

Sydney Water's response to IPART's Draft Report, *The incorporation of company tax in pricing determinations*

1. Overview

In calculating a regulated business's costs for the purposes of setting prices, the Independent Pricing and Regulatory Tribunal (IPART) allows an amount to reflect the tax paid by the business. Currently, IPART estimates a pre-tax weighted average cost of capital (WACC) and applies this to the capital base of the business. The tax rate used is the statutory tax rate.

In its draft decision, IPART now proposes to include corporate income tax liability as a separate cost building block and use a post-tax WACC to estimate the appropriate return on capital. IPART considers this approach would provide the most accurate estimate of the tax liability of a similar well-managed, privately owned business (a benchmark firm). Sydney Water supports this approach provided the estimates of tax to be paid are realistic.

However, as IPART notes, there are many ways that tax could be included as a separate building block in pricing determinations. Some of these are less intrusive and more business-specific than others. Equally as important, however, small changes in method can have a significant impact on a regulated utility's revenues and financial performance.

This submission examines the key elements of IPART's draft decision and sets out the financial implications of each.

Sydney Water's preferred method for incorporating company tax in price determinations is to include a regulatory tax payable estimate based on Sydney Water's financial accounts which is consistent with the final determination (adjusted for dividend imputation credits and 'grossed up'¹ for the iterative nature of tax). Sydney Water would welcome the opportunity to assist in calculating the appropriate level of tax payable, consistent with the final determination.

Sydney Water considers that in order to maintain Sydney Water's financial viability, the tax allowance estimate needs to broadly reflect taxes that are actually paid. IPART's proposed method of including a tax allowance does not sufficiently reflect the actual taxes paid by Sydney Water. Sydney Water is not earning excess returns under the current pre-tax framework. Therefore, moving to a post-tax framework should not, in itself, materially increase or decrease revenue.

Based on Sydney Water's interpretation of IPART's draft decision, Sydney Water's regulated revenue would be reduced by between \$95 million and \$160 million a year. This would materially affect Sydney Water's financial position. Such an outcome would be inconsistent with the framework IPART has established to ensure utilities are financeable and with the matters that IPART is required to consider when setting prices under section 15 of the IPART Act.

Table 1² sets out IPART's draft decision and Sydney Water's summary response to each element of the draft decision.

¹ An estimate of tax payable needs to be grossed up to take account of the fact that there will be tax on the tax. This issue is addressed by IPART in its formula where the gamma-adjusted tax rate is divided by $[1 - t \times (1 - \text{gamma})]$. This ensures that a regulated entity receives an appropriate tax allowance.

² Unless stated otherwise, the tables in the following sections present financial data for the Sydney Water Corporation. The data has not been adjusted for the impact of non-regulated products and services (such as recycled water).

Table 1: Summary of issues

IPART draft decision on post-tax method	Sydney Water response
<p>The nominal tax liability will be the corporate tax rate multiplied by taxable income and adjusted for the value of franking credits. This will be converted into a real amount to include in the cost building blocks. The tax liability will only be calculated on the costs and revenues of the regulated business activities. IPART's preferred position is not to include developer contributions in assessing tax.</p>	<p>Sydney Water's preferred position for incorporating company tax in price determination is to use a tax payable estimate that is consistent with the final determination (grossed up for the iterative nature of tax).</p> <p>If IPART wishes to derive a separate taxable income estimate for the tax component in the building block model it should take into consideration the tax depreciation and interest issues set out below.</p> <p>Developer contributions in the form of assets free of charge need to be included as these are recognised by the Australian Taxation Office (ATO) as income, and taxable, for income tax purposes.</p>
<p>Tax depreciation will be based on:</p> <ul style="list-style-type: none"> – asset lives allowable for tax purposes – the use of the prime cost or diminishing value method (whichever is higher) – a tax asset base determined through a methodology informed by the stakeholder working group. 	<p>If IPART's framework is adopted, the tax depreciation estimate in the tax allowance formula should be based on the tax depreciation estimate used in Sydney Water's financial statements, consistent with the final determination (adjusted to include only regulated assets).</p>
<p>Interest payments will be based on the same assumptions that are used to estimate the WACC (gearing, nominal risk-free rate and the debt margin).</p>	<p>Sydney Water has consistently supported a notional gearing level for the WACC. However, for estimating a tax allowance, the interest payment needs to recognise actual gearing. The use of notional gearing would lead to significantly overestimating the interest deductions and underestimate the tax allowance.</p> <p>In addition, IPART's approach appears inconsistent with the annual revenue requirement (ARR) calculation. This is because the interest payments component of the return on assets is based on a real WACC. IPART is proposing to calculate interest payments for tax allowance purposes using the relevant nominal components of the WACC. This will result in the interest payments component of the return on assets being much less than the interest payments used for tax allowance purposes. Unless the interest payment estimate is similar to the actual interest expense, Sydney Water's long-term viability will deteriorate.</p> <p>It is Sydney Water's view that much more work needs to be done on this issue in consultation with regulated entities.</p>
<p>Expected tax losses will be rolled forward, but will start from a zero base. Actual tax losses will be excluded.</p>	<p>Sydney Water accepts the inclusion of tax losses.</p>

In the draft report, IPART cites Sydney Water as an example of how the approach would work. There was, however, an error in IPART's analysis, which has led to the conclusion that Sydney Water has been significantly overfunded for tax under the current approach. Sydney Water disagrees with this conclusion.

2. Specific comments on IPART's proposed framework

IPART's draft decision on *the incorporation of company tax in pricing determinations* is to incorporate tax as a building block cost and use a post-tax WACC for calculating the return on assets and working capital. The method outlined by IPART in the draft report for calculating the tax allowance is presented in Box 1 below.

Box 1: Tax allowance calculation formula

$$\text{Tax Allowance} = \frac{1}{(1 + \Pi_c)} \left[R(1 + \Pi_c) - \text{Opex}(1 + \Pi_c) - \text{TD} - I \right] \left[\frac{t(1 - \gamma)}{1 - t(1 - \gamma)} \right]$$

Where:

$(1 + \Pi_c)$	=	cumulative inflation adjustment
R	=	real allowable regulated revenue exclusive of tax
Opex	=	real operating costs
TD	=	nominal tax depreciation
I	=	nominal interest payments
t	=	corporate tax rate
γ	=	value of imputation credits (gamma).

A critical element of the formula is how nominal tax depreciation and nominal interest payments are calculated. Sydney Water also considers that the formula needs to be expanded to take account of the roll-forward of tax losses and assets free of charge. These issues are discussed below.

2.1 Tax depreciation

Sydney Water considers that tax depreciation should be based on Sydney water's actual tax position under the National Tax Equivalent Regime (NTER). IPART has given tentative support to using such an approach at various IPART workshops and in follow-up correspondence with Sydney Water.

IPART may decide not to adopt this approach, and instead estimate tax depreciation by developing a tax asset base. If this is the case, Sydney Water considers IPART should:

- 1 set the tax asset base equal to the regulatory asset base (RAB) as at 1 July 2000
- 2 use regulatory economic lives
- 3 apply the prime cost depreciation method to assets acquired prior to 30 June 2012
- 4 apply the diminishing value depreciation method to assets acquired after 1 July 2012.

Sydney Water uses the prime cost depreciation method for tax purposes. IPART should keep in mind that any depreciation method used for tax purposes cannot be changed if assets are already in use and tax depreciation initiated. This means that if an entity is currently using the prime cost method to calculate tax depreciation, that entity cannot elect to change the method to diminish the value of any existing assets. However, the entity can elect to have future assets depreciated using the diminishing value method, where applicable. (The tax laws provide that some assets must be depreciated using the prime cost method.)

Furthermore, IPART should be aware that the ATO publishes a comprehensive list of the effective lives of assets. Taxpayers can choose to assess their own effective asset lives but must be able to support their assessment by, for example, referring to an engineer's report stating that the asset has a useful life of x years. ATO can challenge such self-assessments.

2.2 Interest expense

IPART intends to estimate interest payments based on the same assumptions that are used to estimate the WACC (gearing, nominal risk-free rate and the debt margin).

IPART's proposed approach appears inconsistent with the ARR calculation because the interest payments component of the return on assets is based on a real WACC. This will result in the interest payment in the return on assets being much less than the interest payment used for tax allowance purposes.

Much more work is required to fully understand the interaction between the way interest is calculated in the different elements of the regulatory framework. In particular, greater analysis is required as to how:

- interest for tax purposes aligns with the interest calculated in the ARR model; and
- interest for tax purposes interacts with the interest imputed in the WACC.

Sydney Water offers the following preliminary observations.

2.2.1 Interest calculation in the ARR model

Sydney Water considers that given IPART uses a real WACC to calculate a return on assets, the ARR only partly reflects the nominal interest expense incurred by Sydney Water. This is a product of IPART's approach to the building block model.

IPART currently rolls forward the RAB on a nominal basis, which means that any inflationary adjustments are included in the RAB and recovered over an extended period of time. This approach is technically correct because the present value of the return on, and return of, the asset will equal the initial investment. That said, this approach does not calculate the ARR in a manner that aligns with Sydney Water's cash flow requirements to service debt. For example, applying a real WACC to a nominal RAB provides for a real interest expense estimate in the ARR, while Sydney Water pays interest on a nominal basis.

Effectively, the current approach used by IPART back ends revenue recovery. That is, the interest allowance in the ARR will increase over time as the asset's value is inflated, thereby under-recovering initially and then over-recovering at the end of the asset's economic life. This is inconsistent with the manner in which assets are financed, where the finance amount is not adjusted for inflation, and interest repayments remain constant over the life of a loan (excluding interest rate movements).

An alternative building block approach, which is also technically correct, is to roll forward the RAB on a real basis and apply a nominal WACC. This approach would provide for a nominal interest allowance that will much more closely align an entity's ARR with its interest expense.

2.2.2 Interest and the WACC

In addition, applying a 60/40 gearing ratio will substantially overestimate Sydney Water's interest expense. Currently, Sydney Water's actual debt gearing is around 45%. Using the benchmark will overstate Sydney Water's interest expense by more than \$200 million a year (Table 2).

By contrast, the Water Services Regulation Authority (OFWAT)³ states:

*'When we set price limits, we separate the treatment of tax from the cost of capital. This includes tax as a company-specific cost based on the companies' actual gearing projections.'*⁴

³ OFWAT is a regulator of water and sewerage providers in England and Wales.

⁴ OFWAT, *Financeability and financing the asset base – a discussion paper*, (2009) page 40.

IPART argues that it is appropriate to use the benchmark ratio because the interest expense used to determine the tax allowance should be consistent with the debt allowance in the return on assets. However, using a benchmark ratio that is higher than Sydney Water's actual ratio will reduce the WACC, and therefore the estimated return on assets. As Sydney Water's actual interest expense is determined exogenously to the regulatory framework, IPART is effectively reducing Sydney Water's return on equity because the cost of equity is higher than the cost of debt.

As such, using the benchmark ratio in the WACC results in a return-on-assets estimate that is lower than it would have been if estimated using the actual debt to equity ratio. In addition using the benchmark ratio to estimate the tax allowance will also reduce the tax allowance. Therefore, IPART is effectively imposing a double reduction on Sydney Water by using the benchmark ratio. This could threaten the business's long-term viability.

Table 2: Interest expense (\$ M)(regulated only)

	2012-13	2013-14	2014-15	2015-16
Interest derived from WACC - nominal	630.0	672.7	716.3	758.2
Sydney Water's forecast interest expense - nominal	429.7	465.9	507.3	530.3

As can be seen in Table 2, a notional estimate of interest payments will substantially overstate the interest component of an entity's return on assets. The difference is largely driven by the benchmark gearing assumption. The flow-through effect of this difference in the tax allowance (assuming a gamma of 0.25) is up to \$60 million a year.

Reducing Sydney Water's ARR by around \$60 million a year will over time affect Sydney Water's delivery of services and its financial viability.

It is Sydney Water's view that much more work needs to be undertaken on this issue in consultation with regulated entities. The impact of adopting a post-tax regulatory framework on the financial viability of all affected businesses should be fully tested. This should occur before any final decision is taken to adopt the proposed approach and tax allowance calculation methods.

2.3 Assets free of charge

Based on discussions and feedback from IPART via the workshops, it appears that assets free of charge (AFOC) will be included in the tax allowance calculation. Sydney Water supports this position for the following reasons.

Sydney Water receives AFOC as a result of residential, commercial and industrial developments (urban developments), and major infrastructure developments. In the case of urban developments, water, wastewater, stormwater and recycled water assets are developed on what is, or will become, common land. In the majority of instances, the assets entail the reticulation network that connects the development to Sydney Water's assets. On completion of the development and sale of the land, the developer has no incentive, or legal capacity without a *Water Industry Competition Act* (WICA) licence, to retain ownership of the assets on common land. Therefore, developers transfer the assets to Sydney Water for 'no consideration'. Developers receive a tax benefit from this transfer.

In addition to urban developments, private companies and government agencies undertake major infrastructure projects. These projects occasionally require the relocation or rebuilding of Sydney Water assets. The reconstructed assets are transferred to Sydney Water for 'no consideration'. Again, the transferring entity receives a tax benefit as a result of the transfer.

Sydney Water is required to treat all assets provided for 'no consideration' as income. Sydney Water therefore pays tax on all AFOC. In the case of major developments, Sydney Water is being taxed as a result of the need of other organisations to move or rebuild Sydney Water's existing assets.

2.3.1 Tax liability

For tax purposes, AFOC is regarded as assessable income under section 21A – Non-cash business benefits (Income Tax Assessment Act 1936). This is regardless of whether it relates to the development of new assets or the relocation of existing assets.

Section 21A(2) states that 'if a non-cash business benefit (whether or not convertible to cash) is income derived by a taxpayer:

- (a) the benefit shall be brought into account at its arm's length value reduced by the recipient's contribution (if any); and
- (b) if the benefit is not convertible to cash – in determining the arm's length value of the benefit, any conditions that would prevent or restrict the conversion of the benefit to cash shall be disregarded.'

This means that Sydney Water will incur an income tax liability of 30% of any AFOC received. The AFOC will then be added to the tax asset base.

Sydney Water will also receive a tax depreciation benefit from receiving AFOC. The tax depreciation benefit is obtained over the life of the asset and is calculated on a straight-line basis for existing assets. For tax purposes depreciation is not inflated, and therefore declines in real terms over time. Assets received as AFOC are typically long-lived assets, and as a result the present value of the tax depreciation benefit of the AFOC is usually a small fraction of the initial tax liability. Therefore, Sydney Water incurs a significant net tax liability on the receipt of AFOC.

2.3.2 Revenue

From a regulatory perspective, all AFOC is excluded from the RAB and therefore the revenue requirement on which prices are based.

In the case of urban developments, the expected resulting growth in the customer base would have been factored into the price setting process. Therefore, the receipt of AFOC from urban developments does not result in Sydney Water receiving any additional revenue within the regulatory period in which it is received.

In subsequent regulatory periods to the receipt of the AFOC, revenue requirements will increase commensurately with the operating and maintenance costs associated with the AFOC. This increase in the revenue requirement does not compensate Sydney Water in any respect for the tax liabilities incurred.

In the case of major development related AFOC, there is no change to the customer base, and therefore no future revenue potential associated with this AFOC.

In summary from a regulatory perspective, the receipt of AFOC results in a tax liability and no commensurate increase in revenue. This is one of the reasons why Sydney Water's effective tax rate on average (around 37%) is higher than the corporate tax rate.

2.3.3 AFOC magnitude

Historical AFOC is presented in Table 3.

As mentioned above, there are two distinct aspects to AFOC: urban development and major infrastructure development. Urban development is relatively stable, while major infrastructure development is very lumpy. For this reason, the AFOC forecasts presented in Sydney Water's Statement of Corporate Intent (SCI) related to only urban development. On discussing this point with IPART, IPART suggested a rolling five-year average be used to forecast AFOC. Sydney Water supports this suggestion.

Table 3: AFOC (\$ M)

	2006-07	2007-08	2008-09	2009-10	2010-11
AFOC (\$ Nominal)	107.7	92.1	95.3	71.6	59.2
AFOC (\$ 2011-12)	124.6	103.6	103.6	75.5	61.0
	2011-12	2012-13	2013-14	2014-15	2015-16
AFOC Forecast (\$ Nominal) ¹	93.7	96.0	98.4	100.9	103.4

Notes:

¹ The AFOC Forecasts in Table 3 have been compiled by initially taking an average of the AFOC outcomes in \$ 2011-12 to arrive at a forecast of \$93.7 million for 2011-12. This value was then indexed annually at 2.5% for inflation to arrive at the nominal profile.

3. Financial impact/viability

Sydney Water has undertaken analysis of the impact of IPART's proposal. Although the exact method for calculating tax depreciation, or the value of gamma were not presented in the Draft Report, the proposed method for calculating Sydney Water's tax allowance will substantially understate Sydney Water's actual tax liabilities.

The figures presented in Table 4 are consistent with the financial analysis in Sydney Water's Price Submission to IPART in September 2011. The best and worst cases presented have been estimated by changing parameters where IPART was open to some variability, ie, only tax depreciation and the inclusion of AFOC. In both cases, the interest expense has been estimate using the same assumptions that are used to estimate the WACC (60% debt gearing, nominal risk-free rate and the debt margin).

Sydney Water's proposal to use *Forecast tax payable (with 0.25 gamma)*, is consistent with the current tax allowance as reflected in the *Pre-tax tax allowance*. Therefore, Sydney Water would neither be advantaged or disadvantaged by the move to a post-tax modelling framework.

Table 4: Tax estimates (\$ Nominal, \$ M)

	2012-13	2013-14	2014-15	2015-16	Total
Forecast tax payable ¹	133.2	163.0	185.5	211.7	693.4
Forecast tax payable (with 0.25 gamma)	99.9	122.3	139.1	158.8	520.1
Pre-tax tax allowance ²	118.0	125.9	134.2	142.1	520.1
Post-tax tax allowance - best case ³	49.4	57.4	65.5	73.9	246.1
Post-tax tax allowance - worst case ⁴	10.3	13.7	18.9	22.6	65.4

Notes:

¹ Sydney Water's tax liability is forecast under the principles of the National Taxation Equivalent Regime that aims to foster competitive neutrality. The forecast is consistent with Sydney Water's Price Submission.

² The pre-tax tax allowance is included in the pre-tax WACC, and therefore the pre-tax return on assets. Sydney Water has estimated the pre-tax framework tax allowance by comparing the annual revenue requirement estimated using a pre-tax and a post-tax WACC. IPART used the same approach to estimate the pre-tax tax allowance in its Issues Paper. The values are consistent with Sydney Water's Price Submission and have been grossed down for comparability (gamma of 0.25 assumed).

³ Under the best case results the following assumptions were used: Sydney Water's tax depreciation estimates were employed, assets free of charge were taken into consideration, and a gamma of 0.25 was used. The values have been grossed down for comparability (gamma of 0.25 assumed).

⁴ Under the worst case results the following assumptions were used: tax depreciation was estimated by applying the diminishing value depreciation method to a tax asset base which was set equal to the regulatory asset base as at 1 July 2000, assets free of charge were excluded, and a gamma of 0.4 was used. The values have been grossed down for comparability (gamma of 0.4 assumed).

If IPART sets a method for determining a tax allowance that understates Sydney Water's tax liability, downward pressure will be placed on Sydney Water's financial position. The Price Submission detailed Sydney Water's current financial position. The values in that Submission for the key financial ratios used to assess an entity's financial health were derived on a pre-tax basis. These are presented in Table 5 along with revised financial ratios based on the best and worst cases outlined above.

Table 5: Financial ratios

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Sept 2011 Submission								
Debt to RAB Ratio	44.5%	44.8%	44.7%	44.2%	43.5%	43.4%	43.3%	43.2%
FFO interest cover	2.3	2.2	2.3	2.3	2.4	2.4	2.5	2.5
FFO to total debt	9.3%	9.4%	9.8%	10.1%	10.2%	10.3%	10.5%	10.6%
Post-tax - Best Case								
Debt to RAB Ratio	44.8%	45.9%	46.4%	46.5%	46.5%	46.6%	46.6%	46.6%
FFO interest cover	2.2	1.9	2.0	1.9	2.0	2.0	2.0	2.0
FFO to total debt	8.5%	7.6%	7.8%	7.9%	7.8%	7.9%	8.1%	7.9%
Post-tax - Worst Case								
Debt to RAB Ratio	45.1%	46.5%	47.3%	47.7%	48.0%	48.0%	48.1%	48.1%
FFO interest cover	2.1	1.8	1.9	1.8	1.8	1.9	1.9	1.9
FFO to total debt	7.8%	6.8%	7.0%	7.0%	6.9%	7.0%	7.1%	7.2%

Notes:

FFO = funds from operations.

EBITDA = earnings before interest, tax, depreciation and amortisation.

Table 5 shows that IPART's proposed method to account for the tax allowance would result in a deterioration of Sydney Water's financial position. In financial terms this will reduce Sydney Water's credit rating below investment grade and threaten its long-term business viability. More importantly it would severely challenge the ability of Sydney Water to continue to deliver services to required standards. Neither of these outcomes would be consistent with IPART's key regulatory objectives or the interests of the community.

4. IPART's use of Sydney Water as an example

IPART's draft report highlighted in Table 5.4 that it considered Sydney Water had been over compensated for tax in the pre-tax framework. IPART stated that the tax allowance in 2010-11 was \$125 million, while IPART's projection of Sydney Water's actual tax would be \$64 million if it were a benchmark business. IPART converted the projection of \$130 million in Sydney Water's Statement of Corporate Intent to \$64 million by adjusting for gearing, franking credits and inflation.

Sydney Water's concerns about gearing and the appropriate gamma value have been discussed earlier in this submission or in its Price Submission. Further to these concerns, IPART neglected to gross down their estimate of the tax allowance.

An estimate of tax payable needs to be grossed up to take account of the fact that there will be tax on the tax. This issue is addressed by IPART in its formula where the gamma-adjusted tax rate is divided by $[1 - t \times (1 - \text{gamma})]$. This ensures that a regulated entity receives an appropriate tax allowance.

Therefore, in Sydney Water's view, the pre-tax framework has not overcompensated Sydney Water for corporate tax.