



Independent Pricing and Regulatory Tribunal
New South Wales

Guidelines for Water Agency Pricing Submissions

**Water – Guidelines
April 2018**

© Independent Pricing and Regulatory Tribunal (2018)

With the exception of any:

- (a) coat of arms, logo, trade mark or other branding;
- (b) third party intellectual property; and
- (c) personal information such as photos of people,

this publication is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Australia Licence.



The licence terms are available at the Creative Commons website:
<https://creativecommons.org/licenses/by-nc-nd/3.0/au/legalcode>

IPART requires that it be attributed as creator of the licensed material in the following manner: © Independent Pricing and Regulatory Tribunal (2018).

The use of any material from this publication in a way not permitted by the above licence or otherwise allowed under the *Copyright Act 1968* (Cth) may be an infringement of copyright. Where you wish to use the material in a way that is not permitted, you must lodge a request for further authorisation with IPART.

Disclaimer

IPART does not guarantee or warrant, and accepts no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any material contained in this publication.

Information in this publication is provided as general information only and is not intended as a substitute for advice from a qualified professional. IPART recommends that users exercise care and use their own skill and judgment in using information from this publication and that users carefully evaluate the accuracy, currency, completeness and relevance of such information. Users should take steps to independently verify the information in this publication and, where appropriate, seek professional advice.

Nothing in this publication should be taken to indicate IPART's or the NSW Government's commitment to a particular course of action.

ISBN 978-1-76049-210-6

The Independent Pricing and Regulatory Tribunal (IPART)

IPART provides independent regulatory decisions and advice to protect the ongoing interests of the consumers, taxpayers and citizens of NSW. IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from IPART's website: <https://www.ipart.nsw.gov.au/Home>.

Tribunal Members

The Tribunal members for this review are:

Dr Peter J Boxall AO, Chair

Mr Ed Willett

Ms Deborah Cope

Enquiries regarding this document should be directed to a staff member:

Anthony Rush (02) 9113 7790

Anita Payne (02) 9113 7783

Jean-Marc Kutschukian (02) 9290 8453

Matthew Mansell (02) 9113 7770

Contents

1	Introduction	1
1.1	Our overarching principles	1
1.2	The purpose of these Guidelines	1
1.3	The relationship between a water agency's pricing submission and its information returns	2
1.4	Checklist of pricing submission contents	2
2	Summary and performance requirements	5
2.1	Executive and customer summaries	5
2.2	Your role and functions	6
2.3	Your performance over the current determination period	6
2.4	Standards of service	8
3	Key building block inputs	9
3.1	Forecast operating and maintenance costs	9
3.2	Forecast and historical capital costs	10
3.3	Proposed RAB, WACC, depreciation and asset lives	12
4	Forecast sales volumes and customer numbers	15
4.1	Sales volume forecasts	15
4.2	Customer numbers or entitlement forecasts	15
5	Proposed prices and impacts	17
5.1	Proposed prices	17
5.2	Impacts of proposed prices	19
5.3	Customer consultation	20
6	Additional considerations	22
6.1	Recycled water	22
6.2	Ring-fencing of costs and revenues of unregulated services	23
6.3	Outstanding issues from the previous pricing determination	23
6.4	Determination length	23
6.5	Other issues	24
7	Quality assurance requirements and CEO's Declaration	25

1 Introduction

These **Guidelines** have been prepared to assist you (a water utility regulated by us, the Independent Pricing and Regulatory Tribunal (IPART)) in preparing a submission to an IPART price review.

Each chapter provides detail on the content required in your pricing submission.

1.1 Our overarching principles

In developing your pricing submission, you should be mindful that we aim to replicate the effects of a competitive market so that you deliver what customers want at lowest prices (or, in other words, you maximise value to customers). In regulating your prices, we aim to ensure that prices reflect:

- ▼ the prudent and efficient costs of providing the monopoly services, while meeting broader regulatory requirements, and
- ▼ customer preferences and willingness to pay.

Therefore, your pricing submission should reflect the prudent and efficient costs of providing your services, and a strong understanding of what your customers want.

1.2 The purpose of these Guidelines

These Guidelines explain the minimum information requirements for your pricing submission to an IPART price review. Your Submission Information Package (SIP), Issues Paper, or correspondence from us may specify additional requirements.

Your submission to a price review should publicly explain, justify and document your proposed prices for your monopoly services. It should provide us with sufficient information to understand, replicate, analyse and review these prices. A clear and transparent submission is also necessary to enable stakeholders to effectively participate in our review processes.

If your 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.

1.3 The relationship between a water agency’s pricing submission and its information returns

A number of matters in these Guidelines may also be included in your Excel Annual Information Return (AIR) and Special Information Return (SIR), which accompany your written submission.

It is critical that the information contained in your written submission reconciles with the data you submit to us in the AIR and SIR. We require that your submission, information returns and any other materials provided by you have been subject to a **quality assurance (QA) check** before they are submitted to us.¹ Chapter 7 of these Guidelines explains these requirements.

Your submission should include all information necessary for informed public participation in the inquiry process, even if you have submitted this information in an information return (AIR and SIR). Unlike your written pricing submission, the AIR and SIR are generally not public documents, but are subject to the *Government Information (Public Access) Act 2009*.

1.4 Checklist of pricing submission contents

Pricing submission checklist

You should complete this checklist prior to submitting your pricing submission. Elements of this checklist are discussed further in the chapters below.

Pricing submission checklist	Provided?
Chapter 2 – Summary and performance requirements	
Executive summary	<input type="checkbox"/>
A separate plain English summary for customers	<input type="checkbox"/>
Your role and functions	<input type="checkbox"/>
Your performance over the current determination period	
▼ Service levels	<input type="checkbox"/>
▼ Sales volumes and customer connections	<input type="checkbox"/>
▼ Historical operating expenditure (data presented in nominal \$)	<input type="checkbox"/>
– Totals or comparisons in real \$ of the year stated in your SIP letter from IPART	<input type="checkbox"/>
▼ Historical capital expenditure (data presented in nominal \$)	<input type="checkbox"/>
– Totals or comparisons in real \$ of the year stated in your SIP letter from IPART	<input type="checkbox"/>
▼ Implementation of current determination under section 18(5) of the	<input type="checkbox"/>

¹ 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.

Pricing submission checklist	Provided?
<p>IPART Act</p> <p>Standards of service</p> <ul style="list-style-type: none"> ▼ Service levels (quantity, quality and scope) for next determination period 	<input type="checkbox"/>
Chapter 3 - Key building block inputs	
<p>Forecast operating expenditure</p> <ul style="list-style-type: none"> ▼ A business case for proposed operating expenditure ▼ Five years of future operating costs by service ▼ Operating costs are in real \$ of the year stated in your SIP letter ▼ Drivers, justification and services levels ▼ Approach to allocating common or shared costs ▼ Forecasting methodology, rationale and assumptions and risks ▼ Potential efficiency gains 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>Forecast and historical capital expenditure</p> <ul style="list-style-type: none"> ▼ A business case for proposed capital expenditure ▼ Five years of capital expenditure by service ▼ Long-term investment plan is provided (at least 10 years) ▼ Capital expenditure is in real \$ of the year stated in your SIP letter ▼ Drivers, justification and service levels ▼ Forecasting methodology, rationale and assumptions and risks ▼ Key assumptions underlying forecasts and identified risks <p>Proposed Regulatory Asset Base (RAB), Weighted Average Cost of Capital (WACC), depreciation and asset lives</p> <ul style="list-style-type: none"> ▼ Total RAB for each year of the determination, RAB by service and/or service area and supporting calculations ▼ Proposed WACC, WACC components and supporting analysis ▼ Outline of proposed depreciation method ▼ Proposed asset lives <p>Asset disposals</p> <ul style="list-style-type: none"> ▼ Asset disposals <p>Tax allowance</p> <ul style="list-style-type: none"> ▼ Forecast tax depreciation and cash and asset contributions that contribute to regulated activities 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Chapter 4 – Forecast sales volumes and customer numbers	
<p>Sales volumes</p> <ul style="list-style-type: none"> ▼ Sales volumes and methodology used to forecast sales <p>Customer numbers</p> <ul style="list-style-type: none"> ▼ Connection numbers by year and service ▼ Entitlement and licence numbers by year, valley, water source and type 	<input type="checkbox"/> <input type="checkbox"/>

Pricing submission checklist	Provided?
(bulk water utilities)	<input type="checkbox"/>
Chapter 5 – Prices and impacts	
Proposed prices	
▼ Proposed tariffs for each service over the next five years (real \$ of the year stated in your SIP letter)	<input type="checkbox"/>
Impacts of proposed prices	
▼ Indicative bill impacts in nominal \$ over the next five years (can also provide in both real \$ and nominal \$ in executive summary)	<input type="checkbox"/>
▼ Transitional arrangements to manage or mitigate price changes	<input type="checkbox"/>
▼ Rebates and other measures to mitigate price impacts	<input type="checkbox"/>
▼ Other impacts and matters in section 15 of the IPART Act	<input type="checkbox"/>
▼ Analysis of affordability	<input type="checkbox"/>
▼ Financial impacts on your agency	<input type="checkbox"/>
Customer consultation	
▼ Details of customer engagement	<input type="checkbox"/>
Chapter 6 - Additional considerations	
Recycled water	
▼ Five years of capital and operating expenditure, avoided and deferred costs	<input type="checkbox"/>
▼ Evidence that costs are fully ring-fenced	<input type="checkbox"/>
▼ Any supporting evidence such as business cases for avoided or deferred costs	<input type="checkbox"/>
Unregulated costs and revenue	
▼ Ring-fencing of unregulated revenue and costs	<input type="checkbox"/>
Outstanding issues from the previous determination	
▼ Explanation of how outstanding issues have progressed with a summary of analysis in appendix	<input type="checkbox"/>
Elements of regulatory framework	
▼ Length of determination period	<input type="checkbox"/>
▼ Other issues eg, form of regulation, measures to mitigate risk	<input type="checkbox"/>
Chapter 7 - Quality assurance requirements	
Quality assurance requirements and CEO's Declaration	
▼ QA check has been performed	<input type="checkbox"/>
▼ CEO's Declaration has been provided and signed	<input type="checkbox"/>

2 Summary and performance requirements

Your submission should include an Executive Summary, a plain English summary, an outline of your roles and responsibilities, an overview of your performance over the current regulatory period, and an explanation of your expected service standards over the upcoming regulatory period.

2.1 Executive and customer summaries

Your pricing submission should include an executive summary

This outlines and brings together the key elements of your pricing submission, including:

- ▼ a description of the activities we regulate
- ▼ an explanation of your proposed prices and price structures (with reference to existing prices and price structures, costs and cost structures)
- ▼ a summary of other changes you propose for the upcoming determination (compared to the current determination)
- ▼ your forecast operating and capital costs, including the main drivers or reasons for any proposed cost/price increases
- ▼ how your pricing submission has been informed by customer consultation, and how your submission relates to customer preferences
- ▼ the impact of your pricing submission on customers, your performance and financial position, and
- ▼ any major changes in the operating environment since the last review that result in changes to regulated services or service levels, costs and/or prices.

Your pricing submission should include a plain English summary for customers

The plain English summary should provide a high level overview of your submission, the main drivers of (or reasons for) price changes and impacts on customers.

The purpose of the plain English summary is to assist customers to better understand your submission and engage in the price review process.

2.2 Your role and functions

Your pricing submission should describe your roles and responsibilities over the current and upcoming determination periods

This section of your submission should provide the context and supporting information for the rest of your pricing submission. It should include:

- ▼ the legislative framework in which you operate, including key legislative requirements, objectives and determinants of performance
- ▼ each of your IPART regulated (or 'monopoly') services
- ▼ the area or areas of each service, customer types and customer numbers for each service, and
- ▼ any other services you provide, which are not subject to IPART regulation.

You should highlight any changes to your role and functions for the upcoming determination period.

2.3 Your performance over the current determination period

You need to provide detailed information about your performance over the current determination period

Service levels

You should:

- ▼ compare planned (from the previous price review) and actual service levels
- ▼ summarise performance against measures set at the last price review
- ▼ provide reasons for not meeting planned standards of service or outputs, and the implications of this for your customers and your operations, and
- ▼ detail the numbers of complaints in relation to your regulated services and charges.

Historical revenue

You should:

- ▼ provide an overview of the target revenue we set and the actual revenue received annually for each year of the current determination period, and for the determination period as a whole
- ▼ explain deviations between target and actual revenue over the determination period
- ▼ express actual revenue for each year in nominal dollars, and
- ▼ express totals or comparisons in real dollars, using inflation figures provided in the SIP letter.

Sales and customer connections

You should:

- ▼ compare forecast and actual customer connections (or entitlement volumes)² and sales volumes (eg, kL or ML of water sold) over the current determination period, and
- ▼ explain any deviations from that forecast, 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.

Historical operating expenditure (each year of the current determination period)

You should:

- ▼ express **actual** operating expenditure (**opex**) in **nominal dollars**
- ▼ express **any totals or comparisons over the determination period** (eg, between years) in **real dollars**, using inflation figures provided in the SIP letter
- ▼ provide an overview of opex drivers, activities and outcomes achieved
- ▼ compare annual opex allowances with actual opex³ (by service and/or service area) and include a table of results
- ▼ explain any variances between allowed and actual opex, and
- ▼ highlight significant cost savings or cost increases that you have experienced.

Historical capital expenditure (each year of the current determination period)

We use historical capital expenditure (**capex**) to calculate the closing Regulatory Asset Base (**RAB**) for the current determination period. The RAB is the economic value of the assets used to provide the regulated services.

- ▼ Please provide us with your calculated closing RAB value.
- ▼ You should clearly explain and provide all inputs (such as historical asset disposals and capital contributions) that you used to calculate the closing RAB (see section 4.3).

You should also:

- ▼ provide an overview of the drivers of capex, activities carried out and outcomes achieved for each year of the current determination period
- ▼ express **actual** capex in **nominal dollars**
- ▼ express **any totals or comparisons over the determination period** (eg, between years) in **real dollars**, using inflation figures provided in the SIP letter
- ▼ compare the annual IPART capex allowance with actual capex⁴ and include a table of results

² In the case of bulk water providers, such as Water NSW for its rural operations and DPI Water (for the Water Administration Ministerial Corporation).

³ For the current/final year of the determination period, we acknowledge that this will have to be a forecast. Agencies that submit price submissions 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.

- ▼ explain any variances between allowed and actual capex, and
- ▼ highlight any significant deferment of projects, cost savings or cost increases that you have experienced over the current determination period.

Implementation of the current determination

You should:

- ▼ state how the current determination has been implemented, and
- ▼ if applicable, explain where and why you have not implemented the determination (as required by section 18 of the IPART Act).

2.4 Standards of service

You should explain your forecast service standards including the quantity, quality and scope of activities/services over the upcoming determination period

Service standards are a critical consideration when setting prices. Under section 15 of the IPART Act, we must consider standards for quality, reliability and safety of the monopoly services in setting prices. Those standards may be specified by legislation, agreement or otherwise.

For the next (or 'upcoming') determination period, you should clearly explain your **forecast service standards** including the quantity, quality and scope of activities/services. In addition, you should link these standards to the customer consultation that you have completed. For example, you may have decided to improve service levels beyond that required by regulation because feedback from customers has indicated a willingness to pay for this additional level of service. Further information on customer consultation is in section 5.3.

You should identify any changes in the following, which may affect your service levels:

- ▼ operating performance standards (eg, those contained in an operating licence), performance targets, and output measures
- ▼ environmental standards (eg, those contained in an operating licence)
- ▼ government policy (eg, new targets for water recycling), and
- ▼ customer service delivery (eg, to reduce customer complaints in a particular area).

⁴ For the current/final year of the determination period, we acknowledge that this will have to be a forecast. Agencies that submit price submissions 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.

3 Key building block inputs

We generally aim to set prices to reflect efficient costs. We use a building block approach to calculate your business's efficient costs (or 'notional revenue requirement'). The notional revenue requirement is comprised of the following:

- ▼ operating and maintenance expenditure
- ▼ an allowance for a return on assets (ie, the **RAB** multiplied by the Weighted Average Cost of Capital (**WACC**))
- ▼ a depreciation allowance (an allowance for a return of assets)
- ▼ a working capital allowance, and
- ▼ a tax allowance.

We ask that you use the building block methodology in calculating your revenue requirement and proposed prices.

3.1 Forecast operating and maintenance costs

You should forecast operating costs for five years

Your pricing submission should list your forecast operating costs by service/service area or mode of operation, for each year of the next five years.⁵ These costs should be presented in real dollars of the year stated in your SIP letter from IPART (eg, \$2017-18, \$2016-17).

You need to identify and explain **trends in your forecast expenditure**. In particular, you should provide details of, and reasons for, any changes to operating costs. For example, this may include reference to productivity improvements or changes to service standards.

We set prices to reflect efficient costs. Therefore, you should describe your current and forecast **efficiency programs** and the potential for efficiency gains, and how you have included these in expenditure forecasts.

⁵ We will advise you if we require forecasts for a shorter or longer period.

You should forecast expenditure for the final year of the current determination period

You also need to provide a business case for any actual opex over and above the operating cost allowances we set for the final year of the current determination period.

You should explain your forecasting methodology

Your pricing submission needs to explain your **forecasting methodology** (including the rationale for this methodology and assumptions and risks) in developing your forecast of operating costs.

You should explain the cost drivers for your forecast expenditure

You also need to explain the **cost drivers for your forecast expenditure**. This should be linked to your standards of service, discussed in section 2.4.

When forecasting costs, please explain:

- ▼ what level of expenditure is required - and when - to meet key regulatory and other obligations **at least cost**, and
- ▼ any proposed mechanisms to manage cost uncertainty.

You should consider and explain the relationship between forecast opex and capex

You should outline potential changes to opex resulting from current or proposed capital projects.

You need to explain your approach to allocating common or shared costs

You need to outline your approach to allocating indirect (ie, common or shared) costs across services and service areas, and the rationale for this allocation, including between regulated activities and other functions. For example, this may extend to steps taken to 'ring-fence' the costs of providing unregulated services, or the allocation of corporate overheads between regulated and unregulated businesses. Unregulated services are those that are delivered using, at least in part, regulated assets but which are not subject to our price determination. Section 6.2 provides more detail about ring-fencing.

3.2 Forecast and historical capital costs

We assess the prudence and efficiency of capex as part of a price review.

You should forecast capital costs for five years

- ▼ Your pricing submission should list your forecast prudent and efficient capital costs for each year over the next five years.^{6,7} These costs should be presented in real dollars of the year stated in your SIP letter from IPART (eg, \$2017-18, \$2016-17).

⁶ If IPART requires forecasts for a shorter or longer time period, it will advise the agency.

- ▼ You should describe your current and forecast efficiency programs and the potential for efficiency gains, and how you have included these in expenditure forecasts.
- ▼ You should provide details of major projects, explaining the options analysis undertaken and the overall basis for the cost estimate.
- ▼ Your forecast should include an appendix table listing major projects, their justification, an indication of delivery certainty and the basis for cost estimates. An example is provided below.

Table 3.1 Example table listing major projects

Project	Total project cost (\$16-17,\$m)	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.		

You should explain your capex forecasting methodology

Your pricing submission needs to explain your **forecasting methodology, including its rationale and assumptions, and risks** in developing your forecast capital costs.

You should explain the drivers (justifications) for your forecast capex

This should include an explanation of:

- ▼ how your forecast capex relates to your standards of service (discussed in section 2.4), regulatory requirements and other obligations (including how the expenditure will achieve required outcomes at least cost)
- ▼ the main drivers for capex in each program or service area (eg, water sources, water treatment, water distribution, sewerage transport, sewerage treatment and disposal, recycled water and stormwater drainage), and
- ▼ any areas of uncertainty in your forecasts, including proposed mechanisms to manage cost uncertainty.

You should consider and explain the relationship between forecast capex and opex

For example, identify if a capital project will delay or reduce opex.

⁷ In the SIR, we require long term capex information for each year over the next 10 years by service (and service area or mode of operation where applicable).

You should identify how you propose to recover forecast capex

You should explain how you propose to recover forecast investment in very large capital projects. You should also provide analysis to show the impact on customer bills over time.

You should identify any external funding sources for capex. For example, external funding of a particular capital project may be expected from the Federal Government.

Long-term investment plans

We ask that you provide long-term investment plans (at least 10 years) with your pricing submission. These plans will allow us to put forecast capex for the upcoming determination period into context and enhance our assessment of the prudence and efficiency of capex.

Ideally, these should have:

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

3.3 Proposed RAB, WACC, depreciation and asset lives

3.3.1 RAB

The RAB is a key input in calculating the allowances for the return on assets and regulatory depreciation in the revenue requirement. The RAB represents the economic value of assets employed to deliver the monopoly (regulated) services that are subject to price regulation. Only prudent and efficient capex should be rolled into the RAB.

To determine the value of the RAB over a determination period, we generally:

- ▼ Take the RAB value we determined at the start of the previous period⁸ (the opening RAB) and incorporate your prudent and efficient actual capex over that period. We make adjustments to account for other changes to the RAB over the period (eg, 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 capex over the period and making adjustments to account for other forecast changes to the RAB (eg, asset disposals, capital contributions and regulatory depreciation). This gives the forecast RAB for each year of the upcoming determination period.

⁸ 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.

You should provide a table with your opening and closing RAB

For each year of the upcoming determination period, you should show your opening RAB and closing RAB, by service and/or service area. You should include calculations (or a model) of how you derived the opening and closing RAB values for each year of the upcoming determination period.

3.3.2 WACC

We apply a post-tax WACC in our price reviews. Information on how we apply our WACC methodology, including decisions on key WACC parameters, will be available in our reports accompanying our price determinations. Our current [WACC methodology](#) is available on our website.

You need to provide your proposed real post-tax WACC and supporting analysis

You should include a breakdown of your proposed WACC into its individual parameters and a comparison of parameters used in the previous determination and possibly other recent water determinations. You should explain any proposed changes or adjustments to our WACC parameters.

Since February 2014, we have released 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.⁹ We release updates bi-annually in February and August.

3.3.3 Depreciation

We generally use the straight-line depreciation method to calculate the regulatory depreciation allowance. This means that the total value of the RAB is recovered evenly over the assumed average life of the assets.

You need to identify any proposed changes to the calculation of depreciation, including any proposed changes to the categorisation of assets and asset lives

You should outline your proposed depreciation method, including your justification for change if you propose an alternative to the straight-line approach.

You should also include your proposed asset classes, asset lives (for each asset class), and the methodology and/or assumptions used to determine these. You should justify your approach to determining asset lives and analyse the impact of any changes you propose.

3.3.4 Asset disposals

Our asset disposals policy outlines how we propose to treat the disposal of assets, including associated profits or losses. You are required to report actual and forecast asset disposals in the SIR. Our asset disposals policy can be found on our [website](#).

⁹ IPART, *Market Update*, 23 August 2017 available at http://www.ipart.nsw.gov.au/Home/Industries/Research/Market_Update.

3.3.5 Tax allowance

We include tax as a separate allowance in the building block model. This is consistent with our use of a post-tax WACC to calculate the notional revenue requirement.¹⁰

We calculate a commercially based tax allowance as a separate building block (ie, the tax liability of a similar, well-managed privately owned business).¹¹ We do not factor in actual tax losses into our regulatory determinations.

You need to include your forecast tax depreciation and cash and asset contributions

You need to include your forecast tax depreciation. You also need to include cash and asset contributions that contribute to regulated activities.

If you propose a change to our approach to calculating the tax allowance, you should outline its rationale and an analysis of its impacts.

¹⁰ IPART, *The incorporation of company tax in pricing determinations – Final Decision*, December 2011.

¹¹ IPART, *The incorporation of company tax in pricing determinations – Final Decision*, December 2011.

4 Forecast sales volumes and customer numbers

Once we determine efficient costs, we use forecast volumes to set prices in line with decisions on price structure. This chapter details our information requirements in relation to **forecast volumes**. The next chapter provides information about prices and price structures.

We use forecast sales volumes and customer numbers (or entitlement volumes) to calculate water prices. It is therefore important that you provide accurate forecasts and that we are able to understand how these forecasts were derived.

4.1 Sales volume forecasts

You need to forecast sales volumes by year

Please provide forecasts at a level consistent with prices. For instance, in the case of bulk water utilities, this may mean forecast water sales in ML, by water source and valley. In the case of metropolitan water utilities, this may mean forecast water sales in kL, by water service type (eg, potable, unfiltered, etc).

To support your forecasts, you should explain the methodology and key inputs you used, as well as the assumptions made in calculating your forecasts.

You should also highlight any risks or uncertainties associated with your forecasts.

4.2 Customer numbers or entitlement forecasts

You need to forecast customer or entitlement numbers by year

You need to provide forecasts of customer and connection numbers by year, service and service area.¹² To support these forecasts, you should explain the methodology and key inputs you have used, as well as the assumptions made in calculating your forecasts. You should also highlight any risks or uncertainties associated with the forecast.

Like forecast sales volumes (mentioned above), you need to provide forecast customer or connection numbers at a level consistent with prices.

If you are a **metropolitan water utility**, you need to forecast **connection and customer numbers** by year, **service** (ie, water, sewerage and stormwater), **customer type** (eg, residential and non-residential), **dwelling** and **meter size**. These are needed in order to calculate fixed charges.

¹² 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.

If you are a **bulk water utility**, you will need to provide **water entitlement numbers** by **year, water source, valley and type of entitlement**, such as high or general security. We use entitlement numbers to calculate entitlement charges.

5 Proposed prices and impacts

In making price determinations, we are required to have regard to matters listed under section 15 of the IPART Act.

A key principle in setting prices is that they should be cost-reflective. This means your prices derive sufficient revenue to recover the efficient costs of delivering your monopoly services. Your price structures should also match your cost structure. In other words, your usage charge reflects your marginal cost of supply – short run (SRMC) or long run marginal cost (LRMC), depending on the circumstances – and your service or entitlement charges recover your remaining costs. Cost-reflective prices ensure the efficient allocation and use of resources, to the benefit of society.

5.1 Proposed prices

You should propose prices for each of your services

Your pricing submission should list **each** of your proposed tariffs, for **each** of your services, over the next five years.¹³ You 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.

Your pricing submission should also provide your reasoning or justification for **each** proposed tariff or charge, including:

- ▼ the relationship between your price (level and structure) and your costs of service
- ▼ the relationship between your proposed price structure and the price structure and level of the current determination
- ▼ analysis of any ‘willingness to pay’ information available to you (derived from your customer engagement activities), and
- ▼ 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.

5.1.1 Water usage charge

In past metropolitan water price determinations, we have set water usage charges with reference to the LRMC of water supply. We consider LRMC is 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.

¹³ We will advise you if we require forecasts for a shorter or longer period.

We established pass-through mechanisms so the marginal cost of supply of drought response measures (such as operating the Sydney Desalination Plant) is reflected in water usage prices, where appropriate.¹⁴ We recognised there may be further opportunities to refine water usage prices so they better signal to end-use consumers the marginal value of dam water or short-term imbalances between supply and demand.

Metropolitan water utilities should set out your estimate of the LRMC of water supply, your approach for calculating the LRMC, and your views on the parameters used to estimate the LRMC.

Your submission should provide estimates of the cost of securing short term water needs (ie, the SRMC of water supply), including how this can change under various scenarios (eg, with dam levels and/or bulk water supply operating rules).

You should explain how your proposed water usage prices relate to (or differ from) your estimates of LRMC and SRMC of water supply, and justify your proposed prices.

5.1.2 Sewerage usage charge

When proposing sewerage usage charges, your submission should set out an estimate of SRMC – that is, the cost (\$ per kL) of treating, transporting and disposing of one additional kilolitre of domestic-strength sewerage. You should explain how you have calculated the SRMC.

For practical reasons, we have not used the LRMC of supply for setting sewerage usage charges to date. Unlike water, estimating a single estimate of the LRMC of supplying sewerage services across a water utility's area of operations can be problematic. This is because, within a utility's area of operations, the LRMC of supplying sewerage services can vary significantly by sewerage catchment and over time.

You should explain how your proposed sewerage usage charges relate to (or differ from) your estimate(s) of the SRMC of providing sewerage services.

If you propose sewerage usage charges be set based on the LRMC of supplying sewerage services, you should provide estimates of the LRMC of supply, accompanied by supporting information and explanation.

You should set out any other assumptions made in calculating or applying sewerage charges – eg, any assumed discharge allowance threshold.

¹⁴ See IPART, *Review of prices for Sydney Water Corporation, From 1 July 2016 to 30 June 2020, Final Report, June 2016*, pp 154 – 159.

5.2 Impacts of proposed prices

You need to assess the impact of proposed prices on your business and your customers

You should provide indicative bill impacts in nominal terms using the forecast inflation we provide in your SIP letter. The sections below provide more details about the areas in which you need to provide analysis.

5.2.1 Transitional arrangements to manage or mitigate proposed changes in price

You should detail any transitional arrangements to manage price changes

You need to provide a justification for the arrangements and assessment of costs in terms of forgone revenue. Examples of measures that you may propose include:

- ▼ Setting a glide path where you only recover your full notional revenue requirement towards the end of the determination period or a smoothed NPV-neutral approach.
- ▼ Excluding a portion of the RAB. You should provide a justification and costing of any submission to exclude a portion of the RAB.

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

You should provide an outline of Community Service Obligations

Examples of Community Service Obligations (CSOs) include rebates, exemptions and any other measures that are available to customers to mitigate pricing impacts (eg, pensioner rebates and exemptions for 'Exempt' properties).

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 in efficient costs, for the purposes of setting maximum prices.¹⁵

Where pensioner rebates are available, you 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 and an explanation of how this funding relates to the costs of the CSOs.

¹⁵ We are still in the process of establishing our policy on the treatment of CSOs for the Central Coast Council. Our preliminary position for the treatment of CSOs (pensioner rebates and exempt properties) for the Council for its next price review 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 upcoming review of the Central Coast Council's water and sewerage prices.

5.2.3 Other impacts (eg, environment and other section 15 considerations)

You should consider and explain any other impacts of your pricing submission

Section 15 of the IPART Act requires us to consider a number of factors other than those related to the costs of providing regulated services, when making a price determination. These include, but are not limited to, the environment and the social impact of price determinations.

5.2.4 Affordability

You should analyse customer affordability resulting from your proposed prices

For example, you could present bills as a proportion of average household income.

You could also provide an analysis of customer willingness to pay for additional services or service upgrades. See the discussion of this issue below in section 5.3.

5.2.5 Impacts on the regulated water utility – credit ratings, financial viability and financeability

You should analyse the impact of your proposed prices on your business's financial viability and financeability

Your pricing submission should address the consequences of your proposed prices on your regulated business, including any impacts of the proposed prices on your credit rating.

For our price determinations, we consider the likely effects of our determination on the short-term financial sustainability ('financeability') of your regulated business. This means we assess whether your 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 your 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 you have provided sufficiently robust data.

Further information on our financeability tests is available on our website.¹⁶

5.3 Customer consultation

You should indicate how customers have been consulted about your proposed prices, and how customer views are reflected in your pricing submission

As outlined at the beginning of these Guidelines, you should have a strong and up to date understanding of your customers' preferences.

¹⁶ See IPART, *Financeability tests in price regulation - Final Report*, December 2013.

You are responsible for engaging with your customers to understand their views, priorities and needs, which should inform your decision-making and your pricing submission. You are also responsible for the form and content of your consultation.

Customer engagement by water utilities could be used to argue for proposals such as:

- ▼ **regulatory allowances for discretionary expenditure¹⁷** – we would require evidence of customer willingness to pay to achieve outcomes above those mandated by regulation (eg, environmental standards above those required by the EPA)
- ▼ **changes to price structures** – along with cost structure, customer preferences would be a relevant consideration in reviewing price structures
- ▼ **changes to service standards** – customers’ willingness to pay for higher standards, or willingness to accept lower standards, would be a key consideration in any review of operating licence service standards.

Such customer engagement should be consistent with the following principles:

▼ **Relevant**

The utility targets its engagement at the issues it is seeking input on and makes the engagement relevant to the circumstances of the utility and its customers.

▼ **Representative**

The utility gives a representative sample of customers potentially affected by the proposal meaningful opportunity to participate and sufficient time to provide their views.

▼ **Proportionate**

The utility conducts engagement that is proportionate to the potential impact on service and/or price and does not place an undue burden on participants.

▼ **Objective**

The utility’s engagement is objective and not biased towards a particular outcome.

▼ **Clearly communicated and accurate**

The utility provides clear and accurate information to customers during the engagement process. The utility presents information in a form that makes clear: what the purpose of the engagement is; how the utility will use the results; any potential trade-offs between service and price; and the impacts (including cumulative impacts on services and/or bills) of the options being considered. Customers are provided with feedback on how the results of the customer engagement have informed the utilities’ position.

IPART may also have regard to other relevant matters, depending on the nature of the proposal and regulatory decision.

¹⁷ Discretionary expenditures occur when you invest in projects that provide services or achieve outcomes that are not mandated or go beyond service standards stipulated in your operating licence or other regulatory instruments/requirements.

6 Additional considerations

6.1 Recycled water¹⁸

Our current approach and information requirements in relation to recycled water is mainly governed by our 2006 recycled water pricing guidelines¹⁹ and our 2011 recycled water avoided cost guidelines.²⁰

You need to ring-fence recycled water costs and revenue

You are required to ring-fence the costs and revenues of recycled water schemes from the other parts of your business. This is to ensure recycled water costs are not unduly recovered from regulated potable water, sewerage or stormwater customers.

You should report avoided or deferred costs

We allow you to apply to **recover avoided or deferred water and/or sewerage costs** of recycled water schemes from the broader water and/or sewerage customer base. Our assessments of avoided costs related to recycled water schemes are governed by our 2011 recycled water avoided costs guidelines. We assess and determine avoided/deferred costs in conjunction with our review of your operating and capex that occurs as part of our price determination processes. Supporting evidence, such as business cases for avoided/deferred costs, should be provided as an attachment to your submission.

You should report the efficient costs of recycled water schemes

We are required to **pass-through the direct costs** of some recycled water schemes into water and sewerage prices under section 16A directions of the IPART Act.^{21,22}

¹⁸ This section only applies to utilities for which we regulate the price of recycled water.

¹⁹ 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.

²⁰ 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.

²¹ Direct costs, which are different to avoided costs, are normally recovered from recycled water customers.

²² 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.)

6.2 Ring-fencing of costs and revenues of unregulated services

You should ring-fence the costs and revenues of supplying unregulated services

You need to separately identify and explain the costs and revenues of supplying any unregulated services. You should also identify and ring-fence any changes in costs resulting from unregulated price agreements.

Further, you should explain how you have allocated any common costs (such as corporate costs) between regulated services and unregulated services.

This is to ensure that customers pay no more than the efficient costs of supplying regulated services.

6.3 Outstanding issues from the previous pricing determination

You should address any outstanding issues from the previous price review

In the Final Report accompanying the last price determination, we may have identified some areas where you should undertake further analysis.

As part of your pricing submission for the upcoming determination, you need to explain how each of these outstanding issues has progressed and any conclusions or implications from your analysis. You should provide a summary of your analysis for each issue in an appendix to your pricing submission.

6.4 Determination length

You should propose the length of the determination period

In general, we consider the following factors when deciding on the length of the determination period:

- ▼ the confidence we can place in forecasts
- ▼ the risk of structural changes in the industry
- ▼ the need for price flexibility and incentives to increase efficiency
- ▼ the need for regulatory certainty and financial stability
- ▼ the term of the operating licence (where applicable)
- ▼ the costs of a price review, and
- ▼ the benefits of aligning the determination with the price determination of related utilities.

6.5 Other issues

You should include any other issues you consider relevant to your pricing submission, with supporting reasons and analysis

For example, these may include:

- ▼ Your preferred or alternative form of regulation, such as a weighted average price cap.
- ▼ Measures (and related information) to provide incentives for enhanced efficiency (eg, for its 2016 determination, Sydney Water proposed an efficiency carryover mechanism).
- ▼ Measures to manage risk (eg, associated with cost or revenue volatility).

Your pricing submission would need to clearly outline how your approach would work in practice and your rationale for this approach.

7 Quality assurance requirements and CEO's Declaration

Your pricing submission, information return and any other material you provide to us must be subject to a quality assurance check (QA) prior to submission.²³ This ensures information is complete, accurate and consistent and helps avoid errors or delays in the price review process.

You must include a CEO's Declaration in your pricing submission. This must be signed by the operational head of your agency.

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

A pro-forma example of a CEO's declaration is attached below.

Your QA check should confirm the following:

- ▼ **Information in your pricing submission is consistent** with the information return (AIR and SIR), your financial accounts, and reports against output measures, as relevant. **Where there are variations in figures, these need to be explained.**
- ▼ **Figures in your pricing submission are accurate and correctly sourced.** The figures need to sum correctly. Your 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.
- ▼ **Your pricing submission addresses all the information we have requested** (such as in the SIP or the Issues Paper, these Guidelines, or in correspondence).
- ▼ **Your pricing submission includes proposed prices for all your regulated services.**

²³ QAs of materials can be done either externally or by other parts of the agency that did not specifically work on the materials.

Chief Executive Officer's Declaration

In accordance with the *Guidelines for Water Agency Pricing Submissions*, December 2017 (the Guidelines), of the Independent Pricing and Regulatory Tribunal of New South Wales, I declare that:

- a) the information provided in our pricing submission 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 the Guidelines; and
- b) there are no circumstances of which I am aware that would render the information provided to be misleading or inaccurate.

Certified by the Chief Executive Officer:

(Name of Chief Executive Officer)

Dated