

Response to the Independent Pricing and Regulatory Tribunal Issues Paper

WACC Methodology Review 2017



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1. Introduction

WaterNSW is pleased to provide this submission in response to the Independent Pricing and Regulatory Tribunal of NSW (IPART) *Review of Our WACC Method*, Issues Paper, July 2017 (the Issues Paper).

The weighted cost of capital (WACC) is an important component of IPART price reviews, representing the efficient cost of a hypothetical benchmark businesses' debt and equity. We consider that it is important that there is predictability, transparency and, where possible, incremental improvements over time in the WACC methodology for the benefit of customers, existing and potential investors, debt markets and other relevant stakeholders such as credit rating agencies.

Overall, we agree with IPART that the current WACC Method is working well. That said, we consider that out of sequence WACC Method reviews (such as this review) are good opportunities for continuous improvement in the regulatory environment, and that regulators, including IPART, should be open minded to potential improvements. We welcome and endorse IPART's intent that changes to the methodology should maintain or improve transparency, predictability and replicability.

We are supportive of incremental improvements that are beneficial to our customers and improve the IPART regulatory framework. For example, improvements that IPART has made since 2012, including publication of the biennial WACC Market Update and sharing of determination financial models, has improved the stability, transparency and predictability of the NSW IPART regulatory environment. We note that as a result of these improvements, Moody's has upgraded its assessment of the "Stability and Predictability of the Regulatory Framework" to 'Aa' from 'A'. We commend this improvement, and urge IPART to continue to make incremental improvements to the regulatory framework to achieve a further upgrade to 'Aaa'.

2. Response to Specific Questions

2.1 Our Proposed Approach

2.1.1 Question 1

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

We generally support the guiding principles of the review. We would amend “3” to state

“We should make incremental improvements where there is compelling evidence that they increase the accuracy of the cost of capital faced by a benchmark firm, and contribute to beneficial outcomes for customers”.

This amendment would make it clearer that customer aspects under section 15 of the IPART Act are being considered as part of the Review, including:

- a) the cost of providing the services concerned,
- b) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standard of services,
- d) the effect on general price inflation over the medium term
- k) the social impact of the determinations and recommendations.

2.1.2 Question 2

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

We welcome IPART comparing its WACC Method against other regulators – both domestically and internationally. It is through such examination that opportunities for continuous improvement are found.

We think that there should be a race to best-in-class, and that it is better to have a regulatory environment that is ‘better-and-different’, than the ‘same-and-worse’.

That said, to the extent that there is more in common among regulators, the less economic regulation becomes a barrier to entry, and the more comparable regulated assets in different industries and jurisdictions will be. Increased commonality between regulators can contribute to increased certainty and lowering of overall perceived regulatory risk. This in turn can reduce the cost of capital required by debt and equity investors, and ultimately this is in consumer interests.

Long term monopoly assets held by a Benchmark Efficient Entity (BEE) will be financed by long term debt and long term equity investors looking for stable returns. There is little rationale for differences between regulators on the WACC method for assets with similar risk, if the objective is to provide an allowance based on the efficient financing practices of the BEE for long term infrastructure assets.

In this light, we consider that recent changes to the WACC methodology made by the Australian Energy Regulator (AER) should be closely examined by IPART.

It could reasonably be expected that there be similarities between regulators of long term infrastructure assets in terms of:

- Cost of Debt allowance calculation methodology, including both the risk free rate and the debt risk premium;

- Cost of Equity allowance calculation methodology, including the risk free rate and approach to determining the appropriate equity beta (noting the actual beta should vary according to industry risk);
- Inflation;
- Gamma; and
- Gearing.

For avoidance of doubt, it is our view that there could be reasonably expected differences between regulated industries in terms of:

- Equity beta.

2.2 How we measure WACC inputs

2.2.1 Question 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?

Yes.

2.2.2 Question 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?

Yes.

2.2.3 Question 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 advised of sampling dates in advance. However, we are not aware of any other stakeholders who should be provided with the sampling dates. Publishing this information or providing it to financial institutions could allow market participants to attempt to drive up the cost of debt during the sampling period. This would ultimately result in customers unfairly bearing higher water bills for no additional benefit.

2.3 Cost of debt

2.3.1 Question 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?

We support and advocate incremental improvements to the cost-of-debt methodology that will reduce price shocks to customers at the beginning of regulatory periods.

We agree that the current WACC method can be replicated by IPART-regulated-utilities (indeed, WaterNSW's debt management policy is to follow a risk neutral position by shadowing / replicating the IPART method benchmark).

Accordingly, WaterNSW is commercially indifferent to changes in cost-of-debt methodology, provided they are replicable and there is an appropriate transition.

However, our concern relates ensuring price shocks to customers are averted, recognising we are at the low point in the interest rate cycle, and under the current method, there is risk of 'price-shocks' every four years as 50% of the cost of debt allowance will be based on the "on-the-day" interest rates.

A ten-year trailing average with annual updates to the cost of debt allowance (the AER model) will soften the impact of changing interest rates on customers by passing on only 10% of annual changes in interest rates to customers annually. For example, an increase in interest rates of 1 percentage point (100bps) from 3% to 4% would take 10 years to be fully passed on to customers.

Under such a model, the benchmark efficient entity would replicate its financing in line with the method used by the regulator to provide the allowance, and structure the maturity profile of its debt portfolio to have 10% mature in any given year. Such an approach is consistent with optimal financial risk management (achieves minimum refinancing and interest rate risk). It would also be efficient, with the cost of debt allowance closely matching actual financing costs incurred. We note this meets IPART's stated criteria for making incremental changes to the WACC Method.

In line with IPART's criteria, and our suggested amendment to take into account customer benefit, we support and advocate the following incremental improvements to IPART's cost-of-debt method:

- setting a cost of debt based on a historical 10 year trailing average approach
- the sampling period being based on 12-months of data as published by the RBA, or alternatively a confidential sampling period agreed between IPART and the utility
- annual updates to the cost-of-debt, based on 10% of the portfolio maturing per annum
- ten-year term to maturity Baa2/BBB rated debt, and
- a transition from the current 50-50 benchmark approach.

2.3.2 Question 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?

A ten-year trailing average with annual updates approach (the AER model) would not require (or be compatible with) an average of current market data and historical averages. Under the AER model, annual updates would be based on current market data.

If no change is made towards a trailing average with annual updates approach, then WaterNSW supports the current approach, which is replicable by IPART-regulated-utilities.

However, we reiterate that without annual updates, customers are exposed to risk of price shocks at the beginning of each pricing period.

2.3.3 Question 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?

Yes.

2.3.4 Question 9

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

Yes.

2.3.5 Question 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?

Yes.

2.4 Cost of equity

2.4.1 Question 11

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

Yes.

However, it could also be argued under a trailing average with annual updates approach to the cost-of-debt, that for internal consistency in the WACC and to avoid the possibility of the cost-of-equity being below the cost-of-debt, that the risk-free-rate component of the cost-of-equity should be subject to the same 10-year trailing average with annual updates. Under such an approach, the Beta and Market Risk Premium (MRP) would be based on 100% long-term average data.

2.4.2 Question 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?

Yes.

2.4.3 Question 13

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

No. We note that analyst price targets are factored into share prices upon their release, with the market (actual prices) reflecting more comprehensive information than analyst forecasts alone. Accordingly, we support the current approach of using an average (median - per response to Question 14 below) of the existing six methods to calculate the current MRP.

2.4.4 Question 14

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

Yes. We support IPART using the median approach to determining the point estimate of the current MRP. We think that outliers should be included in the calculation (i.e. NOT be excluded).

2.4.5 Question 15

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

We consider that an enhancement to the regulatory process would be to conduct a review of the appropriate equity beta outside of price reviews, including the process of selecting comparative and proxy companies. This will provide IPART-regulated utilities with more certainty on these parameters ahead of price-review submissions, and enhance the predictability and transparency of the IPART regulatory process.

Given that IPART typically undertakes a review of the WACC methodology between price reviews, we consider this an appropriate opportunity for IPART to review proxy companies and benchmarks for equity beta parameters.

However, both IPART and the regulated entity should still be able to submit a case for different parameters at the time of an individual price review, if there are strong grounds. This is important to ensure there is an opportunity for re-estimation in the event of significant market changes between the prior review and the time of the price submission.

2.4.6 Question 16

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

By reviewing proxy companies as part of IPART's review of its WACC methodology, i.e. between price reviews, IPART-regulated utilities will have the opportunity to propose or submit views on suitable proxy companies. IPART will then decide on the proxy companies and publish them, along with reasoning for their selection. We consider this will enhance transparency.

2.4.7 Question 17

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

WACC methodology reviews between price reviews is the appropriate time for IPART to refresh its econometric estimation of the equity beta range, following selection of the appropriate proxy companies.

2.4.8 Question 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?

Yes. We consider it important for transparency that IPART consider and disclose the impact of potential adjustments on the equity beta.

We note that SFG applied the Vasicek adjustment to their OLS estimation of the appropriate beta for Sydney Desalination Plant in 2011.

2.5 How we combine measures to derive the WACC

2.5.1 Question 19

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

No. We consider the uncertainty index to be a transparent and logical approach to making adjustments to the WACC.

2.5.2 Question 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?

Yes.

We also consider that IPART should retain discretion to make adjustments to the WACC in circumstances where the estimated cost of equity under IPART's WACC methodology is lower than the cost of debt – which could occur during a period of rapid increases in the risk-free rate, and where IPART's WACC methodology utilizes a trailing average approach with annual updates to the cost of debt; and a fixed cost of equity.

2.5.3 Question 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?

Under the cost of debt method we have proposed (trailing average with annual updates), 10% of the cost of debt would be updated annually for current market rates (noting we propose that the sampling period be the entire preceding 12 months). Under such an approach, IPART should not retain any discretion to determine current vs historical weightings when the uncertainty index is outside the range of one standard deviation from its historical average of zero.

Notwithstanding our proposed approach, IPART should not retain discretion to adjust weightings of current and historical market data without providing sufficient transition opportunity for a BEE to replicate the debt maturity profile in response to the adjustment. Regulated utilities, including WaterNSW, who follow a debt management strategy aligned to the BEE (i.e. replicating the IPART methodology), will suffer real losses (or windfall gains) if a transition is not provided.

We consider that transparency and predictability is best served if IPART does not retain discretion in this regard.

2.5.4 Question 22

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

IPART WACC methodology reviews between price reviews is the appropriate time for IPART to review gearing, following selection of the appropriate proxy companies.

2.6 How we measure inflation and gamma

2.6.1 Question 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?

Yes. We support retaining gamma at 0.25.

2.6.2 Question 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?

Yes.

2.6.3 Question 25

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

No. IPART should consider the use of Break-Even Inflation (BEI) as a more appropriate method of deflating the nominal WACC. The BEI method allows for a more accurate and internally consistent real yield estimate than the current method. This would remove under/over compensation when market inflation expectations remain persistently above or below the midpoint of the RBA target band.

BEI is the difference in yield between a nominal fixed rate bond and an inflation indexed bond of the same tenor using the Fischer Equation. The market inflation expectation that is embedded in the nominal yield, BEI, should be measured/observed every time a nominal rate is measured.

- in the case of existing debt, the BEI provides an accurate estimate of real yield at the time a utility would have issued the debt if it had issued debt on the measurement date; and
- in the case of new debt, BEI also provides an accurate measure of where a utility can issue debt on a real yield basis at the time of issue. Alternatively, the real yield can be measured directly from Commonwealth Capital Indexed Bonds and interpolated for the 10 year tenor.

For example: In the February 2017 WACC model update, IPART's current market data estimated inflation at 2.4% and the nominal risk free rate at 2.8%, resulting in a real yield of 0.39%. Actual real yields for Commonwealth Capital Indexed bonds over the same period averaged 0.77% giving a BEI of 1.99%. Using the IPART estimate of inflation to deflate nominal rates results in an estimated real yield approximately 0.40% below actual real yields.

IPART has in the past expressed concern about the breadth of the Inflation Linked Bond (ILB) market. However, turnover over the period from FY12 to FY15 (last available data from Australian Financial Markets Association excluding repurchases) averaged \$200m per trading day. The latest tender of inflation linked debt (8 August 2017) by the Australian Office of Financial Management (AOFM) had a 7x coverage ratio and traded 2.5bps though the mid yield indicating a very, healthy demand for the debt. Moreover, the AOFM has committed to supporting the ILB market with regular tenders and in the past has expressed a desire to reach 10-15% of their total outstanding issuance to be in ILBs.

2.6.4 Question 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?

Yes, subject to our response to question 25.