



SDP Submission on IPART Proposed WACC Methodology

Introduction

This submission from Sydney Desalination Plant (SDP) is in response to IPART's request for stakeholder comment on the proposed change to the methodology for the calculation of WACC parameters for regulated businesses.

The desalination plant, like most utilities is a long term investment, with a 100 year design life and a 50 year off-take contract. SDP, as a long term owner of a significant infrastructure asset, supports a stable regulatory regime and welcomes enhancements to that regime that better reflect a commercially sensible return for a long term investor.

SDP is one of the only private sector infrastructure businesses that is currently regulated by IPART and as such is exposed directly to debt and equity markets arguably to a different degree than the publicly owned water businesses. SDP must compete to attract cost effective, long term sources of funding from investors and financiers who require appropriate commercial returns to continue to support the private provision of essential infrastructure.

We hold the view that it is entirely appropriate that IPART, and other regulators, should review their methodologies from time to time in light of experience, to ensure a commercially sensible return for the long term investor.

The challenge is therefore to develop a methodology that best captures a sensible and reliable WACC whilst supporting the interests of consumers and asset owners.

With that in mind, SDP considers that while there are aspects of the IPART proposal that are positive and may offer long term solutions, there are other aspects that require more research and analysis by both IPART and regulated businesses, before we can form a definitive view.

Structure of our submission

In this submission we suggest that as the purpose of the regulatory allowances for debt is different to that of equity they should be considered separately.

We then separately analyse the proposed regulatory allowances for debt and equity against their purpose. We also comment on the likely impact of the proposal on asset valuations.

Preliminary conclusions

Our preliminary conclusion on the cost of debt is that the proposed approach may increase costs and risks for investors. For that reason it may be preferable to focus on overcoming the known limitations of the current approach to the cost of debt. As an example, the current approach, using short term five year debt rates as a benchmark does not incentivise owners of regulated assets to establish efficient long term debt portfolios. SDP would view the use of longer term debt rates as a key structural enhancement to the

current methodology that would better align the debt portfolio to the asset life and long term asset owners.

In regard to the cost of equity, our preliminary position is that the blending of short run and long run parameters may have the potential to establish a more representative cost of equity. However, further analysis and research on the methodology to calculate the short run Market Risk Premium (MRP) is needed to understand the implications of its use.

Debt and equity allowances have different purposes

While the CAPM model integrates the calculation of debt and equity using the same data, from a regulatory perspective there are some considerations that warrant separate analysis.

The cost of debt, whether in the current market, historically or through market expectations of the future, can be easily and reliably observed.

The cost of equity is much less easily observed and can only be estimated through a variety of theoretical constructs that all involve a high degree of abstraction, assumption and simplification as witnessed by the multiple approaches investigated by IPART to calculate the market risk premium (MRP)

Further, the nature and purpose of the regulated debt and equity allowances are different:

- **The regulatory allowance for debt** aims to compensate a hypothetical firm with an efficient capital structure for the costs of an efficient debt portfolio incurred during the regulatory period. In this way, the cost of debt is more analogous to other costs of a regulated firm such as operating expenses; and
- **The regulated return on equity** should provide investors with an appropriate risk adjusted return on that investment.

The use of CAPM is an appropriate tool to aid regulators in establishing overall rates of return however, as a model it can deviate from market realities. Thus IPART should consider, for example, different RFRs for debt and equity to ensure that each component of the WACC is appropriate for its purpose.

In this regard we note that the IPART Interim Report quotes from a PWC report for the UK airports regulator that recommended different approaches to estimate the cost of debt and the cost of equity.¹ Further UK regulators such as Ofwat have developed composite WACCs taking into account “embedded” debt, an essentially similar concept.²

The cost of debt

The regulatory allowance for the cost of debt aims to compensate firms for the cost of an efficient debt portfolio. That is, the portfolio that an efficient firm would have adopted in the absence of regulation.

The AEMC in their recent review of WACC parameters for electricity and gas network infrastructure stated:

¹ PWC, *Estimating the cost of capital in Q6 for Heathrow, Gatwick and Stansted – A report prepared for the Civil Aviation Authority (CAA)*, April 2013.

² The “embedded” debt for example is very long term debt that was put in place when the water utilities were privatised

the Commission considered that the long-term interests of consumers would be best served by ensuring that the methodology used to estimate the return on debt reflects, to the extent possible, the efficient financing and risk management practices that might be expected in the absence of regulation

If this principle is followed then the regulatory methodology should not drive the debt strategy but aim to be in harmony with it.

In addition, a regulated firm should have the option of locking in or hedging their debt, so that their achieved interest expense will display minimum variation to the regulatory allowance. Regulated firms currently do this by hedging their debt portfolio at the beginning of a regulatory period. Both IPART and the AEMC acknowledge that the private sector electricity businesses have been able to manage their debt portfolios in this way.

The current method of calculation for debt allowance, while capable of improvement, is well understood by regulated firms, investors and financiers and is the default standard for infrastructure regulation in Australia. However, the current framework does not incentivise firms to take out longer term debt. This is because:

- Firms are not entirely compensated for an efficient debt portfolio in that IPART uses 5 year debt as the benchmark but long lived infrastructure is more suited to financing with longer term debt. This means that regulated businesses either adopt a shorter term debt portfolio and increase their refinancing risk or have longer term debt and risk not being adequately compensated through the regulatory allowance; and
- While the underlying risk free rate for existing debt can be matched to the regulatory allowance through swaps, the associated debt premium cannot. This is because the premium on existing debt is not related to the current observed market premium but to the market at the time the debt was incurred.

It is for these reasons that SDP would view the use of longer term debt rates such as 10 years as a key structural enhancement to the methodology that would better encourage alignment of the debt portfolio to the asset life and long term asset owners. For risk free rates, a move to use the current 10 year risk free rate would help achieve this outcome and also enable regulated businesses to continue to hedge their base rate exposure.

IPART's proposal to move to a 40 day averaging period for regulated firms to hedge their debt portfolios is a structural improvement that will help reduce movement in the swap market by reducing the daily volume of swaps required.

Proposal to use trailing averages

When evaluated against a framework of providing compensation for an efficient debt portfolio, the IPART proposal to establish a blended cost of debt from the average of current market observations and a ten year trailing average of five year debt, can present challenges to a financial markets facing business when compared to the current approach.

It is acknowledged by IPART that private sector firms in regulated sectors have been able to match their debt costs to the on-the-day market forward looking cost of debt established in the regulatory 20 day averaging period. The proposal for the use of a ten year trailing average of five year debt in the methodology for risk free rates moves away from this transparent concept and the ability to hedge at market rates.

In regard to trailing average debt, the AEMC in a recent review of the National Electricity and Gas Rules for the calculation of rates of return stated:

the introduction of a trailing average approach may slightly increase the risks for equity holders

and

a historical trailing average approach to estimating the return on debt can lead to significant differences between the regulatory allowance for return on debt and the cost of debt in the market for funds at any point in time.

We also note that in that review, stakeholders advocating the use of trailing averages for debt also proposed annual adjustments during the regulatory period and transitional arrangements to move from the current cost of debt approach. This is not being proposed by IPART and if adopted would further increase the complexity of such an approach.

Regulated businesses could aim to replicate the cost of debt through an even spread of historical maturities of ten year or five year debt however, it still may not achieve the desired result. This is because it may not be possible, for example, to construct a portfolio that mimics the cost of a ten year average of five year debt. SDP will carry out more analysis on the implications of trailing averages to a regulated business and would welcome further analysis by IPART. In particular further analysis on the implication of a trailing average for Debt Risk Premium (DRP) due to the limited history available on Bloomberg.

If the IPART proposal was adopted in its current form, SDP would likely need to develop an alternate debt portfolio and hedging strategy to ensure that variations to the regulatory allowances were minimised. The transition would certainly incur costs and the new approach may involve additional risk. It is for this reasoning that SDP recommends the following for cost of debt:

- The use of 10 year risk free rates; and
- Further analysis is done in particular on the use of trailing averages for DRP.

The return on equity

The regulated return on equity should provide investors with an appropriate risk adjusted return on that investment.

The proposed approach to the cost of equity in the WACC may resolve some of the issues surrounding the low cost of equity that results from the current regulatory WACC approach following the GFC. The blending of long run and short run parameters for equity may result in a more representative cost of equity. However equally, it may not as both the short run and long run approaches have imperfections. Therefore an average of the two approaches may not achieve IPART's desired aim.

For example, such an approach is critically dependent on the proposition that the short run MRP validly reflects the current and future expectations of equity holders at that time. This proposition needs considerable empirical work and analysis to validate, given the lack of a universally accepted methodology to calculate the short run MRP and the simplifications and assumptions involved. We note that IPART has not yet decided on an approach and has flagged that further work needs to be done in this area.

SDP agrees that while the approach of considering a short run MRP is an interesting approach, we support further work being done in this area. The challenge SDP has observed with this proposed change is that historical data on the Bloomberg short-run 40 day average MRP does not extend back prior to 2008. None of the other approaches suggested by IPART are standard methodologies and indeed IPART's consultant SFG Consulting states that the problem of measuring the short run MRP isn't simple because:

What we are trying to measure is the true changes in equity investors' required returns, over the entire asset life, under different market conditions

As natural owners of these assets are long term investors, without a reliable data range, trends are difficult to estimate and conclusions difficult to reach. Our view is that until the further analysis and research to establish a robust methodology for the short run MRP is undertaken, the impacts of IPART's proposal cannot be accurately assessed.

With regards to the short run risk free rates, SDP recommends the use of 10 year risk free rates to better align the long life nature of the asset to asset owners long term investment horizon.

Market soundings

The proposal to sense check the resulting WACC against market expectations is an important step in a regulatory regime, lending significant credibility to the methodology adopted and support for its key stakeholders including consumers and asset owners.

This is a welcome and positive step and recognises that the CAPM model while conceptually elegant can be an imperfect representation of the real world and its results should be tested against that real world.

The Interim Report does not set out how the market soundings will operate to ensure a fair and sensible WACC outcome. Such a process must be systematic and structured to ensure the transparency of the resulting adjustments. It should encompass discussions with Australian utility investors and financiers and not rely solely on academics.

Should market soundings indicate that WACC sits outside the calculated range, it is assumed WACC will be amended accordingly. SDP would welcome further comment on the approach.

Impacts on valuation

IPART's current approach has evolved over a period of some 25 years with continuous development and refinement through all of the State and National regulators. It is well understood by finance markets. If the proposal is implemented, SDP will need to educate financiers on the change to manage any impact on their credit assessment of SDP.

Subject to the market soundings step, the WACC calculated under the new approach is likely to be higher than the "conventional" calculations for other regulated sectors when interest rates are falling and likely lower when interest rates are rising.

It is at this point that the market soundings step is clear, transparent and appropriately implemented to ensure valuations are not unnecessarily impacted by temporary market volatility, restricted by an uncommercial calculated range and reflect the value of the underlying asset.