: Under current regulations, a WICA licence would not be granted for simple retail competition. As IPART stated, the context of the review must be considered within the existing policy and legal framework. Under section 10(4)(d) of the WIC Act a licensee who is authorised to supply water must supply sufficient quantities other than from a public utility. To our knowledge, this has meant every scheme licenced to date under the WIC Act (except the desalination plant) involves the treatment and reuse of sewage, industrial water or groundwater. By supplying the alternative water source, the demand for potable water from customers of WIC licensees is generally lower than public water utility customers serviced by conventional water and wastewater services. The lower demands and reduced peak flows means that, even with respect to drinking water, the service WIC licensees provide cannot properly be characterised as on-selling. While we recognise section 10(4)(d) is not retained in the yet to commence WIC Amendment (Review) Act 2014, the framework still precludes the conventional on-selling to small retail customers as under the changes, retail services may only be provided in connection with a scheme authorised under the Act. This reflects the Government's decision not to implement a fully contestable market model.

In addition, we recognise IPART's efforts over the past decade in removing cross subsidies between customer types and ensuring cost reflectivity. If there was a significant difference in prices for customers using the same amount of water and wastewater, regardless of who they are, this would be cause for concern and should be addressed in the price review process for all customers, regardless of whether they are residential or non-residential. However, we do not believe this is the case. Since large industrial customers received the biggest percentage savings in the current price review, we assume IPART is confident there are no existing cross-subsidies between residential and non-residential customers.

Risk of change in the regulatory environment for prices & price structures: As all of the proposed methods in this paper have the retail price as the starting point we find this point moot.

Non-residential retail prices are a preferable starting point.

We believe non-residential prices reflect:

- That water usage is much less, on average and peak, in an integrated recycled water development than in a similar conventional development. As a reflection of reduced demands smaller meters can be used and still meet pressure and continuity requirements.
- That the sewage load in volume and loading is substantially less than a conventional development.
- There is the ability to both time discharges to the sewer network outside of peak flows and to ensure that the discharges are pumped

with no wet weather infiltration – there is a clear incentive for the WICA licensee to avoid increased pumping costs.

- A reduction in retail administration costs for the utility because of dealing with one customer rather than many

We agree that using the non-residential price structure for wholesale customers is not perfect. We note there are multiple benefits that it does not reflect:

- The contribution to liveability and sustainability goals integrated systems provide
- Contribution to resilience of water supply
- Avoided/ avoidable costs in water and wastewater networks and treatment
- Contribution to objectives in Sydney Water Act, namely reducing discharge to waterways

We suggest that the alternatives proposed add material barriers to new entrants in multiple domains: additional cost and time, decreased transparency and predictability. Such barriers are unwarranted at any point, and especially when a proven fast, simple, cheap and predictable non-residential retail price structure is available, and whilst there is the potential for a further wide-scale industry review.

3. Competition has provided dynamic competition and a substantial transformation of conventional water and wastewater services and is not simple 'on-selling'

We reject the position that the current wholesale market is engaged in simple 'on-selling' of services. We recognise that the regulatory environment has changed, and there may be a theoretical potential for 'on-selling' particularly of bulk water. In these instances a 'retail minus' may be the best form of pricing. However, the wholesale market that has emerged under the current WICA regime has significantly transformed the nature of servicing, providing a level of integrated and innovative water solutions at both the site and community level very different from the standard water and wastewater services generally provided by the public water utilities.

ISF understands that Sydney Water believe arbitrage can and will occur and that this provides the trigger for regulation of wholesale pricing. However, we believe that what is being suggested is a rather blunt and inadvertently short-sighted approach given its potential to materially undermine the emerging sector in integrated water cycle service provision.

Whilst the opportunity for arbitrage is technically possible, it seems neither likely nor preferred. The Water Industry Competition Amendment (Review) Act 2014 makes this unlikely because it requires that retailers provide services only in connection with a scheme approved under the Act. This means retailers will not be allowed simply to cherry pick small retail customers from existing utilities, or provide retail services if there has not been an investment in physical infrastructure. The purpose of this provision was to avoid the adverse implications that can arise where markets introduce "full retail contestability" (Second reading speech). In addition, it does not reflect existing investments by the private sector.

4. The proposed retail minus methods for wholesale pricing are complex and therefore likely to be costly to administer and implement for both agencies and proponents: the cost-benefit is difficult to assess without data or illustrative examples.

At the moment we do not support the retail minus models proposed by IPART. The complexity and the cost of the models proposed does not seem commensurate with either the problem they seek to address or the benefits they will provide. In addition, they fail to account for the broad value gained through provision of integrated water services by WIC actors.

We do support the rejection of access pricing as an appropriate method for wholesale pricing and recognise this as a significant development in the discussion. However, we are concerned that all wholesale pricing models proposed by IPART share the same retail minus foundation as access pricing. Whilst our professional assessment is that none of the retail minus models proposed by IPART will meet the objectives of providing predictability, certainty and promoting efficient entry, we note that it is difficult to support (or refute) this position without tangible data or examples. To facilitate further informed discussion, we believe numerical examples with an assessment of costs and benefits to all parties, including the public utilities, private utilities, IPART and customers, should be developed, with particular focus on timeliness, data availability and cost of accessing data for all relevant parties and administration costs. The examples should be developed for the current non-residential pricing approach and the retail minus approaches suggested by IPART.

Table 1: Response to specific questions identified in the wholesale pricing discussion paper

Question	IPARTs position	Response
<p>definitions</p> <p>1. Do you support our proposed definitions of wholesale water and sewerage services and customers?</p>	<p>Someone who is on-supplying water and sewerage services</p>	<p>We do not support the proposed definitions of wholesale water and sewerage customers. We do not believe that private utilities are engaged in direct 'on-selling' of the public utility water and wastewater services. Current entry provided by private utilities has been in the form of dynamic competition. Private utilities are providing integrated and innovative services that are a substantial transformation of conventional water and wastewater services provided by the utilities.</p> <p>We suggest that IPART could create a low impact customer – much like has already been done for stormwater. This would be simple, allow the existing retail price structures to be used and minimise confusion, complexity and cost. This would also address issues such as Sydney Water's concern with arbitrage.</p> <p>This new definition would raise some inconsistencies where some councils are provided with bulk water to on-supply to their customers (discussion paper 14).</p>
<p>Objectives and guiding principles</p> <p>2. What should be our objectives and guiding principles in determining prices for wholesale services?</p>	<p>Create a level playing field to support efficient entry to water and sewerage service market.</p>	<p>ISF believes that the principle objectives in determining wholesale prices should be consistent with water and wastewater pricing policies and with the objectives of the WIC Act. Specifically the objectives should include:</p> <ul style="list-style-type: none"> • Protect customers from abuses of monopoly power – this should not only relate to price, but in the ability to access information regarding price in a timely manner. • Promote long term efficiency • Preserve postage stamp pricing • Facilitate competition • Any changes should ensure costs are proportional to benefits • Not discriminate in favour of the utility • Consider the implications of the proposed options for the viability of existing licensees, potential impacts on their customers, and potential risks to last resort providers

		<p>We do not believe efficient entry should be measured in single product terms i.e.: efficient entry to the water market, or efficient entry to the wastewater market, as the desirable form of entry is not retail or duplicate competition. The WICA was designed to promote dynamic competition – ie innovative solutions particularly recycled water. Therefore efficient entry should be in relation to total water services, including portfolio level and external costs and benefits (for example climate resilience and water security, river health impacts).</p>
<p>Overall pricing approach</p>		
<p>3. Is retail-minus the best pricing approach to facilitate efficient new entry? If not, what approach can best achieve this objective?</p>	<p>Prefers retail – minus the costs that a reasonably efficient utility would occur in delivering service from the connection point to the end-users</p>	<p>At this time ISF does not support the retail-minus models proposed, as we do not believe they reflect the integrated and bundled nature of the services currently offered by the market, nor do we believe the administrative burden implicit in all models is warranted in relation to the efficiencies it could drive.</p> <p>We support charging the non-residential retail price for WICA customers at this time, until a comprehensive review of the urban water industry is complete. As an interim measure the non-residential retail price is appropriate as it is a simple and cost effective way of meeting the proposed objectives and guiding principles for wholesale prices, within the current regulatory framework constraints, while providing flexibility to cater for different wholesale arrangements. Using the non-residential retail price has a very low administrative burden, price preserves postage stamp pricing (by virtue of being a retail price), is currently facilitating competition in the market (see submissions from Flow) and driving dynamic efficiencies and has the potential to drive long term system wide efficiencies (see for example Mukheibir, P. and C. Mitchell (2014). "Decision-making under future uncertainty: developing adaptive urban water strategies." International Journal of Water 8(4): 435-447.).</p> <p>Non-residential retail prices should protect customers from abuses of monopoly power, and it should recover efficient costs for the amount of water these systems use and wastewater they discharge.</p> <p>However, should a retail – minus setting be considered, we would challenge the premise the retail starting point should be the end customer type. Developments that incorporate integrated water solutions place a substantially lower burden on the water and wastewater system – and thus the starting position should be based on the development load, not the</p>

		<p>load of a conventional customer.</p> <p>We recognise as a longer term solution the price structure should recognise the contribution integrated water services make to resilience or utility obligations (such as reducing discharge to waterways as required under s27 of the Sydney Water Act). These issues should be addressed in a wider industry review, which would in turn set the framework for a more robust price framework.</p>
<p>4. Should the minus component of retail-minus prices reflect the costs of a reasonable efficient competitor? If not, what minus would best achieve our objectives</p>		<p>We disagree with the introduction of a retail minus structure at this stage.</p>
<p>5. How should reasonably efficient entrant be defined?</p>		<p>We disagree with the introduction of a retail minus structure at this stage.</p>
<p>6. Do you support our proposed treatment of facilitation costs? If not, how should the pricing methodology treat facilitation costs?</p>		<p>We disagree with the introduction of a retail minus structure at this stage.</p>
<p>7. What is the best way of determining or estimating net facilitation costs?</p>		<p>We disagree with the introduction of a retail minus structure at this stage.</p>
<p>8. Are wholesale service providers' growth plan the most appropriate determinant of the level of cross-subsidy provided to facilitation costs? If so, how can we ensure these plans are subject to appropriate scrutiny and review?</p>		<p>We disagree with the introduction of a retail minus structure at this stage.</p>
<p>9. Should the determination allow unregulated pricing</p>		<p>In principle we agree that unregulated agreements should be allowed and this would be consistent with the proposed mechanism in the Sydney Water price determination 2016-2020,</p>

<p>agreements between the wholesale service provider and the wholesale service customer?</p>		<p>allowing mutually agreeable unregulated pricing agreements. However, we note that Sydney Water has significant information advantage over competitors in the market.</p>
<p>Options for implementing retail-minus</p>		
<p>Calculating the retail component</p>		<p>This section starts from the premise that the retail component is that of the end user, with no accounting for differences in the way the end user actually uses the water and wastewater services. This is particularly relevant when residential customers are served. The starting question for this section should perhaps be: how do you choose the appropriate starting retail price?</p> <p>Given IPARTs efforts to remove cross subsidies and ensure cost reflective pricing there should be no difference in the end bill for two customers who use the same amount of water and discharge the same amount of water, regardless of who they are. If there are substantial differences this would be cause for concern and review, particularly as it is proposed to provide non-residential customers with substantial bill savings under the current price reviews.</p> <p>It is recognised that customer using integrated water services use less water and discharge significantly less wastewater than customers using conventional services. This applies to averages and peak periods. In its 2012 determination IPART has made allowances for stormwater customers that have taken measures to reduce their stormwater impact, introducing a low impact customer class. We propose that customers of WIC licensees using integrated water services, as substantially lower impact customers than their conventional counterparts and that should be taken into account in the starting retail price.</p>
<p>10. What specific information would the wholesale service provider require to calculate the retail component of retail-minus pricing</p>		
<p>11. How can the wholesale service provider obtain</p>	<p>Based on end use customers – need customer numbers & use</p>	<p>This is only an issue with residential customers. With non-residential developments there is an accepted meter size and discharge metering (or assumed discharge factor process). These</p>

<p>accurate information (eg number of customer and their consumption volumes) to calculate the retail price</p>	<p>for residential developments.</p>	<p>sites also have meters and discharge monitoring.</p> <p>Where there are residential customers we find using the full number of end use customers to be inequitable, as it fails to acknowledge the significant contribution that the integrated water solutions make to reducing average and peak loadings to both the water and wastewater networks. The number of customers could be estimated via an ET approach, based on assumption IPART currently uses for setting residential water and wastewater prices.</p> <p>It is not clear if an additional trade waste charge will also be levied for customers paying the full residential retail price. If this is the case, we would question the equity of the approach and whether it promotes innovative solutions, particularly recycled water.</p>
<p>12. What should range of minus categories be (and their values)?</p>		
<p>12. Do you support the option of retail minus average costs (plus average net facilitation costs) for fixing wholesale prices?</p>		<p>We do not support retail minus options at this time. However, if IPART choses to pursue this path we agree this method has higher transparency and predictability than other methods. However it is not as robust and significantly more complex, carrying higher transaction costs, that the current 'low impact' customer retail pricing that we support, or using non-residential retail prices.</p>
<p>13. If adopted, should Option 1 have a schedule of average efficient competitor minus percentages or values for different scenarios? If so, how many should it have, how should they be set and what should these figures be?</p>	<p>System wide average: although that would not reflect cost differences</p> <p>Specific components: Eg services provided (retail, treatment) Density (high low)) Sewage catchment (inland/costal) Zoning (non-res, residential)</p>	<p>We do not support retail minus options at this time. However, if it were to be implemented, we would suggest that these details be subject to further review. That review should start with example scenarios and numbers to provide an indication of the impact these prices would have. Under present circumstances there is no information available to engage meaningfully in what impact this method would have on current or future investments of private integrated water solutions.</p> <p>Again the components suggested continue to separate water and wastewater and fail to recognise the importance and value of integrated services.</p> <p>However, preliminary comments on the components given are: Sydney Water and Hunter both suggested retail component in the range of 3%, which would seem reasonable.</p>

		<p>The discussion paper proposes sewage catchment differentiation of inland and coastal. While we agree there are current differences in treatment levels and associated costs between coastal and inland treatment plants, we do not agree that the current low levels of treatment in Sydney Water’s major coastal plants is acceptable, or current best practice. The most recent sewage treatment plants built by Sydney Water on the coast have a much higher treatment standard than the three large coastal treatment plants. Cronulla is tertiary, Wollongong is tertiary, Gerringong Gerroa is advanced tertiary, Warriewood is secondary. There has also been progressive closure of smaller plants on south coast— so while the nutrient removal in coastal areas may be less, the acceptable level of treatment even on coastal waters seems to be much higher than Sydney Water’s current level of treatment at its largest coastal STPs.</p>
<p>14. Can net facilitation costs be adequately incorporated into Option 1? If so, what should the schedule of average or typical net facilitation cost, in terms of categories and value be?</p>		
<p>15. For option 1, do you support aligning the determination period with our retail price reviews? If not for how long should the determination apply?</p>		<p>We do not support this option, but if it were to proceed we would suggest the determination period should provide a level of surety commensurate to investment lifetimes of assets, while retaining the flexibility to adapt to regulatory and policy changes.</p>
<p>16. Do you support a methodology for determining scheme-specific minus and net facilitation costs (Option 2).</p>		<p>We do not support this option at this time. If IPART is to progress down the retail minus path, this is our least preferred option of the three proposed. We believe this process adds additional costs and risks through added negotiations, administration and time, even without the potential for dispute resolution. These increased costs for all parties seem unwarranted in light of the market size and an alternative mechanism.</p> <p>It is noted that the process for Option 2 requires individual wholesale pricing plans to be developed, exhibited, and lodged after wider consultation – It is unlikely the process would be flexible, rapid and robust enough to meet with investment timelines for new developments. It is noted that these additional costs are substantially borne by the new entrant (via payment for the development of the wholesale pricing plan + their input + involvement in consultation</p>

		+ having to share any dispute resolution costs) in an already complex, lengthy and costly process.
17. What procedural steps and requirements should be included in our determination to support a methodology for scheme-specific minus and net facilitation costs		
18. Do you support our proposal to include a procedure for developing and registering a wholesale servicing plan in our determination	IPART position: utility develops plan funded by wholesale provider	We do not generally support the plan being funded by the wholesale provider. Under current arrangements the utilities hold all information in relation to system costs. There is no other way of wholesale providers accessing this information. Under WICA access regime the utilities were required to develop a costing manual – as set out in IPART guidelines. Even this manual only has methodology information and no real cost data. In an already costly, lengthy process, that is weighted towards maintaining the status quo – monopoly service provision by the incumbent utility – this seems like an (unfair) additional burden on new entrants, however our exact position would depend on the actual final cost. If the formula was based on reasonably efficient utility costs it would make more sense to develop a cost structure for each area of Sydney Water (where costs differed substantially). A wider review could examine whether changes to current regulatory setting relating to developer charges would be a more efficient way to provide such cost signals.
19. What should be included in a Wholesale servicing Plan?		
20. How should the costs of preparing a wholesale servicing plan be recovered?		
21. What should be the methodology or formula for determining the scheme-specific minus component?		
22. What should be the methodology or formula for determining the scheme-specific minus component		Under the current non-residential retail price structure, a minus is reflected for high density development in their reduction in potable water use, particularly peak demand – via being able to use a smaller meter than in a similar standard building. A similar reduction is recognised in the wastewater charges – although through a slightly more complex mechanism.

		<p>For low density development the minus will be reflected if the development is such that it allows for smaller connections at the boundary.</p> <p>It seems inefficient to develop yet another mechanism with substantially higher administration costs to calculate these minus / facilitation costs, particularly within the existing policy and regulatory environment (postage stamp pricing, no developer charges)</p>
<p>23. If IPART determines a methodology to calculate scheme-specific minus and net facilitation costs, should the determination period be open-ended or set for a specific period (eg length of the retail determination)</p>		
<p>24. If a methodology for scheme-specific minus and net facilitation costs is adopted:</p> <ul style="list-style-type: none"> - what should be interim or default price until the incumbent utility has finalised a scheme's wholesale prices in accordance with the methodology? -how can we ensure the incumbent utility finalised these prices in a timely manner? -what if any measures should be adopted to account for differences between interim and final prices? 		<p>This would only seem to be relevant for the transition for existing schemes. Is it really likely that a scheme would progress without knowing what its price structure would be?</p> <p>Although we do not support this method, if it is adopted timeliness of plan preparation would be important. Our preferred option would be to develop a cost manual covering Sydney Water's area of operations. Otherwise if the wholesale prices are not developed in the defined timeframe a default of non-residential prices should be adopted.</p>