

Ms Liz Livingstone  
CEO  
IPART

Via email: [Liz\\_Livingstone@ipart.nsw.gov.au](mailto:Liz_Livingstone@ipart.nsw.gov.au)

9 September 2021

Dear Liz

### **Sydney Water's response to IPART's comment on our consultation response**

This is our response to your letter of 29 June asking us to provide further thoughts on specific regulatory reform changes. To support this response, we have commissioned a report from NERA, which we attach as an appendix to this letter.<sup>1</sup>

We note that IPART has recently published a draft plan for a substantially revised regulatory framework.<sup>2</sup> We look forward to engaging with you on that wider discussion. This letter does not attempt to lay out our thoughts on IPART's "*Encouraging Innovation*" framework.

We respond to your letter with some introductory comments. We then address specific questions you have raised, which we split under the two headings you used, namely, bill smoothing and revenue caps, and a long-term focus

### **Executive Summary**

- The current IPART approach does not actively consider intergenerational equity issues, because it does not consider in a significant way any information about long-run costs in informing short-term expenditure, revenue and pricing decisions.
- Smoothing cost recovery from customers over time should focus on smoothing *between* regulatory periods. Avoiding large bill shocks between periods is essential to keeping customer bills affordable while maintaining trust in the industry.
- For the most part differences in bills between customers today versus customers in the future do not reflect differences in their behaviour, nor do they incentivise efficient behaviour. Instead, they reflect the current state of financial markets and as well as legacy planning decisions dating back to the 1960s. While some form of the building blocks approach is necessary to smooth the effects of large, chunky investments, this particular version of it, where customers pay disproportionately more during peaks in the

---

<sup>1</sup> "*Potential Changes to Building Blocks Regime*" NERA, September 2021

<sup>2</sup> IPART paper on "*Encouraging innovation*", August 2021

investment cycle and periods of high financing costs, is not inherently superior to any number of alternative variations on it.

- There are alternative revenue recovery models (accelerated depreciation, annuitising large investments, holding an escrow account) which allow for more considered intergenerational choices in the context of investment requirements and financing costs that do not reflect customers' usage of the network. These alternatives would not require IPART to change its current approach to setting the cost of capital or fundamentally discard the principles of the building blocks model, while allowing a smooth customer bill trajectory over time.
- While these approaches rely on forecasts of future investment and financing costs, the existing model relies on the absence of such forecasts, implicitly assuming that existing conditions will persist indefinitely. This is in itself a forecast which may not be a good forecast where better information exists, even if imprecise. Adjustments over time can correct for new information. Where better information *does not* exist, our proposals do not *require* any action to be taken, instead defaulting to the status quo.
- We together need to change from a culture of false precision to a shared strategic focus on managing uncertainty for customers as best we can, in a volatile world, with fast-changing stakeholder and customer requirements. Our proposed reforms meet these objectives better than the status quo.
- A key purpose of the regulatory process should therefore be to require and facilitate the scrutiny of information about long-term costs *and* options for the recovery of those costs from customers over time. This information can be then be used by IPART to inform short-run decision-making, and to hold the utility to account for the management of the short *and* long-term cost exposures its customers face.

## Introduction

We are pleased that IPART considers that Sydney Water raised “*interesting questions*” and you want to hear more about specific improvements we suggest and why they are in the in the long-term interest of customers. IPART requests that we suggest and justify specific improvements that should be made to the regulatory framework”.

We expand here on our proposed improvements, the most important elements of which we covered in our consultation response in June. As our June consultation response clarifies, it is critical that IPART and Sydney Water align in identifying the strategic context of reform. If we do not define well the problem we are trying to solve, the solution is unlikely to be effective. If the focus on detailed regulatory design is at the expense of developing a strategic vision on which government, regulators and SOCs are aligned, we do not believe we will see the cultural change in regulation that we believe we need. Without this alignment, economic regulation is unlikely to have a more strategic impact than it does at present.

We restate the following points on the strategic context:

- Decentralised systems of rule-making such as in NSW water sector need to be coherent. Different sets of regulations (environmental, health, government legislation, operating licences) should, for system-wide policy effectiveness, be mutually supportive of (i.e. complementary to) one another.
- IPART's reform should confront this policy co-ordination issue. IPART, EPA, DPIE, NSW Health, Treasury, customers and the SOCs are the main players in the ecosystem. It is the operation of the system a whole that collectively produces outcomes from which customers benefit.
- Resilience, carbon reduction, climate change, sustainability, innovation, and the challenge of customer engagement all now have as much focus as the traditional IPART focus of cost efficiency. Cost efficiency must be combined with a more holistic focus on the outcomes the system is producing for customers in the long-term.
- IPART's reforms must have regard to this wider context if they are to be effective. Stakeholders and customers must understand how any reforms will improve the performance of the ecosystem and the SOCs as the delivery agents in that ecosystem, and how they will address the challenges we identify above.

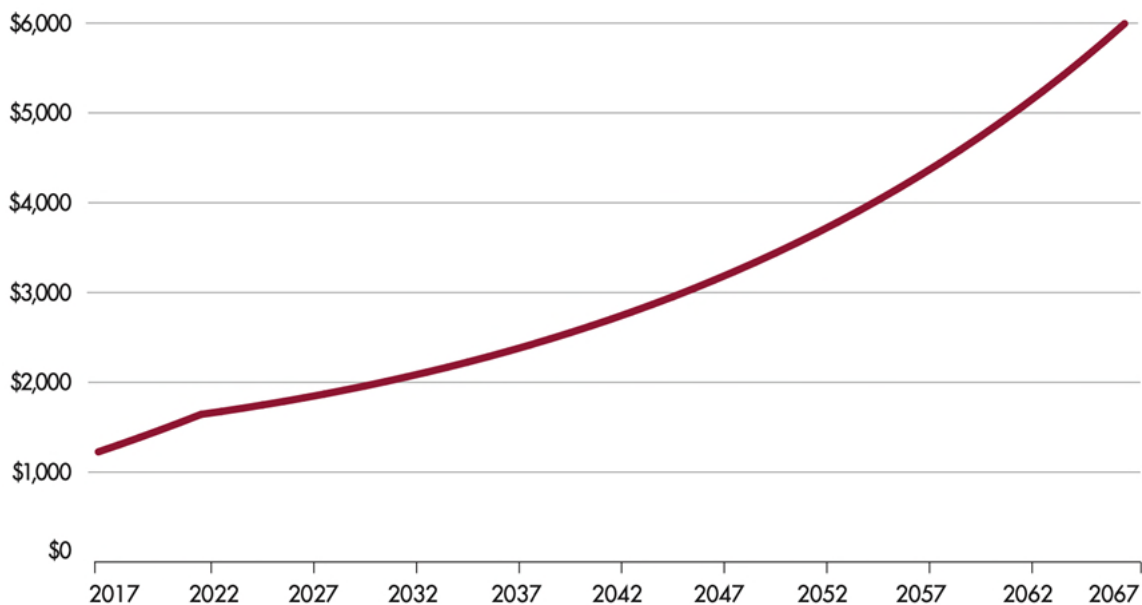
### **Summary of Changes to the Regulatory Framework**

We said in June that the strategic direction of a reformed framework should start with a focus on development of three key features:

1. the subject of the review is the company's long-term plan
2. prices are set based on a long-term price trajectory considering customer insight
3. the long-term plan and the price review focus on efficiency and innovation.

The long-term plan needs to be developed and consulted on at least two years before delivery of our regulatory review if it is to be an input to our plan submitted to IPART for the next regulatory cycle. It aligns with the new operating licence requirement on Sydney Water to produce a long-term capital and operational plan. We think this requires at least a 5-year regulatory cycle to allow for strategic development and engagement of the long-term plan, both as an input to government planning and as an input to Sydney Water's planning for its next regulatory submission.

Figure 1: Projected increase in average residential customer bills in urban water.



**Source:** Infrastructure Australia, Reforming Urban Water – A national pathway for change, 2017, p 30.

We do not think an exhaustive list of the changes that we propose is helpful here. Our detailed thinking on issues such as performance incentives, risk and reward between shareholder and customers, revenue caps, innovation, and customer engagement has been laid out in multiple Sydney Water submissions over the last year, starting with our October 2020 submission. We would be happy to review with you any of these issues.

We set out in the rest of this letter how what we propose will address major gaps in the framework which mean the current approach is failing to protect the long-term interest of customers. We also explain how addressing those gaps is consistent with an evolution of the current building blocks approach. Protection of the operation of the building block model, as traditionally interpreted by IPART, should not be confused with the protection of long-term customer interests.

### Bill Smoothing and Revenue Caps

IPART state that: *“Our view is that price smoothing is a consideration when expenditure levels are cyclical and forecastable. Does Sydney Water’s long-term forecasts suggest that expenditure will be cyclical or permanently higher? If there is a step-change in capital*

*expenditure, or if growth in expenditure is expected to be sustained, why would a standard building block approach fail to sufficiently smooth the bill impacts of new investments?*<sup>3</sup>

We want our customers to pay *on average over time*, through their bills, an amount that reflects the long-run costs of maintaining the system.<sup>4</sup> By implication, we must have regard to intergenerational equity issues. Today's customers do not want to be contributing too much relative to the costs that future customers will have to pay, or relative to the costs that past customers have already paid. In that sense, bill smoothing should *always* be a consideration.

We disagree with IPART that smoothing is only a consideration (only?) when expenditure levels are cyclical and forecastable. It should be an objective of the regulatory process to ensure that short-term decisions are taken in the light of the long-term outlook. While forecasts will always be uncertain, the regulatory process is failing if it does not encourage or *require* SOCs to make use of the best information available and to subject their future scenarios to scrutiny as an input to short-term regulatory decision-making.

Future costs are always "forecastable" to a degree. In fact, the *absence* of a forecast implies the continuation of existing conditions, which is in itself a forecast. In some circumstances, this may be the best forecast that exists, but this is far from guaranteed and certainly not without conducting due diligence. Whether forecasts are reliable is of course another question, but forecasts can change over time for a whole range of reasons, such as changes in technology, regulatory standards, or government policy requirements. The SOCs have limited control over a significant portion of their costs and can face step-changes in their costs. But none of this absolves them from doing their best to forecast the charges their customers are likely to face. In fact, it makes that forecasting even more imperative.

The regulatory process needs capture this information and use it to inform decisions so that the intergenerational equity choices can be considered, and so that more informed choices can be made over time. It should be facilitating and encouraging the production of higher quality forecasts, which are then improved and challenged through public scrutiny.

This does not happen in the current IPART process, which is blind to intergenerational equity transfers. IPART does not consider in a significant way any information about long-run costs in informing its short-term decisions.

Given this, it is hard to understand why IPART think its current approach "*smooths the bill impacts of new investments*". Of course, new capital expenditure is recovered over its asset life but new capital expenditure is but one dimension of the customer bill. All the other variables, in particular the regulated cost of capital, may be volatile and very different between periods and this is what determines the average customer bill over time. In other words, while IPART's

---

<sup>3</sup> IPART letter to Sydney Water, 29 June 2021 p.2

<sup>4</sup> We think that is what our shareholder and customers want too.

approach may smooth the bill *impact* of new investments (relative to an identical world absent the new investments), it does not smooth the overall bill itself.

When IPART discusses smoothing of bills, it tends to be referring to smoothing *within* periods.<sup>5</sup> It often appears concerned with the stability of the customer bill within periods. By extension IPART should be much more interested than it appears to be in smoothing customer bills *between* periods.

We do not mean that average customer bills necessarily need to be the same from one period to the next. The objective is rather to avoid large bill shocks for the average customer. It is significant, largely unavoidable increases in customer bills which can damage trust in the industry as well as making affordability a challenge for customers.

This is a much more meaningful perspective for consideration of bill smoothing from a customer perspective for two reasons:

- Individual customer bills should fluctuate in response to changes in customer consumption.<sup>6</sup> Furthermore, even with IPART's focus on short-term price smoothing, prices, and therefore average customer bills, may vary within period because of drought conditions and/or the operation of SDP.<sup>7</sup> These short-term variations in individual customer bills have positive efficiency properties, because they signal the costs that customers' consumption imposes on the system: We want customers to conserve water, and even more so during periods of drought. Indeed, while not an option under the current determination, more extensive use of different customer pricing approaches should be considered as part of the suite of demand management options to help conserve water and keep the system in balance.
- The focus on price or bill smoothing within periods ignores the fact that the most important source of volatility in average *and* individual customer bills is the cost of capital.<sup>8</sup> Volatility in WACC allowances reflects volatility in underlying financing costs and so it is appropriate we face the same cost as competitors. However, there is nothing objectively efficient about the current approach to setting depreciation and return on capital discretely for each regulatory period. The exact nature of the repayment profile of the asset base is ultimately arbitrary and its impact on customers is compounded by

---

<sup>5</sup> Within a regulatory period, IPART typically turns the utility's revenue requirement over the cycle into a smoothed price path, with prices increasing each by CPI.

<sup>6</sup> They may in principle also fluctuate in response to the supply and demand conditions for water, depending on the regulatory settings. But this does not necessarily mean that *average* customer bills increase, as the utility's level of allowed revenue is regulated. So even if some customers pay more due to higher tariffs, the customer base as a whole will not pay more than the utility's total regulated revenue. More generally, there is no contradiction between considering pricing as a tool for demand management and targeting the smoothing of average customer bills over the short and the long-term.

<sup>7</sup> IPART introduced in 2020 higher usage prices to apply when dam levels fall below 60%. Usage prices and service charges are also increased within periods to recover the cost of the operation of SDP.

<sup>8</sup> The WACC is conventionally set for the regulatory cycle and reset between periods.

movements in IPART's regulated cost of capital between periods.<sup>9</sup> If we are interested in smoothing customer bills, we should therefore explore how customer bills could be varied to smooth fluctuations in WACC, and other sources of medium-term bill volatility (such as periods of high investment) through adjustments to depreciation profiles in the regulatory asset base.

This does not require IPART necessarily to change its current approach to setting the cost of capital, nor does it mean that end-user water prices would be less efficient than they are now. We want to send appropriate signals to customers that reflect the costs they impose on our physical network (like volume-based charges or SDP-related surcharges), but the costs they impose on us are not closely related to movements in financial markets in the short term. A large share of these costs are sunk, meaning we must pay for them irrespective of customers' usage of them. We could, however, make choices about the rate of cost recovery which take into account likely future costs for which customers will be required to pay.

In conclusion, variations in customer bills are necessary and efficient where they signal better usage of the network. Where bill volatility is instead due to volatile financing conditions, medium-term changes in investment levels, or front-loaded capital recovery charges, there is nothing inherently efficient or superior about the existing building blocks regime.

On revenue caps, IPART states that: *"The immediate goals of bill smoothing and a revenue cap would typically work in opposite directions. That is, a revenue cap seeks to match revenues to costs in each year, while bill smoothing seeks to apportion movements in costs to revenues over several years"*.<sup>10</sup>

We disagree. We see no contradiction between revenue caps and a desire to promote smoothing of customer bills. The price caps that we employ now either defer revenue recovery to the end of the regulatory cycle or lead to customers over or under-paying relative to the revenue requirement that the regulator has determined to be allowable for the utility. While they may avoid year-on-year true-ups through adjustments to the service charge, they are not inherently superior to revenue caps in promoting stability over time in average customer bills.

They also require utilities like Sydney Water, businesses with cost structures which are largely fixed, to bear risks to their revenue over which they have virtually no control (including the risk that government introduces restrictions and requires customers to use less water). This is particularly relevant to consider at time when IPART is keen that SOCs accept significantly more risk to their revenue contingent on their performance. It would be sensible to focus the limited risk bearing capacity of the SOCs on management of risks over which they have some measure of control, rather than those that they do not control and against which good performance is

---

<sup>9</sup> We expand on this point later in this letter and it is also explored extensively in the attached NERA report.

<sup>10</sup> IPART letter to Sydney Water, 29 June 2021 p.3

not clearly aligned with customers' best interests. Bill smoothing, as we have set out, it is a more useful concept to consider as a short-to-long term objective, rather than as a within-period issue.

## **A Long Term Focus**

We propose shifting the regulatory process to a long-term focus to recognise that the long-term outlook should be fundamental to informing the short-term plan. It is in the long-term interest of customers to consider the extent to which customers may face future liabilities which are not transparent in the regulatory process, and to consider what the long-term customer bill trajectory might be when setting short-term prices. Our regulatory ecosystem does not at present meet this basic customer requirement.<sup>11</sup>

We propose that a public review of the utility's long-term plan takes place at least two years before the delivery of the regulatory submission.<sup>12</sup> This is an opportunity to consult on the long-term outlook for customer with IPART and other stakeholders, particularly government and customers. This will provide a set of scenarios, with feedback, for the utility to factor into its plan for the shorter period of five years to be covered by its regulatory submission.

The utility can then propose a 5-year revenue requirement that has regard to the long-term outlook, including where appropriate adjustments to the anticipated long-term depreciation and return on capital profile to seek to smooth customer bills over time. In this way, the utility can seek to target a long-term customer price trajectory, and so make decisions that seek to have regard to intergenerational equity.

We recognise that future movements in financial markets will be difficult to predict, as indeed will future investment requirements. A new drought may accelerate the need for water security investment, for example, or the EPA may introduce new environmental standards earlier than we think. However, if we are serious about protecting the long-term interest of customers, the responsible course of action is to seek to estimate these long-run costs as best we can and to take them into account in our proposed short-term prices. The alternative is to implicitly assume that existing conditions will continue in perpetuity, which is probably less likely than what a rigorous forecast would predict.

IPART asks "*why would a standard building block approach fail to sufficiently smooth the bill impacts of new investments?*"<sup>13</sup> There are two points to make:

---

<sup>11</sup> For the avoidance of doubt, in response to IPART's question as to whether customer insight should only inform the long-term price trajectory and not other matters, that is not what we are saying. Please refer to our recent response on customer engagement for our vision for customer engagement.

<sup>12</sup> Sydney Water is now required to produce a 25 -year long-term capital and operational plan for DPIE which can serve this purpose. OL condition XXXX

<sup>13</sup> IPART letter to Sydney Water 29 June page 3



- Firstly, current practice is that the next period expenditure and customer bills are looked at discretely at each regulatory reset. If at the next reset, the cost of capital increases and/or we need to invest at a much higher level, customer bills will jump sharply (perhaps by 20% to 40% in real terms). IPART’s standard approach does not consider *any* smoothing *across* periods.
- Secondly, the utility’s view of forward investment requirements will evolve over time in response to changing requirements and revised cost estimates, as will expectations of future financing costs. The consideration of short-term customer bills relative to likely long-term bills should be continuous, with the regulatory review being an important part of the process of gathering feedback and insight. This should come into focus at each regulatory reset, when IPART will have a role in reviewing the intergenerational choices proposed by the utility and assessing to what extent those choices are in the long-term customer interest. The current “standard approach” does not require long-term estimates of customer bills to be provided. Intergenerational choices are not considered. So, the standard approach can hardly be described as providing “sufficient smoothing” if it does not require the data to be provided to even allow consideration of intergenerational cost recovery issues.

IPART then asks, “*what price smoothing model does Sydney Water envisage and why?*”<sup>14</sup> While different options have different pros and cons, all of them can achieve the objective of reducing bill shock for future customers. The one that will be most appropriate will be the one best suited to our circumstances and the profile of future costs to which our customers are exposed. We will use whatever model is most appropriate in the light of the results of our long-term business planning, which will include our planning for the long-term recovery of costs necessary to deliver the customer outcomes that we target.

The current approach *by default* makes intergenerational choices without any reflection on the extent to which the intertemporal outcomes are appropriate or fair, or the extent to which they reflect what customers and stakeholder want. For the most part differences in bills between customers today versus customers in the future do not reflect differences in their behaviour, nor do they incentivise efficient behaviour. Instead, they reflect the current state of financial markets and as well as legacy planning decisions dating back to the 1960s.

Models that more explicitly consider intergenerational transfers are at least as good as the current standard approach employed by IPART, in part because they all allow for the *option* of defaulting to IPART’s current approach if the longer term focus suggests that it is appropriate.

---

<sup>14</sup> IPART letter to Sydney Water 29 June page 3

There is no uniquely efficient way to recover sunk costs because the costs are already incurred irrespective of customers' usage of the network. To illustrate the arbitrary judgements in the current approach, we ask IPART to consider following points:

- IPART sets short-term prices without regard to the expected long-term profile of the regulatory asset base or to future financing costs. This is by default making a choice about intergenerational equity in that it leaves those costs unexplored and leaves customers exposed in an unplanned way to whatever higher (or lower) future costs may need to be recovered from them in future.
- While the current approach seeks to recover repayment of the asset over the life of the asset, this is a construct. Many assets will last less time than their asset life in the RAB and many will last longer. The attempt to match the cost recovery profile with the asset life is an attempt to pass on the costs to customers in a way that matches use with payment of the asset. However, the average *actual* asset life of different asset classes is no doubt different to their regulatory asset life. There is no attempt to reconcile any differences between actual and regulatory asset lives over time. This itself is a recognition that while the RAB is designed to help achieve some broad intertemporal cost reflectivity, there are limits to the benefits and justification of trying to target the recovery of cost to those customers who “consume” the asset. By implication, there may be other equally reasonable profiles for recovering costs from customers over time.
- The previous point is reinforced if we recognise the arbitrariness of the straight line depreciation approach used by IPART. This approach, which is used by many regulators, has an inherent feature that customers in the early years pay a greater share of the total costs borne by customers, because they pay for the same amount of the principal value plus a larger share of the financing costs. If Sydney Water is entering into a period of higher investment, and this coincides with a high market cost of capital, customers at the time these costs begin to materialise will pay a disproportionately high share of the costs relative to customers further in the future.

Against this background, it is appropriate to consider other models as means through which more active, self-aware intergenerational choices can be made. There should be no presumption that the current approach is necessarily superior to alternatives. In the attached report, NERA sets out how alternative models can be applied and what the basis for them might be. The report explains these models with examples of how they might, in combination with assumptions about future financing costs, be used to set smoother long-run customer bill trajectories.

- Accelerated depreciation has been widely used by regulators, including by Ofgem from 2000-2010, to avoid a “cliff edge” in customer bills for electricity distribution to adjust for

the treatment of asset lives following the treatment of depreciation allowances after privatization in the 1990s.

- Annuity of large investments may be appropriate where there is a large, planned investment (e.g. a new desalination plant) and where there is a desire to target transparently and intuitively the total cost recovery, including financing costs over a certain number of years.
- Escrow account approach involves pre-payment by customers into a fund managed at arms' length from the utility, to provide a fund for smoothing customer bills in anticipate of future increases in the cost of capital and levels of capital investment.

We look forward to discussing this letter with you and we suggest an arranging a time to do so. We will be in touch with your office to arrange a time. We also look forward a full discussion on your “*Encouraging Innovation*” framework over the coming months.

Kind regards

A handwritten signature in black ink, appearing to read 'Roch Cheroux', is written over a horizontal line.

Roch Cheroux  
Managing Director

cc: Philip Davies - Head of Competition and Regulation