Sydney WATER

Sydney Water's submission to IPART's WACC review draft report 2017-18

8 December 2017

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1 Executive summary

Sydney Water is pleased to provide its response to IPART's *Review of our WACC Method - Draft Report* issued in October 2017 (draft report). This response draws upon our submission[1] to IPART's issues paper on the weighted average cost of capital (WACC).

Sydney Water believes that IPART's existing WACC methodology works well, incentivising improved financial efficiency and stability. These sentiments have been echoed by our external rating agency, which have maintained our generally stable credit rating. Together with a transparent and stable general regulatory framework, we have been able to improve the quality of our services while offering one of the lowest average bills[2] of any water utility in Australia.

We acknowledge that for this review, IPART's objective is to identify whether there are opportunities for incremental improvements in the WACC method so that WACC decisions better reflect efficient financing costs of a benchmark entity. We accept IPART's principles in meeting this objective, including that of the stability, predictability and replicability of the WACC method. With IPART's objective in mind, we are mostly supportive of IPART's decisions in the draft report.

We have provided in this submission a summary response to all of IPART's draft positions, with the exception being the cost of debt and related true-up, where we address specific issues.

Sydney Water maintains that regulatory best practice suggests the efficient cost of debt for a benchmark entity with long-lived assets is one which is based on a 10-year trailing average cost of debt with annual updates. Such an entity would seek to minimise refinancing risk by issuing longer term debt and staggering debt maturities over time, minimising the amount of debt to be refinanced at any one time. Therefore, Sydney Water considers that by IPART maintaining the existing approach to measuring the current cost of debt, regulated entities remain exposed to significant refinancing risk due to the two-month reference period used in the current cost of debt calculation. As a result, we propose that the reference period be extended to 4 years to smooth the refinancing risk. A 4-year reference period matches both the length of the determination period, and the range of the proposed true-up calculation.

Nonetheless, we welcome IPART's draft decision to incorporate a periodic update of the current cost of debt during the regulatory period. IPART should adopt its draft true-up proposal to measure the efficient cost of debt on a monthly basis during the determination period. The use of monthly data is likely to provide a fair estimate of efficient short-term debt costs relative to say a one-off reference period each year for the current cost of debt true-up. That said, in practice, we note that it would be unlikely for an efficient benchmark entity to refinance monthly approximately 1 percent of its total debt.

We also support IPART's approach, as being aligned with sound regulatory principles, to provide an NPV-neutral true-up of the short-term portion of the actual cost of debt and regulatory allowance at the end of the regulatory period, in theory minimising embedded windfall gains and losses. More practically Sydney Water considers that absent evidence for the NSW urban water

[1] Sydney Water Submission to IPART's WACC review issues paper 2017-18, August 2017.
[2] New South Wales Government Budget, Budget Paper No. 1, Budget Statement, 2016-17, p. 7-2.

market of customer preferences, the benefits to our customers of simple, transparent and stable bills for the entire regulatory period far outweighs any perceived small cumulative benefits of unidirectional changes in bills over the regulatory period, even before considering the administrative costs and complexity of subjecting customers' bills annually to the randomness of financial markets.

That said, if IPART were to adopt a hybrid approach in which it allows our bulk water suppliers to pass-through the cost/benefits of updated cost of debt allowances on an annual basis and Sydney Water an NPV-neutral true-up, we believe we would be able to pass on these cost changes relatively simply to our end customers' water service charges under existing bulk water cost pass-through mechanisms. We propose this approach to capture the benefits of the regulatory principle of flexibility which is not prevalent in the NPV-neutral true-up approach. This approach ought to also mean private equity firms such as Sydney Desalination Plant, would avoid higher debt costs which are closely aligned to the timing of cashflows, and reduce pass-through costs for our customers.

Finally, in principle, Sydney Water is not averse to annually updated prices ─ if our customers express in the future this as their preference ─ and combined with a benchmark cost of debt based on a 10-year trailing average, minimising any yearly price changes. That said, we believe that a longer period for consultation and engagement with our end customers and stakeholders, would be required to ensure we are confidently delivering to our customers the outcomes they might want.

In the remainder of this report, we have presented our positions on each issue in summary form in Chapter 2. Chapter 3 provides more detailed responses on cost of debt issues.

2 Sydney Water's Position

We acknowledge that in its draft report, IPART has carefully considered Sydney Water's views presented in our submission and at the public hearing.

Sydney Water has considered each of IPART's draft decisions and note we support the majority of IPART's views, which we believe are incremental improvements to the WACC methodology.

Sydney Water's position on each of IPART's questions (**noted by bold**) is outlined below. In the table, we have used the following terms to mean:

- **Supported**: Sydney Water agrees with IPART's draft view.
- **Not supported**: Sydney Water has reservations with IPART's draft view.
- **Accepted**: Sydney Water is not challenging or contesting IPART's draft view or proposal.

How IPART measures WACC inputs
1. Maintain our definition of the efficient benchmark firm as 'a firm operating in a competitive market and facing similar risks to the regulated business'. **Supported.** We believe, complying with IPART's definition will promote efficient financing practices for Sydney Water and deliver long term benefits to our customers. Further we agree with IPART's rationale that it is not necessary to be fully consistent with other regulators.[3]
2. Synchronise the sampling dates for the risk-free rate, debt margin, current MRP, inflation and the uncertainty index. **Supported.**
3. Adopt a sampling period of two months from the sampling date for the risk-free rate and debt margin. **Not supported.** A sampling period of 2 months for the current cost of debt results in significant refinancing risk. Sydney Water considers that the reference period for the current cost of debt be extended to 4 years. See section 3.1.2.
4. Continue to provide the regulated business with confidential, advance notice of the sampling dates. **Supported.**
Cost of debt
5. Continue to estimate the cost of debt as the midpoint between our estimates of the current and historical cost of debt when the uncertainty index is at, or within one standard deviation of, its long-term average. **Not supported.** Sydney Water maintains that regulatory best practice suggests the efficient cost of debt for a benchmark entity with long-lived assets is one which is based on a 10-year trailing average cost of debt with annual updates. Such an entity would seek to minimise refinancing risk by issuing longer term debt and staggering debt maturities over time, minimizing the amount of debt to be refinanced at any one time. See section 3.1.2.

[3] Australian Energy Regulatory (AER), Queensland Competition Authority (QCA) or Essential Services Commission of South Australia (ESCOSA).

6. **Adjust our estimate of the current cost of debt to reflect the cumulative monthly change in the actual cost of debt during the regulatory period, and to make this adjustment through a regulatory true-up:**

   – at the beginning of the following regulatory period, and

   – in the notional revenue requirement (NRR) for the next regulatory period.

   Supported. Sydney Water supports IPART's draft decision to provide a net present value-neutral true-up at the beginning of the following regulatory period as being aligned with sound regulatory principles. However, Sydney Water considers that this proposal by IPART does not have the desired effect of reducing refinancing risk as it continues to concentrate maturities and repricing transactions over a very short time horizon. Refer to Chapter 3 for more detailed discussion. See section 3.2.

7. **Continue to use the 10-year BBB corporate bond spreads published by the RBA to measure the debt margin across all industries.**

   Supported.

8. **Convert published bond yield data into annualised yields.**

   Supported.

9. **Continue to use the 10-year coupon-paying bond yield data to estimate the cost of debt.**

   Supported.

10. **Continue to use a 10-year term to maturity to estimate the cost of debt.**

    Supported.

Determining the cost of equity

11. **Continue to use the Sharpe-Lintner CAPM to estimate the cost of equity, and monitor the impact that the FFM would have if we adopted it at a future review.**

    Supported. We note that IPART have considered Sydney Water's views and also agreed to refine their corrective remedies to address the downward bias of the SL-CAPM. We wish to engage with IPART in the future in this space.

12. **Continue to estimate the cost of equity as the midpoint between our estimates of the current cost of equity and the historical cost of equity when the uncertainty index is at, or within one standard deviation of, its long-term average.**

    Supported.

13. **Continue to use a range with a midpoint of 6 percent as the estimate of historical MRP.**

    Supported. We acknowledge that this method deviates from the standard practice of other regulators[4] who use only long-term MRP of 6 percent for their cost of equity estimates.

14. **Continue to use our existing six methods to measure the current MRP.**

    Supported.

15. **Continue to use the ASX 200 share price index and consensus earnings per share forecasts to measure the current MRP using the Damodaran and Bloomberg methods and the two Bank of England methods.**

    Supported.

16. **Modify the indicators we use to measure the current MRP using the market indicator method by replacing two of our existing indicators – the dividend yield and the risk-free rate – with one new indicator – the earnings yield less the risk-free rate.**

[4] AER, ACCC.

Accepted. We believe this change would not make a notable variation to the overall MRP estimate and on that basis we accept this change.

Sydney Water reiterates a concern we raised in our submission, in regard to the volatility in the current MRP estimates as it could instil unnecessary volatility in the WACC outcome. We believe this is a matter for IPART to consider in the context of further refining their approach in the future.

17. In combining different DDM MRP estimates, move from the midpoint to a median approach, but do not exclude outliers.

Supported. IPART's draft decision reflects our position on this issue, which is also consistent with Frontier Economics' view on behalf of Sydney Desalination Plant as cited by IPART in the draft report.

18. Determine the point estimate of current MRP as the weighted average of the market indicators MRP and the median DDM MRP, with a one-third weight to the market indicators MRP and two-thirds weight to the median DDM MRP.

Supported. We acknowledge the underlying reasoning for applying different weightings, and support this change on the basis that it would improve accuracy of the WACC.

19. Continue to re-estimate equity betas at each price review to inform our assessment of whether the existing estimates remain appropriate.

Accepted. Our acceptance relies on IPART's statement that any change to the value of equity beta would only be effected if there is sufficient evidence to do so. By this statement, IPART have addressed the key concerns that we raised in our submission. We urge IPART to take sufficient care not to instill volatility in the WACC outcome by unnecessarily changing the equity beta value.

20. Use the broadest possible selection of proxy companies to estimate equity beta, but exclude thinly traded stocks.

Supported. We consider that a broader selection will produce a more accurate estimate. However, we would caution IPART against including thinly traded stocks that could have an unnecessary influence on the beta outcome and also the inclusion of additional firms that may have less validity as proxies.

21. Determine the appropriate equity beta having regard to equity betas calculated using the OLS method with the Vasicek adjustment.

Accepted. As raised in our submission to IPART's preliminary WACC paper, we believe IPART ought to consider or account for at least the following potential biases: capital structure, data frequency, portfolio weighting, estimation period, and known downward bias of equity betas in the capital asset pricing model (CAPM) for betas <1. IPART should consider the extent influence of these biases may have on IPART's regulatory WACC outcome.

Combining measurements to derive the WACC

22. Maintain our 2013 method of constructing the uncertainty index.

Supported.

23. Maintain our 2013 method decision rule.

Supported.

24. Continue to use our discretion to determine the appropriate weighting of current and historical average market data when the market is in an abnormal state, and to consult with stakeholders before we make our decisions.

Supported.

25. Continue to re-estimate the gearing of the benchmark entity at each price review to inform our assessment of whether the existing estimates remain appropriate.

Accepted. Sydney Water did not support IPART's preliminary position. However, IPART's draft position has elaborated that gearing will be reviewed along with the beta and any adjustment to the gearing will be backed by sufficient evidence. Further IPART have stated they will undertake reviews early in price review processes, allowing incorporation into price submissions. On this basis, we accept this change.

Measuring inflation and gamma

26. In converting our nominal WACC inputs into real terms, adjust them by the expected rate of inflation over the regulatory period.

Supported.

27. Calculate the average expected inflation rate as the geometric average of:

- **the RBA's 1-year ahead inflation forecast in its most recently issued Statement of Monetary Policy for the first year of the regulatory period, and**
- **the midpoint of the RBA's target inflation band (2.5 percent), for the remaining years in the regulatory period.**

Supported.

28. Reconsider whether we should move to a break-even inflation method to calculate the average expected inflation rate at the next review of our WACC method.

Supported.

29. Calculate expected inflation as the geometric average of the change in the level of prices.

Supported.

30. Define the 1-year ahead RBA forecast we use to estimate inflation, as the inflation forecast:

- **in the RBA's most recently issued Statement of Monetary Policy, and**
- **that is closest to 12 months ahead of the start of the regulatory period.**

Supported.

31. Continue to use 0.25 as the value for gamma.

Supported.

3 Specific Issues of Concern for Sydney Water

3.1 Cost of Debt

3.1.1 IPART's draft decision

IPART's draft decision for the regulatory cost of debt (CoD) is to, absent economic uncertainty, maintain its prevailing methodology and estimate the regulatory CoD as the midpoint (50 percent weighting) between current and historical CoD estimates. IPART's draft decision, broadly speaking, is justified on the view that the current CoD reflects useful information as to the marginal cost of raising debt finance near the start of the regulatory period.

However, where IPART's draft decision differs from its prevailing methodology is in the proposal to update monthly the current CoD, initially set for the regulatory period, to reflect changes in the current CoD during the regulatory period, while keeping account of differences. The cumulative net differences are then compounded and used to make an adjustment for current CoD windfall gains and losses via the notional revenue requirement at the beginning of the next regulatory period using a net present value (NPV) neutral true-up (true-up).

Overall, IPART considers its draft decision to the current CoD will reduce the risks for regulated utilities of having to theoretically refinance 50 percent of their debt at the start of any regulatory period.

This change would apply to decisions made on or after 1 July 2018, meaning for Sydney Water's 4-year regulatory cycle, a true-up will be applied to revenue and prices from the 2024 determination.

3.1.2 Sydney Water's position

Trailing average cost of debt

Sydney Water, as set out in our previous submission on the WACC and in our submission to the Issues Paper, maintains a preference for a 10-year trailing average CoD, with annual update.[5] We believe that the 10-year trailing average cost best reflects the efficient CoD for a benchmark entity with long-lived assets. Such a benchmark entity seeks to minimise refinancing risk by issuing longer term debt and staggering debt maturities over time, thereby minimising the amount of debt that must be refinanced at any one time.

However, we acknowledge that IPART's objective for this review is to identify opportunities for only incremental improvements to the method of setting the WACC while maintaining the stability and predictability of regulatory decisions. To this end we see the CoD based on a 10-year trailing average methodology as an area for further engagement and consideration by IPART for future, longer-term reviews of the WACC.

[5] Sydney Water Submission to IPART discussion paper: *Review of method for determining the WACC*, March 2013; Sydney Water Submission to IPART's WACC review issues paper 2017-18, August 2017.

Current cost of debt

IPART's draft decision is to continue to give a 50 percent weighting to the current CoD and adjust monthly this estimate to reflect changes in the efficient current CoD during the regulatory period.

Although we welcome IPART's draft decision to recognise the refinancing risks to utilities implied by the current CoD methodology as a step in the right direction, we in principle do not support the approach proposed as it does not in effect mitigate refinancing risk. Under IPART's draft decision the current CoD (base) that is set at the start of the regulatory period will continue to be measured over a narrow reference period of two months and then updated during the regulatory period (ex-post current CoD).

This approach has practical implications, in that, should a regulated entity seek to match this risk profile they will also have to:

- have the CoD of their actual debt portfolio be in line with the current CoD (base) in the IPART determination; and,
- manage their debt portfolio during the determination period to replicate IPART's approach to referencing the ex-post current monthly CoD for true-up purposes.

Further, to hedge IPART's base CoD estimate, regulated utilities will be required to structure their debt portfolios to replicate IPART's approach. This will require refinancing or repricing 50 percent of their debt portfolio over a narrow time period of two months to match the approach used by IPART. This proposal by IPART does not have the desired effect of reducing refinancing risk as it continues to concentrate debt maturities and repricing transactions over too short a time horizon.

Therefore, Sydney Water proposes that an effective strategy to manage refinancing risk is to extend the reference period for calculating the current CoD (base) to a trailing average of 4 years. This will allow regulated entities to structure their debt portfolios to manage refinancing risk by avoiding a significant concentration of debt refinancing or repricing in any one year.

Finally, as a matter of efficiency and good regulatory practice, we consider that it is important that a utility be able to match IPART's true-up quantum for adjusting the current CoD (base), ensuring the actual debt costs of the utility do not differ significantly from IPART's ex-post current CoD allowance.

True-up of the current cost of debt

IPART have proposed that the adjustment to the current CoD (base) be made at the beginning of the following regulatory period using an NPV neutral true-up. In practice as mentioned in the above section, it would be unlikely for an efficient benchmark entity to refinance approximately 1 percent of its total debt monthly.

That said, Sydney Water believes the use of monthly data will provide a fair estimate of efficient debt costs over longer periods relative to say a yearly reference period and ought to be avoided.

Further, Sydney Water believes that to maintain good regulatory practice, contributing to transparency and predictability of the WACC, IPART ought to consider at least the following in relation to the practicality of the true-up:

- Clear and timely guidance on how the current CoD (ex-post) will be measured eg, average for the month, end-of-the-month.
- Periodicity of publishing benchmarks of actual benchmark current cost – Sydney Water's preference is for monthly publications, allowing utilities to track how they are performing against the benchmark.
- Details of data sources, especially for the months leading up to the determination period where the actual CoD will not have yet been known.

3.2 Timing of True-up

3.2.1 Sydney Water's position and assessment against regulatory pricing principles

Given IPART's draft decision to maintain the 50 percent weighting to the current CoD, we support IPART's approach to provide an NPV-neutral true-up of the current CoD at the end of the regulatory period. In practice, the implication of this approach is that end customer prices will in real terms, all else equal, remain constant for the entirety of the regulatory period – a single price update – instead of being subject to random changes annually ie, multiple price changes.

We have based our broad support of updating prices once (single NPV-neutral true-up) via a high-level assessment of each approach relative to generally accepted good pricing practice / regulatory pricing principles perspectives in Table 1. Sydney Water understands these principles to broadly include:

- **Economic efficiency** – prices should be set such that they encourage the efficient investment in and use of regulated services and infrastructure ie, efficient connection and disconnection decisions and usage decisions.
- **Equity / fairness** – whilst equity is a subjective test/principle, generally, it is reasonable to broadly assume that customers would want to face the same or similar price as other consumers who face the same / similar circumstances or cost structures.
- **Ease of understanding** – a tariff / price should be easy to understand and calculate / forecast by the customer. The more complex the reason for a price change or difficult to understand for a reasonable customer, then customers are less likely to be responsive to the price signal, negating any allocative efficiency benefits. Therefore, a less cost-reflective price in the short-run may be more economically rational, making less frequent longer-run changes more effective than a difficult to understand / explain cost-reflective short-run price change.
- **Predictable & stable** – prices should be predictable and stable. Volatility in prices can lead to poor decision-making and uncertainty for customers, such as, investing in water saving technology, which is sunk, based on an analysis of today's tariff structure / price, only to have that information alter the outcome of their decision the following period possibly stranding their investment.
- **Flexibility** – tariffs should be flexible enough to cater for situations faced by utilities and / or demanded by end consumers, meaning there may not be a one-size fits all approach and there should be a balance between flexibility and prescription.
- **Implementation costs** – a tariff structure or cost pass-through mechanism will not have a net efficiency benefit if the implementation and administration costs outweigh any benefits derived.

- **Revenue adequacy** – prices (fixed and variable tariffs) should be set at such a level to provide a reasonable opportunity for firms to be able to recover their efficient costs of the provision of regulated services.

Table 1: True-up timing assessment against regulatory pricing principles

Pricing Principle	Single price change– NPV-neutral true-up	Multiple price changes– annual updates	Comment
Economic Efficiency	✓	✓	Both approaches would see usage (LRMC) prices remain constant throughout the regulatory period, maintaining efficient price signals, all else equal.
Equity / Fairness	✓	✓	All customers will face equivalent prices in all period ie, NPV equivalent approaches, making customer no worse-off through time. That said, absent exacting customer research an exacting preference for annual vs end of period price updates is not yet known.
Ease of understanding	✓	✗	Relative to current common concepts such as inflation, CoD concepts and changes are difficult to explain to customers.
Predictable & Stable	✓	✗	CoD parameters ie, interest changes, subject prices to exogenous factors which can shift in a positive or negative direction with unknown quanta within a single regulatory period. Therefore, annual updates are less stable & predictable, all else equal.
Flexibility	✗	✓	Privately owned firms such as SDP face different debt financing restrictions relative to government owned firms, and so may have different pricing needs, so annual updates may accommodate this need more thoroughly, see sections 3.2.2 & 3.2.3. Further, exacting customer preference information of annual vs end of period price updates is not yet known.
(Low) Implementation Costs	✓	✗	In our submission[6] to IPART's issues paper, we indicated the administrative complexity and the challenges we currently face in implementing annual price updates.
Revenue Adequacy	✓	✓	Both approaches are NPV neutral and equivalent.

[6] See Sydney Water submission to IPART's WACC review issues paper 2017-18, August 2017, p. 20.

Table 1 highlights that a single NPV-neutral true-up currently, all else equal, likely adheres to more of the broad pricing principles outlined, meaning, absent more detailed and exacting customer research on this issue:

1. a single NPV-neutral true-up approach is likely to best serve the long-term interests of end-users; and,
2. IPART ought to retain its draft decision to apply a single NPV-neutral true-up.

Overall, Sydney Water considers that currently the benefits to our customers are unlikely to be material (approximately +/-$4-5 nominal per annum and less in real terms) when assessed against the additional complexity and cost of annually updating prices for changes to the current CoD only.

That said, we acknowledge that absent more detailed and exacting customer research on this issue, a responsibility that most likely rests with Sydney Water given we serve all of Sydney's end customers, this result is indicative only and may change overtime. Therefore, in principle, Sydney Water is not, in the long-run, averse to annually updated prices particularly when combined with a benchmark CoD based on a 10-year trailing average, which we have always supported. To this end, and acknowledging that the single NPV-neutral true-up approach in principle is less flexible than an annual price update approach, we encourage IPART to consider applying a flexible hybrid approach to this issue. A hybrid approach could include allowing:

1. Sydney Water to apply a single NPV-neutral true-up for its own CoD changes.
2. Bulk water suppliers apply an annual update of CoD changes and pass-through to Sydney Water these costs annually.

Sydney Water's rationale for this position is outlined in the below sections.

3.2.2 Bulk water suppliers' preferred timing for true-up

In their respective submissions, WaterNSW and SDP have stated their preferences to adopt annual updates for the CoD, broadly basing their views on two factors:

1. Customer research from other jurisdictions (other states or regions within NSW) and/or industries suggests that customers prefer small incremental unidirectional price changes rather than single one-off price changes.
2. The cashflow[7] impact on private equity firms such as Sydney Desalination Plant (SDP), could have negative debt covenant impacts.

In relation to customer preferences for small incremental unidirectional price changes, Sydney Water does not believe that there is conclusive evidence available for the NSW urban water market to be able to verify, one-way or the other, customer preferences. Further, we do not believe that all customers are equivalent, and preferences from other states or industries are not necessarily relevant to the NSW urban water market. We believe that this view is in line with IPART's position in relation to not aligning all parts of the WACC methodology with practices in

[7] SDP, Submission to IPART issues paper, August 2017, p. 2.

other parts of Australia. That said, when bulk water suppliers raise customer preference in relation to pricing, we assume, in the case of WaterNSW, they are referring to the preferences of their rural customers. Sydney Water being the only urban customer of WaterNSW and SDP, we have clearly stated in our previous WACC submission our preference for an NPV-neutral true-up or a single price change.

In reference to the impact on private equity firms, we acknowledge that while our bulk water suppliers may not face the same challenges we face in implementing annual price updates to retail consumers, they may have commercial and financial targets such as maintaining minimum levels of credit metrics and meeting financing covenants. These may require them to pass on immediately the cost/benefits of updated debt allowances rather than at the end of the regulatory period. It may also be the case that such immediate pass-through could reduce the costs to private equity firms, and hence the cost to Sydney Water's customers.

We believe we can do this relatively simply, based on extending the existing pass-through arrangements for bulk water costs.

Overall, in the interests of flexibility we would support an annual CoD pass-through for bulk water suppliers based on the following views:

- Private equity firms may in fact pass-through lower CoD amounts annually.
- Existing pass-through arrangements for bulk water costs can easily be accommodated as part of existing regulatory and administrative arrangements (see section below for more detail).
- Price impacts from bulk water suppliers (average residential customer bills is +/-$1-1.2 per annum in nominal prices and less in real terms), relative to those derived from Sydney Waters RAB.
- Absent any unequivocal customer evidence for a preferred approach to cost pass-through/price changes, it would not be principled to deny bulk water suppliers their position (given small customer impacts).

3.2.3 Pass-through of bulk water supplier annual cost of debt true-up

If IPART were to adopt annual updates of the CoD for bulk water suppliers and allow the cost differences to be passed through to Sydney Water on an annual basis, then Sydney Water would prefer to pass on the changes in the bulk water costs annually (with no smoothing across the post-tax revenue model) to end customers while accumulating the changes due to our own CoD for a true-up at the next determination.

Under our current determination, the additional costs to Sydney Water of purchasing desalinated water is passed through to water consumers' fixed service charges at a 1-year lag. This service charge pass-through mechanism can accommodate the additional costs (or benefits) to Sydney Water due to SDP's updated current CoD allowances.

With respect to changes in WaterNSW costs, IPART introduced in the 2016 determination, a service charge cost pass-through mechanism to compensate Sydney Water for actual bulk water costs incurred from WaterNSW for transfers from Shoalhaven. Under this mechanism, the difference between Sydney Water's forecast bulk water costs and its actual bulk water costs from

WaterNSW will be passed through to Sydney Water's customers at a year's lag via the water service charge.

If IPART were to allow an annual CoD true-up for WaterNSW, then Sydney Water proposes that IPART extend this water service charge pass-through mechanism to enable us to pass-through to customers the annual changes in WaterNSW's CoD allowance.

Administering the cost pass-through to Sydney Water's customers of SDP and WaterNSW's updated CoD allowances would be relatively simple to implement relative to the need to smooth via the post-tax revenue model all of Sydney Water's CoD differences, as the cost changes affect only our customers' water service charges and the price adjustment mechanism is already in place.

We do not expect the changes in the average customer residential bill due to annual changes in the CoD for SDP and WaterNSW to be material, given the size of SDP and WaterNSW's RAB's relative to that of Sydney Water. Our estimate of the average total likely range of impact on average residential customer bills is +/-$1-1.2 per annum in nominal prices.

The true-up for Sydney Water's own actual CoD allowance would then occur at the beginning of the following regulatory period per IPART's proposed true-up mechanism, and will be factored along with other inputs into the calculation of Sydney Water's notional revenue requirement and prices by IPART for the next determination.