HUNTER WATER RESPONSE TO IPART ISSUES PAPER

Review of our WACC method

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Hunter Water Corporation

Response to IPART's Issues Paper: Review of our WACC method

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EXECUTIVE SUMMARY

Hunter Water considers that IPART's 2013 WACC methodology review resulted in a far better approach to the setting of financing costs. Hunter Water welcomed IPART's setting of decision rules in the WACC formula, the use of externally available information sources for each parameter, the inclusion of the uncertainty index, and the publication of biannual WACC updates. IPART's WACC method enabled Hunter Water to track a likely WACC outcome throughout the course of the 2015-16 price review. IPART's current WACC methodology satisfies the test of replicability, stability and transparency.

Hunter Water appreciates the work that IPART has undertaken in researching and drafting the issues paper for this WACC review. IPART has set out a comprehensive description of all components of the WACC methodology, explained the reasoning for its current approach and identified possible areas for improvement or refinement. IPART initiated this review and has taken the time and effort to document the current state of play in WACC regulation across Australian jurisdictions. This is a sign of best practice economic regulation.

IPART has indicated that it will consider incremental improvements to the WACC method to better reflect efficient financing costs of the benchmark firm. IPART's preliminary view supports a number of minor changes that should improve the precision of the WACC estimate, such as synchronising sampling dates and annualising bond yields.

IPART has also stated that it will consider further improvements to the WACC method where it is feasible and there are material benefits from doing so.

IPART defines a benchmark entity as a hypothetical firm operating in a competitive market that faces similar risks to the regulated business. This benchmark has important implications for determining the prudent and efficient approach for setting the cost of debt allowance in the WACC method.

Water utilities are capital intensive businesses where service provision relies on making major capital investments with large up-front costs and long asset lives. The WACC method should take into account the particular risks and challenges associated with financing large infrastructure assets and asset renewals. Hunter Water is of the view that an efficient debt management strategy would therefore be heavily weighted to longer term debt with staggered maturities. This would allow the benchmark entity to incrementally refinance debt in a way that matches the stable levels of capital investment in long-lived infrastructure assets.

The WACC method should reflect this efficient debt management strategy by setting the cost of debt allowance using a single measure of the ten-year trailing average of historical rates or, at a minimum, increase the weighting given to the long-term cost of debt. Refinancing half of all debt at the same time every few years to take advantage of current market rates is not an efficient financing strategy for a sector investing in assets with 100 year service lives.

Hunter Water's business is characterised by relatively stable customer connection and demand growth, along with well-established and accepted price structures. Customers in the Lower Hunter have indicated support for a smoothing of any significant price movements through time.

IPART's methodology should take account of annual movements in borrowing costs for the benchmark entity throughout a price path. Hunter Water sets out a mechanism whereby IPART tracks and records the net movement in borrowing costs for an entity that refinances 10 per cent of debt each year. IPART would allow a true-up for actual costs in the following regulatory period and apply NPV smoothing to even out any material price impact. This approach allows the benchmark entity to recover efficient financing costs while providing price certainty for customers throughout each price period.

IPART acknowledges weaknesses in the beta calculation as there are few close proxy companies for the benchmark entity as well as questions about the best statistical technique and the quality of input

data. Hunter Water is of the view that the data set used for the equity beta analysis should take a long-term perspective, drawing in all statistically strong estimates of comparator companies. The period for measuring the beta estimate should not be limited by a short rolling time period. Given the relative importance of the equity beta to the final WACC estimate, this approach would add a justifiable degree of stability to this parameter.

Hunter Water supports IPART's inclusion of the uncertainty index in the WACC methodology. Hunter Water understands that IPART designed this mechanism to provide a safety valve during extreme events in financial markets. IPART would provide regulated entities and stakeholders an opportunity to explain and document the circumstances at the time that may warrant a departure from the mid-point of the WACC parameters. Hunter Water does not propose any narrowing of the threshold for triggering this mechanism.

IPART's method for measuring the WACC inflation estimate overstates the adjustment to the nominal WACC in the current low inflation rate environment. The breakeven inflation measure may provide a more accurate estimate of the real yield a utility would have achieved under the cost of debt methodology, creating a direct link between the market parameters that IPART uses to calculate the cost of debt and the inflation measure used to deflate it. Hunter Water invites IPART to comment on the merits of the breakeven inflation measure in the draft report.

1 INTRODUCTION

Hunter Water welcomes the opportunity to respond to the Independent Pricing and Regulatory Tribunal's (IPART's) *Review of our WACC method – Issues Paper* (the issues paper) as published on 4 July 2017.

Hunter Water considers that the current WACC method is generally working well and therefore this response provides specific comments on five matters:

1) The benchmark firm and efficient cost of debt
2) Cost of debt over the determination period
3) Estimating the equity beta
4) Applying the uncertainty index
5) An accurate inflation estimate

Hunter Water sets out a position on each of the 26 questions detailed in IPART's issues paper in Appendix A.

2 THE BENCHMARK FIRM AND EFFICIENT COST OF DEBT

2.1 The benchmark firm

IPART's issues paper outlines potential refinements to the cost of debt methodology as currently adopted in the WACC. To provide comment on these, Hunter Water has considered the debt management practices of the benchmark entity; '*A firm operating in a competitive market facing similar risks to the regulated business.*'

Competitive market

In an unregulated competitive market, an efficient firm makes debt financing decisions that aim to minimise finance costs and limit refinancing risk. Another way of framing the financing question is to ask how an efficient service provider would seek to minimise the expected present value of its financing costs over the life of its assets. There are three key factors that drive financing decisions.

1. **The term of debt financed (short or long term maturity)** – firms will balance interest costs (that tend to be higher over a longer term), issuance costs (will be lower when fewer transactions are undertaken), interest rate risk and refinancing risk

2. **Whether debt maturities are staggered or aligned across a portfolio** – firms will consider a risk appetite for refinancing and interest rate risk. By staggering maturities in a debt portfolio, a firm can manage risk as a smaller proportion of the firm's debt would be affected by unfavourable market conditions at any one time.

3. **Whether interest rates are fixed or floating** – firms will consider a risk appetite for refinancing and interest rate risk. Floating rates can allow an opportunity to benefit from favourable current market conditions if they exist, however expose a firm to greater interest rate and refinancing risk.

IPART's cost of debt method should replicate an efficient debt management strategy. Taking IPART's definition of a benchmark entity, an efficient comparator firm operating in a competitive market would adopt financing practices that minimise financing costs over the life of the assets. Regulatory influences such as price reset periods would not be relevant. Similarly, the benchmark firm would not have the same access to debt finance from NSW Treasury Corporation as is the case with most of the NSW regulated water utilities.

Facing similar risks

IPART's cost of debt approach for a benchmark entity operating in the water sector should recognise that there are particular risks and challenges associated with financing large infrastructure assets and asset renewals. Infrastructure assets involve substantial capital investments, large up-front costs and assets with long service lives. For example, IPART has set Hunter Water's asset lives for regulatory depreciation purposes at 66 years for existing assets and 84 years for new assets.

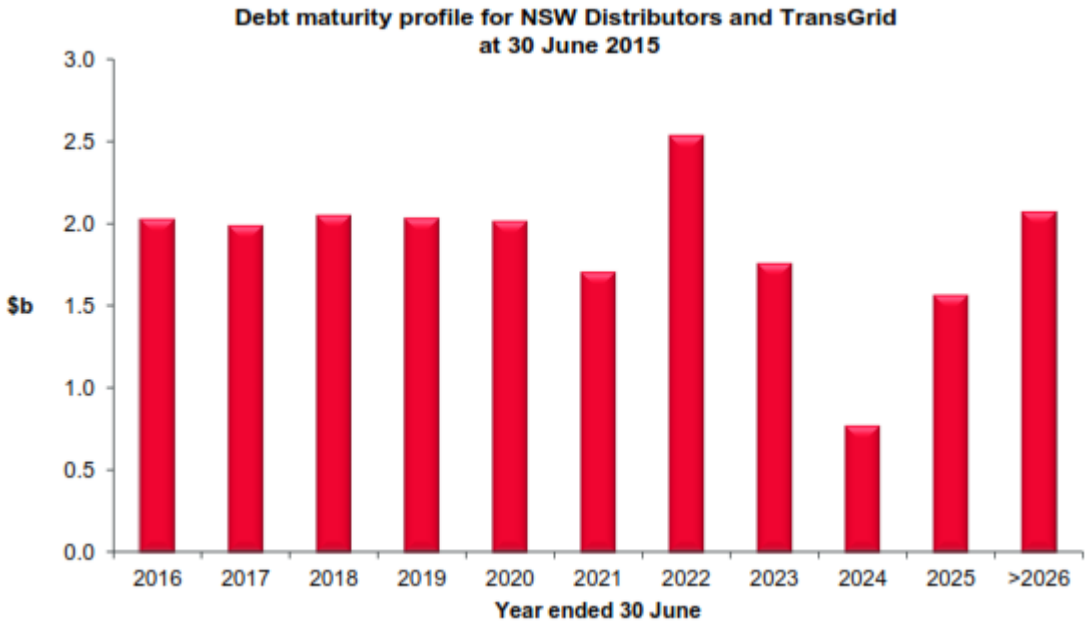
Efficient debt management strategy

Due to the capital intensive and long lives associated with infrastructure assets, utilities are especially exposed to refinancing risk (due to the long duration for which debt finance is required) and interest rate risk (due to the magnitude and long duration for which debt finance is required). A competitive benchmark firm investing in long-lived infrastructure assets would seek to reduce exposure to both types of risk.

Hunter Water is of the view that an efficient debt management strategy would be heavily weighted to longer term debt with staggered maturities. Issuing longer-term fixed rate debt allows firms a greater time period over which they can refinance debt and provides greater certainty over the interest rate which is applied. A prudent capital-intensive service provider would ensure a relatively smooth profile of debt maturities so that refinancing or financing occurs incrementally each year. In that way, long-term debt appropriately matches the long life of large infrastructure assets.

The debt maturity profile of NSW electricity distributors at June 2015 is provided in Figure 1. This sector comprises infrastructure companies in NSW with a combined debt portfolio of $20.6 billon.[1] These businesses have adopted a staggered maturity cycle as a prudent and proven debt management strategy, despite cost of debt allowances in the Australian Energy Regulator's WACC methodology imposing an on-the day approach at this time.

Figure 1: NSW Distributors and TransGrid Debt Maturity profile



Source: *NSW Auditor-General's Report to Parliament, Volume Thirteen 2015, Electricity Financial Controls, p.33*

2.2 IPART's cost of debt methodology

IPART currently calculates a current and historic average of the risk-free rate (measured by the 10-year Australian Government Bond (AGS) yield) and the risk premium (measured by the spread between BBB rated corporate bond yields and 10-year AGS yields). IPART's approach resembles a debt management strategy whereby 50 per cent of the total debt portfolio is available for financing or refinancing within a 40 day window every few years.

Hunter Water considers that the cost of debt component should apply a 100 per cent trailing historic approach averaged over ten years or, at a minimum, give a greater weighting to long-term debt costs.

IPART states that a benefit of considering current market data is that it could '*provide an efficient price signal to a firm when it is deciding whether to expand capacity or make other investment decisions'*.[2] It can be argued however that investment decision making, undertaken by a firm with risks similar to that of the regulated water entities, are largely driven by regulatory standards (eg, environment and health)

[1] Audit Office of NSW, 2015, p.33.
[2] IPART, 2017, p.23

and not of a discretionary nature. Water utilities have a relatively stable capital investment profile each year.

Hunter Water's investment decisions take a long term focus and are driven by a regulatory obligation to ensure the delivery of efficient, safe and reliable services against a backdrop of growing demand and ageing infrastructure. The expenditure for construction of large-scale infrastructure or the renewal of existing assets cannot be readily re-profiled to take advantage of debt market conditions.

Hunter Water engaged Ernst & Young to conduct an independent debt management review in 2015, including an analysis of strategies used by peers. [3] Ernst & Young concluded the debt portfolios of peer companies (Sydney Water, Sydney Airport and Ausnet Services) have greater average tenors but also make use of extra-long term issues of greater than ten years. This allows such companies the ability to maintain a longer average tenor which matches the average life of assets.

Ernst & Young considered IPART's approach of applying a 50 per cent weighting to short term borrowing costs with debt maturing in a single year would materially increase refinancing risk. Hunter Water would have to rely on funding available through its relationship with NSW TCorp – a financing relationship not open to a competitive benchmark entity. It was worth noting that Hunter Water, Sydney Water and Water NSW (Greater Sydney) all have a common four-year determination period ending in June 2020. IPART effectively implies that TCorp can facilitate the refinancing of debt for all three utilities, based on a 60 per cent gearing, in the same 40-day window without any impact on the market and borrowing costs for each utility.

Ernst & Young consider having a large proportion of debt maturing in any one year *'possibly ignores the wider commercial needs of the business, the matching of debt to the profile of the underlying asset profile and increases exposure to future interest rate fluctuations.*' Ernst & Young recommended a debt financing strategy based on issuing long term debt to manage refinancing and interest rate risk, while maintaining a small level of short term debt to capitalise on periodic flattening of the yield curve.

Hunter Water considers that moving to 100 per cent of historic averages for the cost of debt parameters, or a greater weighting for the long-term rates, can be made 'incremental' by adopting a transition to historical long term debt costs. This is a matter that Hunter Water would like to explore in more detail at the draft report stage should IPART contemplate this approach.

[3] Ernst and Young, 2015 (Commercial in Confidence)

3 COST OF DEBT OVER THE DETERMINATION PERIOD

IPART currently sets one value for the cost of debt over the price determination period. IPART recognises that this provides price certainty for customers throughout the determination period, but may result in WACC-driven price movements from one regulatory period to the next. Many utility regulators update the cost of debt parameter on an annual basis to even out price and bill impacts.

IPART's issues paper proposes three methodologies in relation to the cost of debt and the frequency of WACC updates and price adjustments:

1. Continue the current methodology and apply one value for the cost of debt that applies for the whole regulatory period.
2. Set a value for the cost of debt at the start of the period and adjust it each year to reflect changes in the market.
3. Apply one value for the cost of debt for the whole regulatory period, however adjust this parameter to take account of expected changes in debt costs in the price period using forward interest rates.[4]

Hunter Water considers that IPART should only consider methodologies 2 and 3 if the cost of debt parameter weighting is changed to 100 per cent trailing average. If the cost of debt is not set using historical rates, costs of annual volatility in pricing or hedging needed to emulate the efficient benchmarking would outweigh the benefits of these methods. Furthermore, Hunter Water is of the view that methodology 3 should include a true-up at the end of each regulatory period to take account of actual movements, with adjustments made at the beginning of the regulatory reset. The advantages and disadvantages of each methodology are summarised in Table 1.

Table 1: Updating WACC and customer prices based on 100% trailing average approach

	Advantages	Disadvantages
Current methodology	**Price certainty for customers -** Hunter Water has supported the four year price determination in the past, noting that customers benefit from price certainty over the price path. This particularly applies to large commercial and industrial customers where water prices can represent a significant input cost for business.[5] **Revenue smoothing –** IPART manages the potential issue of 'step movements' in cost of debt outcomes from one determination to the next by net present value revenue smoothing mechanisms. This ensures that any large changes in the cost of debt and resulting WACC are passed onto customers over the regulatory period on a smoothed profile. Hunter Water fully recovers revenue requirements on a present value basis. **Administrative simplicity** – The simplest of the three methodologies, a new cost of debt and revenue requirement do not need	**Refinancing risk –** This methodology does not emulate operations of a competitive benchmark firm completely. Some refinancing risk will remain due to updates only at the start of regulatory reset period. **No alignment with regulatory period** – Favourable outcomes for customers are achieved when debt WACC parameters and actual debt costs are closely aligned. This avoids over or under-compensation by customers within a regulatory period. Under volatile market conditions, this method may be the least reflective of actual debt costs faced by a regulated utility.

[4] IPART, 2017, p.20
[5] Hunter Water, 2015, p.60.

	to be calculated and applied to price structures on an annual basis.	
Annual updates	**Limits step changes in pricing –** As the cost of debt is updated annually, changes in market conditions are reflected in prices as they occur. This promotes incremental changes to the cost of debt rather than potential step changes in line with the start of regulatory periods. **Reduction of refinancing risk –** Refinancing risk is minimised under this methodology as actual costs of raising debt throughout the period are taken into account. Efficient debt management practices are encouraged as the actual costs of debt can be in-sync with the cost of debt allowance under a 100% trailing average approach.	**Lower price certainty for customers –** Whilst customers will retain some visibility as to prices over the four year price determination period, these are dependent on the annual updates. **Lower price stability within regulatory period** - As the revenue smoothing mechanism is no longer applicable to annual updates, resulting prices may contain some year on year volatility. **Implementation considerations** – Annual calculations of the cost of debt, updated revenue requirements and flow on effects to prices means this methodology is the most administratively complex. This approach requires a cost pass-through mechanism to ensure that benefits outweigh extra resourcing and administrative costs.
Adjust cost of debt for expected changes over regulatory period	**Price certainty for customers –** Similar to the current methodology, customers benefit from a greater degree of price certainty over the price period. **Revenue smoothing -** Similar to the current methodology, the potential issue of 'step movements' in cost of debt outcomes from one determination to the next has been appropriately dealt with by IPART through net present value revenue smoothing mechanisms. **Alignment with regulatory period** – This method takes account of expected actual debt costs over the regulatory period and as such promotes alignment with WACC parameters. This method is not as effective in this respect as the annual updates.	**Refinancing risk –** This methodology does not emulate operations of a competitive benchmark firm completely. Some refinancing risk will remain due to updates only at the start of regulatory reset period.

Hunter Water's 2015 price submission to IPART supported a four-year determination period on the basis that it strikes a reasonable balance for a water utility to manage the various risks, costs and incentives that arise under IPART's regulatory framework. Hunter Water has emphasised the benefit of price regulation and price certainty for customers under this arrangement.

It is also relevant to note that Hunter Water does not operate under a revenue cap like utilities in other jurisdictions. IPART determines charges and prices for the full range of regulated services that Hunter Water delivers, in an industry where there is stable year-on-year growth in new connections and customer demand. IPART has adopted pricing principles and pricing structures for the key components of water and wastewater services. Annual price movements are limited to CPI plus or minus adjustments, in line with movements in the regulated revenue requirement. Hunter Water considers that this approach has worked well in practice. Customer engagement work for past price submissions supports this view.

In this context, Hunter Water's preferred approach for updating the WACC cost of debt parameters would follow a four-step process.

1. IPART would set cost of debt parameters for each price determination using a ten-year trailing average referencing actual historical information. IPART would lock in prices for the four-year price path, subject only to CPI movements.

2. IPART would track and record the impact of movements in the cost of debt parameters for each of the four years of the price path. IPART would take account of the movement in the annual revenue requirement based on a ten per cent refinancing of debt at the end of each financial year. At the end of each price path, IPART would calculate the net financial impact of movements in the cost of debt parameters across the four years, again assuming a ten year historical average with an annual one-tenth adjustment.

3. IPART would allow a 'true up' of actual financing costs at the next price determination, based on actual year-to-year movements in the rolling historical cost of debt parameters during the current price path.

4. IPART would apply NPV smoothing of revenues and prices for the next price determination to moderate and transition any material bill impacts for customers associated with the 'true up' mechanism.

IPART's technique of applying NPV revenue smoothing across a price path period works well as a mechanism to even out price impacts through time. The NSW water sector does not experience the same demand volatility as other sectors, nor is IPART implementing any major restructuring or rebalancing of prices. In a sector with relatively stable expenditure programmes, an end of period 'true-up' mechanism for net movements in the cost of debt parameters should result in modest price movements under most circumstances.

If IPART decides not to move to a cost of debt based entirely on the historic trailing average, Hunter Water can see merit in the proposal to adjust the cost of debt over the price period using forward interest rates:

- This method uses market data to better forecast actual costs of debt faced by regulated firms throughout the price period.

- A constant cost of debt allows for price certainty and stability within a regulatory period for customers whilst price revenue smoothing moderates the effects of step changes between regulatory periods.

Under IPART's methodology 3, Hunter Water considers it appropriate for an end of period true-up to take account of differences between the 'expected' adjustment at the beginning of the regulatory period and the actual cost of debt over the period.

4 ESTIMATING THE EQUITY BETA

IPART's estimate of the cost of equity using the Capital Asset Pricing Model is sensitive to the selection of the equity beta. IPART's issues paper documented a number of difficulties faced by utility regulators when endeavouring to derive a reliable and defensible equity beta estimate. Hunter Water is of the view that IPART should adopt a careful and cautious approach when reviewing the equity beta.

IPART's February 2017 Biannual WACC update reported a 0.7 beta estimate as the mid-point for the water industry. IPART's current WACC method sets a 0.8 beta as the high estimate and a 0.6 beta as the low estimate. Moving to either the high or low beta estimate would add or subtract approximately 80 basis points to or from the cost of equity (which has a 40 per cent weighting). For regulated utilities with multi-billion dollar regulatory asset bases, any move away from the midpoint estimate would have a significant impact on the entity's annual revenue requirement.

Under IPART's approach, the benchmark firm operates in a competitive market but faces similar risks to the regulated firm. Water utilities in Australia are almost always owned by state or local government. This places practical limits on IPART's ability to identify a group of comparator listed companies with a history of share price and dividend information. As noted by IPART, *'the more unique the regulated activity, the greater the difficulty in finding suitable proxies'*.[6]

Hunter Water recognises the information constraints and measurement issues that are inherent in the task of calculating empirically robust beta estimates. Unlike most of the other WACC parameters, there is scope for regulator judgement in the data collection and estimation process. Hunter Water considers that IPART should, to the extent possible, take a long-term view using a long-term data set of listed companies in Australia and comparable international markets. This approach would build a greater degree of stability and objectivity into the estimation of the equity beta. Hunter Water considers that this is a reasonable outcome given the complexity of the task and the lack of close proxies amongst listed companies.

Hunter Water would prefer that IPART provided advance notice of the equity beta estimate prior to the commencement of each price review. Early notice would enable the utility to more accurately model likely revenue requirements, assess customer bill impacts and conduct financeability assessments. This would improve the robustness of price submissions and pricing proposals. Alternatively, a review or a sense check of the equity beta could occur on a periodic basis or in response to significant economic events.

[6] IPART,2017,p.35

5 APPLYING THE UNCERTAINTY INDEX

Hunter Water supports the inclusion of the uncertainty index in IPART's WACC methodology.

IPART's 2013 determination of Hunter Water's prices set a WACC estimate, using the former methodology, well below Hunter Water's expectations, and was followed by a credit rating downgrade shortly thereafter. IPART's 2013 WACC methodology review made a number of substantial improvements to the way that the WACC is calculated.

Putting aside the broader issue of setting the cost of debt, Hunter Water considers that IPART has taken the lead and instituted a robust and efficient process for updating and setting the WACC estimate. IPART's WACC methodology sets known decision rules and references externally available data sources. IPART follows an approach that is certain, replicable and transparent. Moody's rating agency's favourable comments on IPART WACC methodology is evidence of good regulatory practice.

Hunter Water is of the view that IPART's uncertainty index would act as a safety valve during extreme or unusual events that materially affect financing decisions. Hunter Water's reading of IPART's 2013 WACC reports and the current issues paper support this view.

IPART has adopted an approach that prescribes a WACC formula, decision rules and data sources for 'normal' market conditions. However, during extreme events a methodology with hard-wired decision rules would preclude IPART from making adjustments that take account of one-off factors and unpredictable or unmanageable movements in financial markets.

Hunter Water understands that triggering this mechanism would allow the regulated utility and other stakeholders an opportunity to document and explain the effect of any extreme event on the utility's financing costs. Hunter Water trusts that it would receive a fair hearing from IPART in such extreme or unique circumstances. IPART could still apply its normal decision rules if there was insufficient evidence to support a departure from the mid-points for each parameter.

IPART's analysis of the uncertainty index in the issues paper shows the index exceeding the threshold during the global financial crisis and a seven month period in 2011, while going close to the threshold at other times. This appears reasonable with the benefit of hindsight. While supportive of the uncertainty index, Hunter Water is not convinced that there is a strong case for narrowing the current threshold.

6 INFLATION ESTIMATE

IPART's input parameters for the cost of debt and equity in the WACC estimate are measured on a nominal basis. IPART deflates the nominal WACC by a forward looking inflation estimate. IPART currently applies an inflation forecast derived from the geometric average of the midpoint of the RBA's one year ahead inflation forecast and the midpoint of the RBA's target inflation band for the following nine years.

IPART's February 2017 WACC update included current market estimates of inflation at 2.4% and a nominal risk free rate of 2.8%, resulting in a real yield of 0.39%. Actual real yields for Commonwealth Capital Indexed bonds over the same reporting period averaged 0.77%, implying an inflation rate of around 2%. At that point in time, using the IPART estimate of inflation to deflate the nominal WACC rate results in an estimated real yield that is 0.40% below actual real yields.

IPART's issues paper recognises that the current approach overestimates inflation in current market conditions. IPART is of the view that long-term inflation expectations are unlikely to deviate too far from the RBA's target range of 2.5 per cent. IPART's preliminary view is that the current approach '*accurately reflects long-term inflation expectations, and is simple to estimate, transparent and replicable by stakeholders'*.[7]

Hunter Water agrees with IPART's statement regarding simplicity, transparency and replicability of the current inflation method. However, Hunter Water considers that there is a legitimate issue worth exploring about the accuracy of the current approach after a nearly two and half year period of relatively low actual inflation outcomes.

Hunter Water questions whether IPART's inflation adjustment should more appropriately reflect parameters inherent in the nominal WACC, as well as conditions likely to be experienced over the course of the regulatory period (rather than the longer term). Internal consistency in WACC parameters should mean that utilities are less likely to be either over or under-compensated for their debt costs, promoting more cost-reflective outcomes for utilities and customers.

Hunter Water considers that there is a reasonable case to argue that a more accurate WACC inflation estimate would use a market-based approach, rather than a method that is designed not to deviate materially from 2.5 per cent.

The breakeven inflation estimate (BEI) measures the difference in yield between a nominal fixed bond rate and an inflation fixed bond rate of the same tenor. Given prevailing inflation outcomes, the BEI measure would provide a more accurate estimate of the real yield a utility would have achieved under the cost of debt methodology, creating a direct link between the market parameters that IPART uses to calculate the cost of debt and the inflation measure used to deflate it.

IPART and other regulators have raised concerns around the reliability and availability of inflation fixed bond data (particularly around 2009). The Australian Office of Financial Management (AOFM) now has a large inflation-linked debt program with over $40 billion indexed par on issue. The AOFM expects additional inflation-linked debt of between $3 billion and $4 billion for 2017-18. Both the Reserve Bank of Australia (RBA) and Bloomberg publish data on indexed government debt.

IPART's issues paper does not explore the merits or limits of the BEI measure. Hunter Water would welcome a more detailed discussion and examination of the BEI measure in IPART's draft report.

[7] IPART,2017,p.45

7 REFERENCES

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APPENDIX A: HUNTER WATER RESPONSE TO IPART'S ISSUES PAPER QUESTIONS

OUR PROPOSED APPROACH

1. Do you agree with our guiding principles? Are there any other principles we should consider?

Hunter Water agrees with these principles and considers that a review guided by this framework will continue to result in a WACC methodology that is robust and defendable.

IPART's approach to this 2017 review is to suggest incremental improvements to refine the calculation of the WACC estimate. IPART has indicated that it will consider more substantial changes to the WACC methodology where there is a strong case for change. This is a sensible approach and good regulatory practice.

Hunter Water has long held the view that price certainty and price stability for customers are key outcomes of the price review process. Hunter Water is mindful of ensuring that movements in WACC estimates are implemented in a way that does not lead to volatility in customer prices. Hunter Water considers 'yo-yo' pricing, whereby prices fall in one period only to increase again in the next, as undesirable.

Further to these principles, Hunter Water considers that the WACC review should focus on replicating and fostering efficient debt management activities within regulated utilities. Consumer's interests are safeguarded when the debt management activities of regulated entities reflect those of a prudent and efficient benchmark firm. This should be IPART's focus when determining the cost of debt allowance. The review of cost of debt parameters should further consider whether outcomes are inadvertently encouraging regulated entities to engage in inefficient debt hedging and swap practices in line with regulatory reset periods.

The default approach of the WACC review should be to maintain the current approach, unless there are compelling reasons for change to increase accuracy, improve efficiency, or enhance stability and certainty.

2. What are the benefits of having a common position across regulators? For which parameters is this consistency most important and why?

Hunter Water is of the view that regulators should be consistently guided by principles that are technically sound and aim for best practice regulation. This does not necessarily mean that regulators need a common position on WACC parameters as this will not automatically represent best practice or result in the same WACC outcomes.

Regulators should continually review and benchmark their methodologies against peers to encourage robust outcomes in their respective jurisdictions. A common position across regulators when it occurs should indicate a best practice position, however should not be promoted for the sake of consistency.

HOW WE MEASURE WACC INPUTS

3. Do you agree with our preliminary view that we should continue to define our benchmark entity as a firm operating in a competitive market facing similar risks to the regulated business?

Hunter Water agrees with the preliminary view that the benchmark firm should continue to be a firm operating in a competitive market facing similar risks to the regulated business. As a regulator, IPART's role is to impose proxy conditions that imitate a hypothetical unregulated market, such that regulated entities do not abuse their monopoly powers. Hunter Water believes the benchmark utility defined supports IPART's role.

It is important that the benchmark entity takes into consideration the risks of operating long term infrastructure assets. This will recognise the risks of substantial up-front costs and capital investment, long lives of assets and long and detailed planning process which drives investment decision-making in a regulated business such as Hunter Water.

4. Do you agree with our preliminary view that we should synchronise sampling across all current parameters to take account of relationships between parameters and minimise systematic bias?

Hunter Water believes that synchronised sampling of parameters represents an incremental improvement that will improve accuracy in the cost of capital. As such, Hunter Water agrees with the preliminary view to synchronise sampling across parameters.

5. Do you agree with our preliminary view that we will choose and advise businesses of our sampling dates in advance? Should we disclose our sampling dates to other stakeholders?

Regulated businesses should be made aware of sampling dates in advance of the release of price determinations. This will allow regulated entities to replicate and properly plan for upcoming cost of capital outcomes and to prudently manage debt requirements.

Sampling dates should not be disclosed to other stakeholders. The disclosure of sampling dates to other parties may impact debt markets if market participants are able to pre-empt future dates. The regulated business would provide relevant stakeholders such as NSW Treasury Corporation and NSW Treasury with sampling dates as the need arises.

COST OF DEBT

6. Should we continue to set a single cost of debt for the regulatory period, or should this cost be updated during the period? If we set a single cost of debt, should it be adjusted to reflect future interest rate expectations using forward interest rates?

Hunter Water sees merit in applying a single cost of debt provided the following conditions are applied;

- 100% trailing average cost of debt approach
- A true-up at the end of the regulatory period to recognise any variances between the expected rates and actuals rates for the annual incremental 10% refinancing.

Section 3 of the main report, *Cost of debt over the determination period,* outlines Hunter Water's views on this issue.

7. Do you agree with our preliminary view that we should continue to use a combination of current market data and historical averages to estimate the cost of debt? If so, do you think we should place more weight on either of the two approaches?

Hunter Water considers that the cost of debt component should be based on a trailing average (100% historical) approach. Section 2 of the main report; *The benchmark firm and appropriate cost of debt*, outlines Hunter Waters views on this issue.

8. Do you agree with our preliminary view that we should continue to use the 10-year BBB rated corporate bond spread data published by the RBA?

Hunter Water agrees with the preliminary view to continue to use the 10-year BBB rated corporate bond spread data published by the RBA.

9. Do you agree with our preliminary view that we should convert the published bond yield data into annualised yields?

Hunter Water supports IPART's preliminary view.

10. Do you agree with our preliminary view that we should continue to use coupon-paying bond yield data in estimating the cost of debt?

Hunter Water agrees with the preliminary view to continue to use coupon-paying bond yield data in estimating the cost of debt.

COST OF EQUITY

11. Do you agree with our preliminary views on how to calculate the cost of equity?

Hunter Water agrees with IPART's preliminary views on how to calculate the cost of equity. This includes the use of 6% as a mid-point for the historical estimate of MRP, the calculation of historic and current parameters, and the weighting of current and historical averages.

Hunter Water accepts the inclusion of current estimates in the cost of equity to replicate investor behaviour and indicate actual costs the regulated firm would face during the regulatory period. This may need to be reviewed in line with any changes made to cost of debt parameters to ensure internally consistent WACC parameters.

12. Do you agree with our preliminary view that we should continue to use the existing six methods to calculate the current MRP? Or should other MRP methods be included?

Hunter Water will provide comment on the method to calculate the current market risk premium in the response to the draft report.

13. Should we change our approach to DDM estimates on analyst price targets and individual analyst EPS forecasts?

Hunter Water will provide comment on the DDM estimates in the response to the draft report.

14. Do you agree with our preliminary view that we should use the median approach to determine the point estimate of the current MRP? Or should we exclude outliers in our calculation?

The issues paper indicates that the median approach can be less affected by outliers and more accurate in instances where not all data estimates may be available. Hunter Water agree with the preliminary view to use the median approach rather than the existing midpoint approach.

15. Do you agree with our preliminary view that we should re-estimate equity betas at each price review?

Section 4 of the main report; *Estimating the equity beta*, outlines Hunter Waters views on this issue.

16. How formal should the process of selecting proxy companies for beta analysis be?

IPART should have a clear and transparent methodology for selecting proxy companies to reinforce principles of transparency, replicability and predictability. The selection of proxy companies could occur under a consultative process whereby utilities can provide comment on selected companies and weighting applied to comparators.

17. How often should beta estimates be refreshed with new econometric analysis?

Section 4 of the main report; *Estimating the equity beta*, outlines Hunter Waters views on this issue.

18. Do you agree with our preliminary view that we should decide on the appropriate beta having regard to the OLS methods with and without adjustments? What adjustments, if any, should be made to estimated betas?

Hunter Water agrees with the preliminary view that the appropriate beta should have regards to the OLS methods with and without adjustments. Hunter Water can see merit in the Vasicek adjustment whereby OLS estimates with a high standard error can be adjusted transparently and objectively.

HOW WE COMBINE MEASUREMENTS TO DERIVE THE WACC

19. Should we consider any changes to how we calculate our uncertainty index?

Hunter Water does not have any proposed changes to the way the uncertainty index is calculated. Section 5 of the main report; *Applying the uncertainty index,* provides commentary on this issue.

20. Do you agree with our preliminary view that we should only consider deviating from our standard approach if the uncertainty index is more than one standard deviation from its historical average since mid-2001?

Hunter Water agrees that IPART should only consider deviating from the standard approach if the uncertainty index is more than one standard deviation from its historical average. This approach ensures that the technical robustness of the WACC methodology remains whilst allowing IPART the ability to sense check overall outcomes when market circumstances are considered abnormal.

21. Do you agree with our preliminary view that we should retain discretion to determine the weighting or current and historical market data when the uncertainty index is outside the range of one standard deviation from its historical average of zero? Should we adopt a specific decision rule for abnormal market conditions? If so, what should the rule be?

Hunter Water agrees with the preliminary view that IPART should retain discretion to determine weighting on current and historical market data when the uncertainty index is outside its range. Section 5 of the main report; *Applying the uncertainty index,* provides commentary on this issue.

During extreme events a methodology with hard-wired decision rules would preclude IPART from making adjustments that take account of one-off factors and unpredictable or unmanageable movements in financial markets. Hunter Water trusts that IPART will exercise sound judgement when determining any deviation from midpoint weightings.

22. Do you agree with our preliminary view that we should review the gearing at each price review?

To allow for enhanced accuracy in price submission planning and price modelling, Hunter Water is of the view that the gearing should be reviewed prior to a price review.

23. Do you agree with our preliminary view that we should continue to use 0.25 as the value for gamma? If not, what evidence can you provide that supports a different value?

Hunter Water agrees with the preliminary view that 0.25 should continue as the value for gamma.

HOW WE MEASURE INFLATION AND GAMMA

24. Do you agree with our preliminary view that we should continue to forecast inflation as the geometric average of the midpoint of the RBA's 1-year ahead inflation forecast and the midpoint of the RBA's target inflation band?

Hunter Water acknowledges that IPART's current approach to forecasting inflation is accurate, simple and transparent over the long-term and as such can see the merits with this as a forecasting methodology. Hunter Water however considers a market based approach may be appropriate to deflate the nominal WACC.

25. Do you agree with our preliminary view that our forward-looking inflation forecast is the best method to deflate the nominal WACC?

Hunter Water believes that breakeven inflation should be considered as an option to deflate the nominal WACC. Breakeven inflation is a market based parameter that can better reflect real yields inherent in the cost of debt. This will promote internal consistency in WACC parameters.

Section 6 of the main report; *Inflation*, outlines Hunter Waters views on this issue.

26. Do you agree with our preliminary view that we should change the way that we calculate expected inflation to consider the geometric average of the change in the level of prices?

Hunter Water recognises the technical logic in calculating expected inflation as the geometric average of the change in the level of prices.