



Independent Pricing and Regulatory Tribunal

# Guidelines for Water Agency Pricing Submissions

**Water — Guidelines**  
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# 1 Introduction

The Independent Pricing and Regulatory Tribunal (IPART) sets the maximum prices that water agencies can charge for their monopoly services. In determining these prices, we use public and transparent processes which generally involve inviting agencies to submit their price proposal, releasing an issues paper and a draft report for comment and holding public hearings.

The *Independent Pricing and Regulatory Tribunal Act 1992* (IPART Act) provides limited guidance on the form or content of a submission to IPART. However, the IPART Act does require that a submission from a government agency include a statement on how the prior determination has been implemented and, if not, the reasons why it has not been implemented.<sup>1</sup>

This *Guidelines for Water Agency Pricing Submissions* (the Guide) has been developed to assist a water agency in preparing a submission to a pricing review. The aims of the Guide are to ensure that our processes, our expectations regarding information provision and the agencies' responsibilities are made as clear as possible. While we encourage agencies to use this Guide, they can provide submissions in any format they wish so long as they address the minimum requirements in this Guide.

This Guide is structured as follows:

- ▼ Chapter 1 provides background information and explains why a guide is needed
- ▼ Chapter 2 lists the matters that an agency's submission is required to address, as a minimum
- ▼ Chapter 3 contains a checklist of the requirements for an agency's submission.

## 1.1 The purpose of this Guide

This Guide explains the minimum information requirements for water agencies to address in their submissions to price reviews. Additional requirements may be specified in each agency's Submission Information Pack, issues paper, or in correspondence to the agency concerned.

As part of a pricing review, we are required under section 15 of the IPART Act to have regard to specific matters and show what regard we have had to them in making a price determination. It will therefore benefit an agency to support its proposals with reference to these matters. Section 15 of the IPART Act is provided in Appendix A.

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<sup>1</sup> Section 18(5) of the *Independent Pricing and Regulatory Tribunal Act 1992*.

An agency's submission to a price review needs to publicly explain, justify and document its proposed prices for the monopoly services that it provides. The submission should provide stakeholders with a clear understanding of the agency's pricing proposals as well as providing us with sufficient information to understand, replicate, analyse and review these proposals.

In developing its submission, an agency should consider the needs of different stakeholders that are likely to consider its submission or have an interest in the matters under investigation. For example, the general public may be interested in future prices and the impacts of these on them; non-government organisations could be concerned with impacts on vulnerable customer groups or the environment; and/or government departments may be interested in the funding of particular capital expenditure programs. The needs of stakeholders may change for each pricing review.

If an agency's submission is incomplete or inaccurate, or provided late, then we may need to base our pricing decisions on our best estimates at the time. Alternatively, we may implement our 'stop the clock' mechanism, whereby we extend the review timetable by the length of the delay.

## 1.2 Timing of the agency's pricing submission

From August 2014, we introduced a 'propose-respond' approach for some water agencies. Under this approach, the agency's pricing proposal is submitted to us **before** we release an issues paper.<sup>2</sup> For other agencies, the existing review model has largely been maintained – that is, IPART releases an issues paper **followed by** submission of the agency's pricing proposal.

Under the propose-respond approach, the agency's pricing proposal is due to be submitted to IPART in June of the penultimate year of the current determination period, **before** we release our issues paper. We then release our issues paper about two to three months later, in September of the final year of the current determination period.

Under the alternative approach, the order is reversed – ie, IPART would release its issues paper in June of the penultimate year of the current determination period, and the agency's pricing proposal would then be due in September.

Prior to the commencement of a pricing review, we will provide each agency with a Submission Information Package (SIP). This will include a timetable for the review, the latest version of these Guidelines, an Excel Annual Information Return (AIR) and Special Information Return (SIR), and updated inflation figures for use in agencies' price submissions. It may also include an agency specific pricing model.

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<sup>2</sup> The agency, along with all other stakeholders, then also has an opportunity to provide a submission in response to IPART's issues paper.

### 1.3 The relationship between an agency's submission and its information returns

A water agency's proposal to a pricing review is a public document that needs to include sufficient information to enable stakeholders to obtain a clear understanding of what is proposed, the rationale for the proposals and the implications of the proposals. A clear and transparent submission is necessary to enable stakeholders to effectively participate in our review processes.

A number of matters in this Guide may also be included in an agency's information returns, which accompany its written submission. For example, a water agency submits an AIR and a SIR, which provide details of the operating and capital expenditure programs.

It is critical that the information contained in an agency's written submission reconciles with the data it has submitted to us as part of an information return (AIR and/or SIR). We require that the submission, information returns and any other materials provided by the agency have been subject to a **quality assurance (QA) check** before they are submitted to us.<sup>3</sup> These requirements are explained in section 2.17 of this Guide.

Under the propose-respond model, we require agencies provide us with an AIR with their written pricing proposals (or submissions) in June of the penultimate year of the current determination period. We also ask that agencies provide us with an updated AIR several months later in September. The prime purpose of this September updated AIR is to replace forecast data for the penultimate year of the current determination period with actual (end year) data.<sup>4</sup>

Unlike an agency's pricing submission, the AIR and SIR are generally not public documents, but are subject to the *Government Information (Public Access) Act 2009*. Therefore, an agency's submission should include all information necessary for informed public participation in the inquiry process, even if this information has been submitted to us in an information return (AIR and SIR).

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<sup>3</sup> QA checks of materials can be done either externally or by able bodies of other parts of the agency that did not specifically work on the materials.

<sup>4</sup> Relative to the original AIR (submitted with the June pricing proposal), we expect the updated AIR would primarily reflect differences between forecasts and actuals for the penultimate year of the current determination period. Any other differences should be clearly highlighted and explained.

## 2 The required contents of a pricing submission

This section explains our minimum requirements for a water agency's submission to a pricing review.

### 2.1 Executive Summary

An agency's submission should include an Executive Summary, which outlines and brings together the key elements of the agency's pricing proposal, including:

- ▼ a description of the activities covered by the monopoly services order
- ▼ the agency's proposed prices and the rationale for proposed price levels and structures (with reference to existing price levels and structures, and costs and cost structures)
- ▼ a summary of the agency's proposed changes (in comparison to the current determination) for the upcoming determination
- ▼ the agency's forecast operating and capital costs, including the main drivers of or reasons for any proposed cost/price increases
- ▼ the impact of the agency's pricing proposal on:
  - customers, including measures to mitigate any adverse social impacts
  - the agency's performance (including service standards and against outputs specified in the previous determination) and its financial position
- ▼ any major changes in the operating environment since the last review that have brought about the need for change to monopoly services or service levels, costs and/or prices.

### 2.2 Plain English summary

We also require that an agency submits a plain English summary of its proposal, as a separate document. This should provide a high level overview of its proposal, the main drivers and impacts on customers. The purpose of the plain English summary is to assist customers better understand an agency's proposal and engage in the price review process.

### 2.3 The agency's role and functions

An agency should clearly outline and describe its roles and responsibilities over the current and upcoming pricing periods, including:

- ▼ the legislative framework in which it operates, including key legislative requirements, objectives and determinants of performance
- ▼ each of the agency's IPART regulated (or 'monopoly') services



- ▼ the area or areas of each service, customer types and customer numbers (by service, service area and customer type)
- ▼ any other services provided by the agency, which are not subject to IPART regulation.

The agency should highlight any changes to its role and functions for the upcoming pricing period. This section provides the context and supporting information for the rest of the submission.

## **2.4 Performance over the current determination period**

An agency's submission should report on its performance over the current determination period. This should describe the activities carried out and services delivered by the agency, including the quantity, quality and scope of activities and services (by type of service and service area).

The submission should also identify, explain the reasons for, and discuss the implications of any variations to the areas discussed below.

In discussing the implications of any variations between forecasts and actual outcomes, the submission should explain the implications for the agency, its performance and its customers.

At a minimum, the submission should also explain any variations between forecasts used in our previous determination and actual outcomes at a level consistent with our previous determination report. For instance, if our report provided forecast sales volumes by service, area and customer type, then the submission should also identify and explain any variances by service, area and customer type.

### **2.4.1 Service levels**

- ▼ Service levels forecast at the current (ie, the last) price determination and actual service levels achieved over this period.
- ▼ A summary of the agency's performance against output measures or any other performance measures set by IPART at the last determination. For example, the metropolitan water agencies are required to report annually on a number of specific output measures for water, wastewater and stormwater services.
- ▼ If standards of service have not been achieved (eg, non-compliance with system performance standards or other obligations in an Operating Licence) or output measures have not been met, then the reasons should be provided.
- ▼ Overview of the number and type of complaints that the agency has received in relation to its IPART regulated services and charges over the determination period.

#### 2.4.2 Revenue

- ▼ Overview of the 'target' revenue set by IPART at the current price determination and actual revenue received for each year over this period.
- ▼ Explanation of whether the agency expects to under or over recover revenues for the current determination period.
- ▼ Actual revenue for each year should be expressed in nominal \$, and any totals or comparisons should be expressed in real \$ using the inflation figures provided to each agency in its SIP.

#### 2.4.3 Sales and customer connections

- ▼ IPART's forecasts for customer connection numbers (or entitlement volumes<sup>5</sup>) and sales volumes (eg, kL or ML of water sold) over the current price determination period and actual customer connection numbers (or entitlements) and sales volumes over this period.
- ▼ Agency to explain any deviations from the current determination, and if there are any implications for the methodology to be adopted in estimating sales volumes or customer connections (or entitlement volumes) for the upcoming determination period.

#### 2.4.4 Historical operating expenditure

- ▼ Overview of the drivers of operating expenditure, activities carried out and outcomes achieved over the period.
- ▼ Comparison of IPART determined operating expenditure and the agency's actual operating expenditure<sup>6</sup> (by service and/or service area) for each year over the current determination period. A table of results should be included in the body of the submission.
- ▼ Explanation of any variances between the IPART determined and actual operating expenditure.
- ▼ Highlight any significant deferment of works, cost savings or cost increases that the agency has experienced over the current period.

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<sup>5</sup> In the case of bulk water providers, such as Water NSW for its rural operations and DPI Water (for the Water Administration Ministerial Corporation).

<sup>6</sup> For the current/final year of the determination period, we acknowledge that this will have to be a forecast. Agencies that submit price proposals prior to us releasing an issues paper are required to update data for the penultimate year of the current determination period to actuals by September, after the June submission.

- ▼ Actual operating expenditure for each year should be expressed in nominal \$, and any totals (eg, over the determination period) or comparisons (eg, across years) should be expressed in real \$ using the inflation figures provided to each agency in its SIP.

#### **2.4.5 Historical capital expenditure**

- ▼ Overview of the drivers of capital expenditure, activities carried out and outcomes achieved for each year over the current determination period.
- ▼ Comparison of IPART determined capital expenditure and the agency's actual capital expenditure<sup>7</sup> (by service and/or service area) for each year over the current determination period. A table of results should be included in the body of the submission.
- ▼ Comparison of actual capital expenditure by program (or project) to IPART determined capital expenditure program (or project), as specified in the last determination report. A table of results should be provided in an Appendix to the submission.
- ▼ Explanation of any variances between the IPART determined and actual capital expenditure.
- ▼ Highlight any significant deferment of works, cost savings or cost increases that the agency has experienced over the current period.

Actual capital expenditure for each year should be expressed in nominal \$, and any totals or comparisons should be expressed in real \$ using the inflation figures provided to each agency in its SIP.

We use historical capital expenditure to calculate the closing Regulatory Asset Base (RAB) for the current determination period. In its submission, an agency should provide us with its value of the closing RAB and clearly explain and provide all inputs (such as historical asset disposals and capital contributions) that it used to calculate the closing RAB (see section 2.10).

#### **2.4.6 Implementation of current determination**

- ▼ Statement of how the current determination has been implemented and, if not, specifically where it has not been implemented and the reasons why it has not been implemented. This is a requirement of section 18(5) of the IPART Act.

### **2.5 Standards of service**

The standards of service an agency is required to achieve are a critical consideration when setting prices. Section 15 of the IPART Act requires that, in setting prices, the Tribunal is to consider standards for quality, reliability and

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<sup>7</sup> Ibid.

safety of the services (whether those standards are specified by legislation, agreement or otherwise).

For the next determination period, an agency needs to clearly explain its standards of service including the quantity, quality and scope of activities and services. It also should describe how it has decided on the appropriateness of the service levels that it plans to provide or undertake. For instance, the agency should explain whether it has undertaken any studies of customer willingness to pay for any improvements in service levels that exceed regulatory requirements.

An agency should identify if there has been a change (or expected change) in:

- ▼ operating performance standards (such as contained in an Operating Licence), performance targets, and output measures
- ▼ environmental standards (eg, as specified in Environment Protection Licences)
- ▼ government policy (eg, new targets for water recycling)
- ▼ customer service delivery (such as to reduce customer complaints in a particular area).

In forecasting costs, an agency should give an indication of the timing and level of expenditure required to meet key regulatory and other obligations at least cost, and any proposed mechanisms to manage cost uncertainty.

## **2.6 Forecast operating costs**

This section provides the rationale and key information to support an agency's forecasts of operating costs.

The written submission should list the agency's forecast operating costs, by service (and service area or mode of operation where applicable), for each year over the next five years.<sup>8</sup> These costs should be presented in real dollars of the last year of the current determination period.

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<sup>8</sup> If IPART requires forecasts for a shorter or longer time period, it will advise the agency.

The submission needs to explain the methodology and rationale used to develop these forecasts, including:

- ▼ Drivers of, and justifications for, this expenditure, activities to be carried out, and outcomes to be achieved.
- ▼ How the agency's forecast expenditure relates to quantity and quality of service (or activity) and the drivers of, or justifications for, these service levels.
- ▼ The business case, including details of supporting economic analysis, for increases in operating expenditure above the determined operating costs for the final year of the current price period.
- ▼ Identification and explanation of the trend in the agency's forecast operating expenditure and the relationship between this trend and the agency's obligations and standards, having regard to historical expenditure, scope for productivity improvements, trends in input prices and other factors. In particular, submissions should provide details of, and reasons for, any changes in operating costs.
- ▼ Potential changes to operating expenditure resulting from current or proposed capital projects.
- ▼ A description of the agency's current and forecast efficiency programs and the potential for efficiency gains, and how these have been factored into forecast expenditures.
- ▼ Key assumptions underlying the forecasts, any risks to the expenditure forecasts, and how these risks and uncertainties have been addressed.
- ▼ Indications (if any) of customer willingness to pay for any improvements in service levels that exceed regulatory requirements.
- ▼ The agency's approach to allocating indirect (ie, common or shared) costs, and the rationale for this allocation, including (where applicable):
  - The allocation of indirect costs between the agency's IPART regulated activities and its other activities/functions (including steps taken to 'ring fence' non-regulated costs and recycled water costs). For example, the treatment of corporate overheads between regulated and non-regulated businesses.
  - The allocation of indirect costs across services and service areas.

## 2.7 Forecast capital costs

This section provides the justification and key information to support an agency's proposed capital program.

The written submission should list the agency's forecast capital costs, by service (and service area or mode of operation where applicable), for each year over the next five years.<sup>9 10</sup> These costs should be presented in real dollars of the last year of the current determination period.

The submission needs to explain the methodology and rationale used to develop these forecasts, including:

- ▼ Drivers of, and justifications for, capital expenditure, activities to be carried out and outcomes to be achieved (eg, has there been an increase in standards?).
- ▼ How the agency's forecast capital expenditure relates to service or activity levels, and the drivers of, or justification for, these service or activity levels.
- ▼ The main drivers (justifications) for capital expenditure in each program area (eg, water sources, water treatment, water distribution, wastewater transport, wastewater treatment, recycled water and stormwater drainage).
- ▼ Specific major projects should be clearly substantiated with links to drivers for the project, explanation of how options analysis was undertaken and the overall basis for its cost estimate.
- ▼ An appendix table listing all major projects, a link to the justifications discussed in the submission, an indication of delivery certainty and the basis for cost estimates. This appendix table could be structured along the following lines.

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<sup>9</sup> If IPART requires forecasts for a shorter or longer time period, it will advise the agency.

<sup>10</sup> In the SIR, we require long term capital expenditure information for each year over the next 10 years by service (and service area or mode of operation where applicable).

Project	Total project cost (\$16/17m)	Justification	Cost split	Options considered	Cost estimate certainty	Delivery certainty
Upgrade XYZ waste water treatment plant	22.3	Population growth will exceed current capacity by 2030.	80%	1. Decommission existing plant and transfer inflows to ABC treatment plant.	High – tenders received and contract awarded March 2015.	High – minimal delivery risks.
		EPA pollution reduction program to reduce phosphorus discharge by 2030.	20%	2. Retain and upgrade to BNR process.		

- ▼ Key assumptions underlying the capital expenditure forecasts, any risks to the forecasts, and how these risks and uncertainties have been addressed. Explain clearly the potential for variations in the capital expenditure program.
- ▼ Identify areas where the agency expects to make efficiency gains on the capital program and the sources of these gains.
- ▼ Explain the relationship between capital expenditure and operating expenditure. For example, if a project has been brought forward or extended to reduce operating expenditure.
- ▼ Indications of stakeholder willingness to pay for discretionary items of capital expenditure (see section 2.16.5 customer consultation).
- ▼ Identify if an agency expects to receive external funding for capital expenditure projects. For example, is external funding on a capital project expected from the Federal Government.
- ▼ Where very large capital expenditure projects are forecast, the agencies should propose how the investment should be recovered and provide analysis to show the impact on customer bills over time. For example, Sydney Water proposed that for its desalination plant the capital expenditure should only be added to the Regulatory Asset Base when the plant became operational. This would reduce the price shock for customers in the first year of the determination.<sup>11</sup>

In its submission, an agency should provide us its value of the closing RAB for each year of the next determination period. The agency should include all inputs used in the RAB roll-forward calculations (such as forecast asset disposals and capital contributions). See section 2.10 for more detail.

### Long-term investment plans

<sup>11</sup> Sydney Water submission to the IPART Review of Prices for Sydney Water Corporation, 14 September 2007, p 50.

We also ask that agencies provide long-term investment plans (at least 10 years) with their submissions. These plans will allow us to put forecast capital expenditure for the upcoming determination period into context and enhance our assessment of the prudence and efficiency of capital expenditure.

We envisage that agencies will be able to leverage off their existing corporate planning documents in complying with this request, and that their long-term investment plans would have some of the following features:

- ▼ a strategic focus, linked to statutory water plans and population projections
- ▼ investment drivers, linked to business areas
- ▼ project level detail for the next five years (covering at least the upcoming determination period) and higher level information beyond this period
- ▼ an explanation of assumptions and risk profiles.

## 2.8 Recycled water

Our approach to recycled water is mainly governed by our 2006 recycled water pricing guidelines.<sup>12</sup> During a price review we:

- ▼ Examine the ring-fencing of recycled water costs - Agencies are to ring-fence, from the regulated parts of their businesses, the costs and revenues of recycled water schemes. This is to ensure that recycled water costs are not unduly recovered from regulated potable water, sewerage or stormwater customers.
- ▼ Monitor recycled water prices - We no longer set prices for recycled water schemes, but rather monitor their prices in accordance with our 2006 recycled water pricing guidelines. This is a 'light handed' approach and we consider it more appropriate, as it is proportionate to the costs and benefits of regulation given the increasing number of small schemes.<sup>13</sup> We also monitor prices during a price review, rather than every five years as prescribed in the 2006 recycled water pricing guidelines.
- ▼ Assess avoided/deferred costs - We allow water agencies to apply to recover avoided and deferred costs of recycled water schemes from the broader customer base. Our assessments of avoided costs related to recycled water schemes are governed by our 2011 recycled water avoided costs guidelines.<sup>14</sup> We assess and determine avoided/deferred costs in conjunction with the

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<sup>12</sup> IPART, *Pricing arrangements for recycled water and sewer mining, Sydney Water Corporation, Hunter Water Corporation, Gosford City Council and Wyong Shire Council, - Determinations and Report*, September 2006.

<sup>13</sup> IPART, *Review of prices for Sydney Water Corporations water, sewerage, stormwater drainage and other services - Final Report*, June 2012, pp 130-133.

<sup>14</sup> IPART, *Assessment Process for Recycled Water Scheme Avoided Costs, Water - Guidelines*, January 2011. This updates our previous avoided costs guidelines in Appendix C of *Pricing arrangements for recycled water and sewer mining, Sydney Water Corporation, Hunter Water Corporation, Gosford City Council and Wyong Shire Council, Water - Determinations and Report*, September 2006.



review of an agency's operating and capital expenditure that occurs as part of our price determination processes.

- ▼ Assess the efficient costs of recycled water schemes under section 16A Directions. We are required to pass through the direct costs of some recycled water schemes into water and wastewater prices under section 16A directions.<sup>15,16</sup>

Agencies are required to provide relevant recycled water information as per our 2006 recycled water pricing guidelines and 2011 recycled water avoided costs guidelines. A lot of the recycled water information would be provided by agencies in their AIR. Supporting evidence, such as business cases for avoided/deferred costs, should be provided as an attachment to an agency's submission.

## 2.9 Elements of regulatory framework

### 2.9.1 Proposed determination period

In its submission, an agency should include the proposed length of the determination period that it is seeking and the reasons for this length. For example, the reason may be that it achieves a reasonable balance between providing incentives for the regulatory agency to pursue efficiency gains while not making customers wait too long to benefit from these gains, minimising regulatory cost and providing a reasonable level of regulatory certainty.

In proposing a determination period, issues to consider include the following:

- ▼ the merits of aligning the determination period with those of related or comparable entities
- ▼ the level of certainty around expenditure and/or consumption forecasts (and, related to this, the extent, timing and pace of change likely in an industry)
- ▼ the incentives created for the regulated agency to increase efficiency
- ▼ the need for regulatory certainty
- ▼ the cost of the determination process, and
- ▼ other costs and benefits associated with shorter or longer determination periods.

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<sup>15</sup> Direct costs, which are different to avoided costs, are normally recovered from recycled water customers.

<sup>16</sup> A section 16A direction requires that we pass through an amount representing the efficient cost of complying with a specified requirement imposed on an agency, by the agency's portfolio minister (see section 16A of the IPART Act.)

## 2.9.2 Other issues

Agencies should also include in their submissions any other issues they consider relevant to their pricing proposal, along with supporting reasons. For example, an agency could propose a preferred or alternative form of regulation, if the agency considers that there are changes to the regulatory framework that would:

- ▼ Enhance the incentives for the agency to pursue efficiency gains; and/or
- ▼ Promote improved cost reflectivity and/or add value to customers through different combinations of price and service level.

The agency's pricing submission would need to clearly outline how the proposal(s) would work in practice and the rationale for the proposal(s).

An agency, for example, could propose a mechanism for mitigating demand risk during a price determination period – such as a demand volatility or consumption adjustment mechanism. Again, the agency's pricing submission would need to clearly outline how the proposal(s) would work in practice and the rationale for the proposal(s).

## 2.10 Proposed RAB, WACC, depreciation and asset lives

### 2.10.1 Regulatory Asset Base (RAB)

The RAB is a key input in calculating the allowances for a return on assets and regulatory depreciation in the revenue requirement.

In general, to determine the value of the RAB over a determination period, we:

- ▼ Take the RAB value we determined at the start of the previous period<sup>17</sup> (the opening RAB) and incorporate the agency's prudent and efficient actual capital expenditure over that period (discussed in section 2.4.5), making adjustments to account for other changes to the RAB over the period (such as, asset disposals, capital contributions, regulatory depreciation and indexation). This determines the opening RAB for the next period.
- ▼ Roll forward this opening RAB to the end of the next determination period by including prudent and efficient forecast capital expenditure over the period (discussed in section 2.7), making adjustments to account for other forecast changes to the RAB (such as, asset disposals, capital contributions and regulatory depreciation). This gives the forecast RAB for each year of the next period.

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<sup>17</sup> The opening RAB for a historical RAB roll-forward is generally the closing RAB of the penultimate year of the previous determination period. This is because the final year of a determination period is typically a forecast year, and the actual figures for that final year need to be incorporated into the RAB.

In its submission, an agency must provide a table that shows the total proposed RAB for each year of the determination period and the RAB by service and/or service area. An agency should include calculations (or a model) of how it derived the opening RAB and RAB values for each year of the upcoming determination period.

### 2.10.2 Weighted Average Cost of Capital (WACC)

In December 2011, after consultation, we decided to include a tax allowance as a separate block in the building block model, and to use a post-tax WACC to calculate the notional revenue requirement.<sup>18</sup>

In 2013, we further reviewed our approach to setting the WACC. Our approach can now be summarised as a 3-stage process:<sup>19</sup>

1. Establish a WACC range and midpoint:
  - Estimate a WACC range based on long-term averages (long-term WACC range).
  - Estimate a WACC range based on current market data (current WACC range).
  - Use the midpoints of these two WACC ranges as the upper and lower bounds of our final WACC range.
  - The midpoint of the final WACC range is given by the average of the midpoints of the long-term and current WACC ranges.
2. Choose a WACC point estimate:
  - Choose a WACC point estimate within the final WACC range based on our WACC decision rule.
  - Our WACC decision rule is based on the uncertainty index.
  - The uncertainty index is a proxy for financial market volatility.
  - The decision rule allows us to deviate from the midpoint WACC if the uncertainty index is more than one standard deviation away from the long-term average.
3. Specify point estimates:
  - Specify our point estimate for the cost of debt.
  - Specify our point estimate for the cost of equity.
  - Provide additional evidence we considered in choosing the WACC point estimate.

In summary, the real post-tax WACC is determined by taking the midpoint of two WACC estimates,<sup>20</sup> which are derived from current market data and long

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<sup>18</sup> IPART, *The incorporation of company tax in pricing determinations – Final Decision*, December 2011.

<sup>19</sup> IPART, *Review of WACC Methodology – Final Report*, December 2013.

term averages. We select a final WACC based on this midpoint taking into account the level of economic uncertainty.

Since February 2014, we have been releasing bi-annual financial market updates. The purpose of these updates is to allow stakeholders to better understand, replicate and predict our WACC decisions. A WACC spreadsheet, which includes a working copy of our full WACC model, is released with each update.<sup>21</sup> Updates are released bi-annually in February and August.

Additional information on our approaches to calculating the cost of debt and the WACC is provided in our Fact Sheets.<sup>22</sup>

Further, our application of the WACC methodology, including decisions on key WACC parameters, will be available in our reports accompanying our determinations.<sup>23</sup>

In their submissions to IPART, water agencies need to provide their proposed real post-tax WACC and supporting analysis. This should include a breakdown of the WACC into its individual parameters and a comparison of parameters used in the previous determination and possibly other recent water determinations. If the agency proposes changes or adjustments to IPART's WACC parameters, then justification should be provided.

### 2.10.3 Depreciation

In past determinations, we have generally used the straight-line depreciation method to calculate the allowance for regulatory depreciation. This means that the total value of the RAB is recovered evenly over the assumed life of the assets.

In its submission, an agency needs to identify any proposed changes for the calculation of depreciation, including asset classes and asset lives (for each asset class) and the methodology or assumptions used to determine these.

Any proposals to change the method of calculating depreciation should include a full justification of the reasons for the change and an analysis of the impacts resulting from the change.

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<sup>20</sup> The two WACC estimates are the midpoints of two separate WACC ranges based on long-term averages and current market data.

<sup>21</sup> IPART, *Market Update*, 21 August 2014 [http://www.ipart.nsw.gov.au/Home/Industries/Research/Market\\_Update](http://www.ipart.nsw.gov.au/Home/Industries/Research/Market_Update)

<sup>22</sup> IPART, *Fact Sheet - WACC Update - February 2014*, and *Fact Sheet - New Approach to Estimating the Cost of Debt - Use of the RBAs Corporate Credit Spreads - February 2014*.

<sup>23</sup> For example, see IPART, *Essential Energy's water and sewerage services in Broken Hill - Draft Report*, March 2014, Table D.2, p 137.

#### 2.10.4 Asset lives

Water agencies need to explain their proposed approach to asset lives for the upcoming determination. Asset lives are used to calculate depreciation of an agency's asset base. If an agency proposes changes to the way it calculates asset lives, it should provide justification for the changes in its submission and the methodology it used in calculating the new asset lives.

#### 2.11 Tax allowance

In December 2011, after consultation, we decided to calculate a more accurate and commercially based tax allowance as a discrete building block, and to use a post-tax WACC.<sup>24</sup> We consider that this most accurately estimates the tax liability that would be achievable by a similar well-managed, privately owned business. Our previous approach used a pre-tax WACC with an assumed statutory tax rate. In most cases, this overstated the tax that would be paid by a comparable commercial business.

Our approach to calculating agencies' tax allowances incorporates forecast:

- ▼ costs and revenues of the regulated business activities (cash and asset contributions that contribute to regulated activities are also included)
- ▼ tax depreciation based on agencies' existing financial modelling of tax depreciation, adjusted to remove unregulated activities
- ▼ interest repayments based on the same assumptions used to estimate the WACC (gearing, nominal risk-free rate and the debt margin).

We also roll forward expected tax losses, but will start from a zero base. Actual tax losses will not be factored into regulatory determinations.

In its submission, an agency needs to include its forecast tax depreciation, and cash and asset contributions that contribute to regulated activities (as described above).

Any proposals to change the method of calculating the tax allowance should include a full justification of the reasons for the change and an analysis of the impacts resulting from the change.

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<sup>24</sup> IPART, *The incorporation of company tax in pricing determinations – Final Decision*, December 2011.

## 2.12 Sales volume forecasts

Water agencies need to provide a forecast of sales volumes by year. Such forecasts should be provided at a level consistent with prices. For instance, in the case of bulk water utilities this may mean forecasts by water source and valley.

To support these forecasts, agencies should explain the methodology and key inputs they have used as well as the assumptions made in calculating their forecasts. The agency should also highlight any risks or uncertainties associated with the forecast.

Since the sales volumes are used to calculate water prices, it is important that the agencies provide accurate sales forecasts and that we are able to understand how those forecasts were derived.

## 2.13 Customer numbers or entitlement forecasts

Water agencies need to provide forecasts of customer and connection numbers by year, service and service area.<sup>25</sup> To support these forecasts, agencies should explain the methodology and key inputs they have used, as well as the assumptions made in calculating their forecasts. The agency should also highlight any risks or uncertainties associated with the forecast.

In the case of metropolitan water utilities, they need to provide forecast connection and customer numbers by year, service (ie, water, sewerage and stormwater), customer type (eg, residential and non-residential) and meter size. These are needed in order to calculate fixed charges.

Bulk water utilities such as WaterNSW (Rural) and DPI Water will need to provide water entitlement numbers by year, water source, valley and type of entitlement, such as high or general security. Entitlement numbers are used to calculate the value of entitlement charges.

## 2.14 Outstanding issues from the previous pricing determination

In the last pricing determination report, we may have identified some areas where the water agency should undertake further analysis. For example, we may have asked the agency to provide an estimate of the long run marginal cost of water at the next price review.

As part of the submission, an agency needs to explain how each of these outstanding issues have progressed and any conclusions or implications from its

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<sup>25</sup> Information is needed for all customers that are provided a monopoly service, irrespective of whether they are charged a price or not, eg, certain properties/customers can be exempt from service charges but still receive regulated services.

analysis. A summary of the analysis for each issue should be provided in an appendix to the submission.

## 2.15 Proposed prices

The agency's submission should list **each** of its proposed tariffs for **each** of its services over the next five years.<sup>26</sup> This should include each element of a multi-part tariff structure (eg, fixed and usage charges), as well as individual miscellaneous or administration fees or charges.

For **each** of these proposed tariffs or charges, the submission should also provide the agency's reasoning or justification, including:

- ▼ the relationship between the price (level and structure) and the agency's costs of service provision
- ▼ the relationship between the proposed price structure and the price structure of the current determination, including the rationale/basis for any proposed variation and an analysis of any transitional issues (noting that any price proposal should be related back to the relevant costs, both system-related and transactional or administrative, and/or the benefits to customers)
- ▼ the relationship between the proposed price level and the price level of the current determination, including the rationale/basis for the proposed variation and an analysis of any transitional issues
- ▼ analysis of any 'willingness to pay' information available to the agency
- ▼ for **each** type of miscellaneous or administration fee or charge, the number of fees or charges forecast to be levied over the upcoming period, and the basis for these forecasts.

We generally use a building block methodology to calculate an agency's revenue requirement and prices. This methodology is outlined in Appendix B. It is expected that water agencies will use the building block methodology in calculating their revenue requirement and proposed prices.

### 2.15.1 Water usage charge

In past metropolitan water agency reviews, we have set water usage charges with reference to the long run marginal cost (LRMC) of water supply, calculated on an average incremental cost (AIC) basis. The AIC approach to calculating LRMC involves estimating the present value of all the construction, operating and maintenance costs of the next required water supply augmentation project over its lifespan and dividing this by the present value of the benefits (water volumes) of the project.

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<sup>26</sup> If IPART requires proposed prices for a shorter or longer time period, it will advise the agency.

We consider LRMC remains an important benchmark for setting the water usage charge, as it generally sends an appropriate signal about the cost of meeting sustained increases in demand over the long term. However, there may be opportunities to refine water usage prices so that they better signal to end-use consumers the marginal value of dam water or short-term imbalances between supply and demand.

We ask that each metropolitan water agency's submission set out its estimate of the LRMC of water supply, its approach for calculating the LRMC, and its views on the parameters used to estimate the LRMC.

We also ask that each agency's submission provide estimates of the cost of securing short term water needs (ie, the short run marginal cost, or 'SRMC', of water supply), including how this can change under various scenarios (eg, with dam levels and/or bulk water supply operating rules).

Water agencies should explain how their proposed water usage prices relate to (or differ from) their estimates of LRMC and SRMC of water supply, and provide justification for their proposed water usage prices.

### **2.15.2 Sewerage usage charge**

When proposing sewerage usage charges, we ask that the agency's submission set out an estimate of its SRMC - that is, the cost (\$ per kL) of treating, transporting and disposing of one additional kilolitre of domestic-strength wastewater. This estimate should be accompanied by supporting information and explanation.

Water agencies should explain how their proposed sewerage usage charges relate to (or differ from) their estimate(s) of the SRMC of providing sewerage services, and provide justification for their proposed sewerage usage charges.

If an agency is proposing that its sewerage usage charges be set based on the Long Run Marginal Cost (LRMC) of supplying sewerage services, it should provide estimates of its LRMC of supply, accompanied by supporting information and explanation.

We also ask that water agencies set out any other assumptions made in calculating sewerage charges - eg, any assumed discharge allowance threshold.

## **2.16 Impacts of proposed prices**

Water agencies' submissions need to include an assessment of the impact of proposed prices on customers and the agency itself. Indicative bill impacts should be provided in nominal terms, using the forecast inflation we provide in each agency's SIP.



The areas in which the agency needs to provide analysis are covered under the headings below.

### **2.16.1 Transitional arrangements to manage or mitigate proposed changes in price**

Any transitional arrangements to manage or mitigate proposed changes in price need to be covered in detail in a water agency's submission. A justification for the arrangements and assessment of costs in terms of foregone revenue needs to be provided by the agency. Measures that agencies may take to mitigate price changes include:

- ▼ Setting transitional price paths, such as a glide path where the agency only recovers its full notional revenue requirement towards the end of the determination period or a smoothed NPV-neutral approach.
- ▼ Excluding a portion of the Regulatory Asset Base (RAB) – eg, where an agency has plans to undertake a considerable amount of capital expenditure to fund assets required for growth. By excluding a certain amount of the RAB and deferring returns on this portion of the RAB, an agency may seek to ensure that those who create the need for this capital expenditure will bear the costs of it in the future. This also ensures that current customers do not bear the costs of growth related capital expenditure in the current period. Agencies should provide a justification and costing of any proposal to exclude a portion of the RAB.

### **2.16.2 Rebates and any other measures to mitigate the impact of proposed prices on customers, particularly vulnerable groups**

Agencies should provide an outline of Community Service Obligations (CSOs) – for example, rebates, exemptions and any other measures that are available to customers to mitigate pricing impacts (eg, pensioner rebates and exemptions for 'Exempt' properties). Where pensioner rebates are available, agencies should provide an analysis of pensioner bills and compare pensioner bills to full bills. Forgone revenue from providing CSOs should be clearly identified, as well as any revenue received from Government to fund CSOs (eg, pensioner rebates, exempt properties) and an explanation of how this funding relates to the costs of the CSOs.

Our policy for State Owned Corporations (eg, Sydney Water, Hunter Water and Essential Energy) is that the funding of CSOs is a matter between the NSW Government and each agency. Therefore, we do not include the expected

shortfall in revenue due to CSOs into efficient costs, for the purposes of setting maximum prices.<sup>27</sup>

### **2.16.3 Other impacts (eg, environment and other section 15 considerations)**

Agencies should consider and explain any other impacts of their pricing proposal, such as environmental or other considerations under section 15 of the IPART Act.

These could include, for example, environmental levies and the environmental and other impacts of these levies. For instance, in a previous price review the then State Water proposed the continuation of a natural resource management plan levy for irrigators in the Yanco Creek System. This levy was supported by the Yanco Creek and Tributaries Advisory Committee.<sup>28</sup>

### **2.16.4 Affordability**

Submissions should provide an analysis of customer affordability resulting from pricing impacts. For example, bills could be presented as a proportion of average household income. Bulk water utilities such as Water NSW (Rural) could provide an analysis of the affordability of bills by providing them as a percentage of total farm cash costs (or similar measure), as it did in a previous submission.<sup>29</sup>

Agencies could also provide analysis of willingness to pay for additional services or service upgrades if they undertake these studies. Where new charges are being introduced or large amounts of discretionary expenditure are occurring, agencies should engage in customer consultation to ensure that customers are willing to pay for these additional services.<sup>30</sup>

### **2.16.5 Customer consultation**

A water agency's submission should include information on how customers have been consulted on proposed prices and report the responses of customers to these proposed prices. Agencies should provide evidence of customers' willingness to pay where new charges are introduced or large discretionary

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<sup>27</sup> We are still in the process of establishing our policy on the treatment of CSOs for Gosford City Council and Wyong Shire Council. IPART's preliminary position for the treatment of CSOs (pensioner rebates and exempt properties) for these Councils for their next price reviews is to include any shortfalls in CSO funding in costs to be recovered from water customers' charges. We will consult with stakeholders on this issue during the next review of Gosford City Council's and Wyong Shire Council's water and wastewater prices.

<sup>28</sup> See IPART, *Addressing environmental issues in IPART's price determinations – Information Paper*, July 2011, p 13.

<sup>29</sup> State Water Corporation submission to IPART 2010 pricing determination, 16 September 2009, Appendix C Part 6, p 28.

<sup>30</sup> See IPART, *Customer engagement on prices for monopoly services – Final Report*, August 2012.

expenditures are being undertaken. Discretionary expenditures occur when agencies invest in projects that provide services or achieve outcomes that are not mandated or go beyond service standards stipulated in each agency's operating licence or other regulatory instruments/requirements.

Water agencies could also provide evidence from objective customer surveys in support of new charges or large increases in existing charges. Wherever willingness to pay studies, customer surveys, or other forms of customer consultation are undertaken, the water agency should outline the methodology used for these studies or surveys, or how the customer consultation was undertaken.<sup>31</sup>

#### **2.16.6 Impacts on the agency – credit ratings, financial viability and financeability**

Submissions should address not only the impacts of pricing proposals on customers, but also the consequences of the proposed prices for the regulated business. For example, an agency should explain the impacts its pricing proposal will have on its credit rating.

For our price determinations, we consider the likely effects of our determination on the short-term financial sustainability ('financeability') of the regulated business. This means that we assess whether the business will be able to raise finance consistent with an investment-grade rated firm (Baa2 or BBB) during the regulatory period. In conducting our financeability tests, we will calculate financial ratios by using the business' actual gearing ratio and a forecast of its actual interest expense. If we identify a financeability issue, we will extend our analysis to include two to three years of data before and after the regulatory period, if sufficiently robust data has been provided by the business.

Further information on our financeability tests is available on our website.<sup>32</sup>

### **2.17 Quality Assurance requirements and CEO's Declaration**

We require that the submission, information returns and any other materials provided by the agency are subject to a quality assurance check (QA) before they are submitted to us.<sup>33</sup> This is to provide a level of assurance that information submitted by an agency is complete, accurate and consistent. This will help to avoid errors or delays in the price determination process.

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<sup>31</sup> Ibid.

<sup>32</sup> See IPART, *Financeability tests in price regulation - Final Report*, December 2013, p 2.

<sup>33</sup> QAs of materials can be done either externally or by other parts of the agency that did not specifically work on the materials.

A CEO's Declaration is to be included in an agency's submission. This refers to the operational head of the agency, for example Managing Director for Sydney Water Corporation and Hunter Water Corporation.

The CEO's Declaration shall certify the accuracy and consistency of all the data provided and be signed and dated by the head of the agency.

A pro-forma example of this statement is attached in Appendix C.

The QA needs to include the following areas:

- ▼ Information in the submission should be checked to ensure that it is consistent with that in the information return (AIR and SIR), the agency's financial accounts, and reports against output measures, as relevant. Where there are variations in figures, these need to be explained.
- ▼ Figures in the submission should be checked to ensure that they are accurate and correctly sourced. The figures need to sum correctly and be in the same terms (ie, all figures are in nominal or real dollars of the same year). The use of nominal or real dollars should also be explained in clear and simple terms so that stakeholders can follow the logic of their use.
- ▼ The QA should check that all information we have requested (such as in the SIP or the Issues Paper, these Guidelines, or in correspondence) is addressed in the submission.
- ▼ Lastly, the QA should check that the submission includes proposed prices for all monopoly services of the water agency.

Having effective QA procedures in place will help to ensure an efficient review process with a minimum amount of time spent reconciling any errors that arise. It will also reduce confusion and ensure effective stakeholder participation in the review process.

### 3 Checklist of submission contents

This checklist should be completed by the water agency, prior to submitting its pricing submission to IPART.

Item	Complete
<b>An Executive Summary has been included</b>	<input type="checkbox"/>
<b>A separate plain English summary document has been provided</b>	<input type="checkbox"/>
<b>Role and functions of the agency have been explained</b>	<input type="checkbox"/>
<b>Performance over current determination period</b> <ul style="list-style-type: none"> <li data-bbox="288 884 1177 920">■ Service levels <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 936 1177 1039">■ Historical revenue. Data presented in nominal \$ Totals or comparisons in real \$ of last year of current determination period <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 1055 1177 1126">■ Sales volumes and customer connections (or volume of water entitlements for WaterNSW Rural and DPI Water) <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 1142 1177 1245">■ Historical operating expenditure. Data presented in nominal \$ Totals or comparisons in real \$ of last year of current determination period <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 1261 1177 1364">■ Historical capital expenditure. Data presented in nominal \$ Totals or comparisons in real \$ of last year of current determination period <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 1379 1177 1415">■ Implementation of current determination under s.18(5) IPART Act <span style="float: right;"><input type="checkbox"/></span></li> </ul>	
<b>Standards of service</b> <ul style="list-style-type: none"> <li data-bbox="288 1512 1177 1574">■ Explained service levels (quantity, quality and scope) for next determination period <span style="float: right;"><input type="checkbox"/></span></li> </ul>	
<b>Forecast operating expenditure</b> <ul style="list-style-type: none"> <li data-bbox="288 1664 1177 1700">■ 5 years of future operating costs by service are provided <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 1715 1177 1778">■ Operating costs are in real \$ of last year of current determination period <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 1794 1177 1830">■ Drivers, justification and services levels are explained <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 1845 1177 1908">■ A robust business case for proposed operating expenditure is presented <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 1924 1177 1960">■ Explained key assumptions underlying forecasts and identified risks <span style="float: right;"><input type="checkbox"/></span></li> <li data-bbox="288 1975 1177 2011">■ Explained potential efficiency gains <span style="float: right;"><input type="checkbox"/></span></li> </ul>	

Item	Complete
<p><b>Forecast capital expenditure</b></p> <ul style="list-style-type: none"> <li>■ 5 years of capital expenditure by service is provided <input type="checkbox"/></li> <li>■ Long-term investment plan is provided (at least 10 years) <input type="checkbox"/></li> <li>■ Capital expenditure is in real \$ of last year of current determination period <input type="checkbox"/></li> <li>■ Drivers, justification and service levels explained <input type="checkbox"/></li> <li>■ A robust business case for proposed capital expenditure is presented <input type="checkbox"/></li> <li>■ Explained key assumptions underlying forecasts and identified risks <input type="checkbox"/></li> <li>■ Explained potential efficiency gains <input type="checkbox"/></li> </ul>	
<p><b>Recycled Water</b></p> <ul style="list-style-type: none"> <li>■ Information has been provided as per IPART's 2006 recycled water pricing guidelines and IPART's 2011 recycled water avoided costs guidelines <input type="checkbox"/></li> </ul>	
<p><b>Elements of Regulatory Framework</b></p> <ul style="list-style-type: none"> <li>■ Length of determination period <input type="checkbox"/></li> <li>■ Other issues eg, form of regulation, measures to mitigate demand risk, prices charged between agencies <input type="checkbox"/></li> </ul>	
<p><b>Proposed RAB, WACC, Depreciation and Asset Lives</b></p> <ul style="list-style-type: none"> <li>■ Total RAB for each year of the determination, RAB by service and/or service area and supporting calculations <input type="checkbox"/></li> <li>■ Proposed WACC, WACC components and supporting analysis <input type="checkbox"/></li> <li>■ Outline of proposed depreciation method <input type="checkbox"/></li> <li>■ Proposed asset lives <input type="checkbox"/></li> </ul>	
<p><b>Tax Allowance</b></p> <ul style="list-style-type: none"> <li>■ Forecast tax depreciation and cash and asset contributions that contribute to regulated activities <input type="checkbox"/></li> </ul>	
<p><b>Sales Volumes</b></p> <ul style="list-style-type: none"> <li>■ Sales volumes and methodology used to forecast sales <input type="checkbox"/></li> </ul>	
<p><b>Customer Numbers or Entitlement Forecasts</b></p> <ul style="list-style-type: none"> <li>■ Connection numbers by year and service (metropolitan water utilities) <input type="checkbox"/></li> <li>■ Entitlement and licence numbers by year, valley, water source and type (bulk water utilities) <input type="checkbox"/></li> </ul>	

Item	Complete
<p><b>Outstanding Issues from the Previous Determination</b></p> <ul style="list-style-type: none"> <li>■ Explanation of how outstanding issues have progressed with a summary of analysis in appendix</li> </ul>	<input type="checkbox"/>
<p><b>Proposed Prices</b></p> <ul style="list-style-type: none"> <li>■ Proposed tariffs for each service over the next 5 years (real \$ of last year of current determination period)</li> <li>■ Estimates of LRMC and SRMC of water supply (metropolitan water utilities)</li> <li>■ Estimate(s) of SRMC of sewerage services (metropolitan water utilities)</li> </ul>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p><b>Impacts of Proposed Prices</b></p> <ul style="list-style-type: none"> <li>■ Indicative bill impacts in nominal \$ over the next 5 years (can also provide in both real \$ and nominal \$ in executive summary)</li> <li>■ Transitional arrangements to manage or mitigate price changes</li> <li>■ Rebates and other measures to mitigate price impacts</li> <li>■ Other impacts, environment, other matters in section 15 of the IPART Act</li> <li>■ Analysis of affordability</li> <li>■ Financial impacts on the agency</li> </ul>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p><b>Quality Assurance Requirements</b></p> <ul style="list-style-type: none"> <li>■ QA check has been performed</li> <li>■ CEO's Declaration has been provided and signed</li> </ul>	<input type="checkbox"/> <input type="checkbox"/>







## Appendices



## A Section 15 requirements of IPART Act

In making determinations, IPART is required by the IPART Act to have regard to the following matters (in addition to any other matters IPART considers relevant):

- i) the cost of providing the services concerned
- ii) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standard of services
- iii) the appropriate rate of return on public sector assets, including appropriate payment of dividends to the Government for the benefit of the people of New South Wales
- iv) the effect on general price inflation over the medium term
- v) the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers and taxpayers
- vi) the need to maintain ecologically sustainable development (within the meaning of section 6 of the *Protection of the Environment Administration Act 1991*) by appropriate pricing policies that take account of all the feasible options available to protect the environment
- vii) the impact on pricing policies of borrowing, capital and dividend requirements of the government agency concerned and, in particular, the impact of any need to renew or increase relevant assets
- viii) the impact on pricing policies of any arrangements that the government agency concerned has entered into for the exercise of its functions by some other person or body
- ix) the need to promote competition in the supply of the services concerned
- x) considerations of demand management (including levels of demand) and least cost planning
- xi) the social impact of the determinations and recommendations
- xii) standards of quality, reliability and safety of the services concerned (whether those standards are specified by legislation, agreement or otherwise).

## B IPART's building block approach

We generally use a building block approach to calculate the revenue requirement for the businesses that we regulate. We expect that water agencies will use the building block approach in developing their pricing submissions. The building block approach ensures that the full, efficient costs of providing regulated services are measured and monitored in a rigorous and transparent way. Use of the building block approach is consistent with the approach we use in regulating water businesses and industries in NSW.

To apply the building block approach, we have to make decisions on:

- ▼ The revenue that the agency will require for operating expenditure over the determination period, including the forecast efficient operating and maintenance costs.
- ▼ The revenue that the agency will require for capital investment over the determination period, including:
  - an allowance for a return on assets
  - an allowance for a return of assets (regulatory depreciation).
- ▼ An allowance for meeting tax obligations.
  - In December 2011, after consultation, we decided to calculate a more accurate and commercially based tax allowance as a discrete building block, and to use a post-tax WACC.<sup>34</sup> Our previous approach used a pre-tax WACC with an assumed statutory tax rate. In most cases, this overstated the tax that would be paid by a comparable commercial business.
- ▼ An allowance for a return on working capital.
  - This represents the holding cost of net current assets.<sup>35</sup> The allowance for a return on working capital typically represents a very small proportion of each agency's total notional revenue requirement (less than 1%).

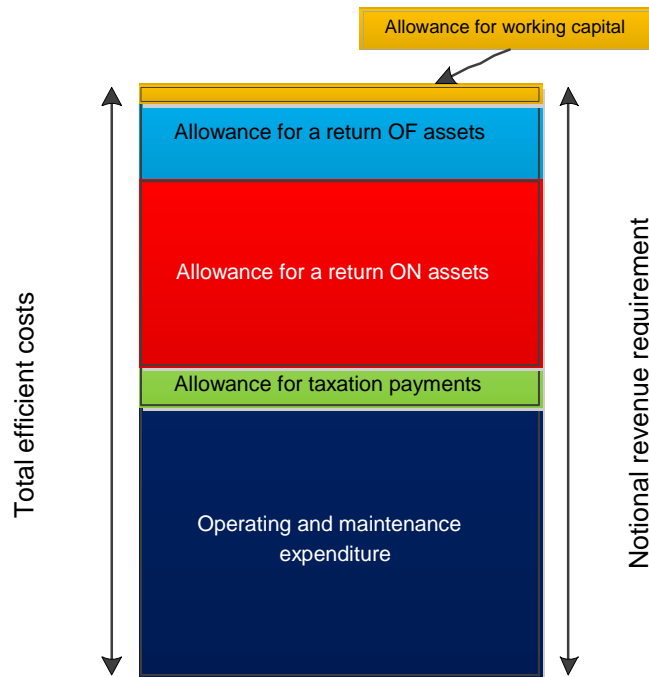
The sum of these amounts represents our assessment of the agency's total efficient costs over the determination period, or its notional revenue requirement. The sum of these cost building blocks is illustrated in Figure B.1 below.

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<sup>34</sup> IPART, *The incorporation of company tax in pricing determinations – Final Decision*, December 2011.

<sup>35</sup> Net current assets = current assets - current liabilities.

**Figure B.1 Building block approach**



Once the revenue requirement has been determined through the building block approach, we then set prices to recover this revenue.

In determining how it should recover its revenue requirement through its fixed charges and its variable usage (or volumetric) charges, a water agency should put forward its preferred pricing proposal, which incorporates its price structures. Agencies need to outline any new prices that they are proposing as well as any changes to the structure of existing prices. Agencies should also explain the relationship between their cost structures and their proposed price structures (eg, in relation to fixed and variable costs and prices).

## C Chief Executive Officer's Declaration

In accordance with the Guidelines for Water Agency Pricing Submissions, December 2015 (the Guide), of the Independent Pricing and Regulatory Tribunal of New South Wales, I declare that:

- a) the information provided in our pricing proposal submitted on [insert date] is the best available information of the financial and operational affairs of [insert agency's name] and has been checked in accordance with section 2.17 of the Guide; and
- b) there are no circumstances of which I am aware that would render any particulars included in the information provided to be misleading or inaccurate.

Certified by the Chief Executive Officer:

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(Name of Chief Executive Officer)

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Dated