

Melbourne Water's 2021 water price review

Guidance paper

13 November 2019



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Summary

Melbourne Water's 2021 price review will be its first under our PREMO framework.¹ Our guidance for Melbourne Water's review is similar to the guidance we used in our 2018 water price review of 17 water businesses (which did not include Melbourne Water).²

We have made modifications to the guidance to reflect Melbourne Water's role as a bulk water and sewerage supplier, and its waterways and drainage functions.

PREMO provides stronger incentives to focus on customer needs that complements the traditional building blocks approach to price setting. In particular, it places a greater emphasis on their customers to inform a price submission. The PREMO incentive mechanism links the return on equity to the ambition of a business in delivering better customer value in its pricing proposals.

We will assess Melbourne Water's price submission consistent with the requirements of the Water Industry Regulatory Order 2014 (WIRO).

If we can assess its price submission in a timeframe shorter than the timeframe we have set out in our guidance, – subject to the clarity, quality and strength of its justifications and proposals – we may be able to release an earlier draft decision for Melbourne Water.

The PREMO framework affords greater autonomy for businesses that demonstrate clear ownership of their proposals. Key to this is the requirement in our guidance that Melbourne Water's board attests to the quality and accuracy of its price submission, and its commitment to the customer outcomes proposed. Ultimately, our expectation is that Melbourne Water's price submission will reflect its "best offer" to its customers.

¹ We applied our new PREMO (Performance, Risk, Engagement, Management and Outcome) framework at our 2018 price review of 17 water businesses.

² An independent review by farrierswier found that PREMO was successful in providing incentives for water businesses to deliver better outcomes for their customers. This reflected extensive engagement by water businesses, so price submissions were better informed by customer priorities.

1. About this guidance

1.1. Our role

We must make a price determination which determines the maximum prices (or the manner in which prices are to be calculated, determined or otherwise regulated) Melbourne Water may charge for prescribed services from 1 July 2021.³

We are required to assess a price submission prepared by Melbourne Water and form an opinion on whether the price submission complies with the guidance we issue Melbourne Water and the Water Industry Regulatory Order 2014 (WIRO).

If we form a view that a price submission satisfies our guidance and WIRO criteria, then we must approve Melbourne Water's price submission — otherwise, the WIRO affords us discretion to specify maximum prices, or the manner in which prices are to be calculated, determined or otherwise regulated.⁴

1.2. About this paper

This paper is the guidance which sets out our approach to the price review and information requirements for Melbourne Water's price submission.⁵

In September 2019, we undertook a focused consultation process to inform our guidance. A focused consultation approach was adopted as we considered there would be little change to the guidance used for our 2018 water price review of 17 water businesses (not including Melbourne Water), which was consulted on extensively with stakeholders over an 18-month period.

³ We are required under clause 10(a) of the WIRO to make a price determination which determines the maximum price that a regulated entity (i.e. Melbourne Water) may charge. The prescribed services are listed at clause 7(b) of the WIRO. Our pricing powers and functions in Victoria's water industry are governed by the Water Industry Regulatory Order 2014 (WIRO), which sits within the broader context of the Water Industry Act 1994 (Vic) (WI Act) and the Essential Services Commission Act 2001 (Vic) (ESC Act).

⁴ Clause 14(b)(i) of the WIRO (provided at Attachment 2) provides that the Commission may only specify the maximum prices, or the manner in which prices are to be calculated, determined or otherwise regulated, if :

1. Melbourne Water's price submission does not comply with the guidance issued by the Commission under clause 13 of the WIRO, and
2. Melbourne Water's price submission does not have adequate regard for the matters specified in clause 11 of the WIRO.

⁵ We are required to issue to Melbourne Water a guidance under clause 13 of the WIRO (clause 13(a) is provided at Attachment 1). Clause 13 of the WIRO also requires us to provide guidance following consultation with Melbourne Water and interested parties.

In preparing our guidance, we consulted with regional urban water businesses and metropolitan water retailers connected to Melbourne Water's network, and the Consumer Action Law Centre. Our consultation was on parts of our 2018 guidance that may need to be refined or amended to reflect the nature of Melbourne Water, the services it delivers, and its customers.

The consultation focused on possible changes to the guidance used for our 2018 review of 17 water businesses (not including Melbourne Water). Stakeholders generally supported our proposed changes. This guidance has taken into account stakeholder feedback.

Where possible we have sought to minimise compliance costs for Melbourne Water.⁶ In considering the information required to support its price submission, much of the information should be readily available and relevant for other purposes such as corporate planning or project justification and prioritisation.

This guidance recognises the nature of different services provided by Melbourne Water. For example, our guidance requires Melbourne Water to present expenditure information for its bulk services separately to its waterways and drainage services. Expenditure in these service areas are subject to very different drivers. Major customers for bulk services are water retailers or regional urban water businesses. For waterways and drainage, the main customers are residential and non-residential customers. Melbourne Water's engagement will need to consider these differences.

In some areas, the guidance indicates where Melbourne Water should only provide a summary in its price submission and make supporting detailed information available at our request. Further, in some situations where Melbourne Water is proposing to maintain the status quo, we do not require detailed justification in the price submission.

Melbourne Water may, in the interests of brevity, choose not to include all the supporting information for the claims made in its submission. However, it must be able to provide any supporting information subsequently requested by us. For example, Melbourne Water may reference a consultant's report in its submission without providing the full report as an attachment.

1.3. PREMO will apply to Melbourne Water

We applied our PREMO pricing framework for the first time in 2018, when we reviewed the price submissions of 17 Victorian water businesses (not including Melbourne Water). An independent review found that PREMO was successful in providing incentives for water businesses to deliver

⁶ Under section 4C (a) of the *Water Industry Act (Vic) 1994* we have an objective to ensure the costs of regulation do not exceed the benefits, wherever possible.

better outcomes for their customers.⁷ This reflected extensive engagement by water businesses, so price submissions were better informed by customer priorities.

Noting the improved customer outcomes arising from our 2018 price review, we will apply the PREMO pricing framework to Melbourne Water, which is reflected in the requirements outlined later in our guidance. We note our consultation found stakeholders support PREMO's application to Melbourne Water and its 2021 price review.

PREMO will provide financial and reputational incentives for Melbourne Water to deliver outcomes most valued by its customers.⁸ The main elements of PREMO are:

- a greater emphasis on the role of customer engagement to inform and influence proposals
- an incentive mechanism linking the return on equity earned to the level of ambition to deliver customer value expressed in a price submission
- flexibility mechanisms to allow a tailored and possibly fast-tracked assessment of proposals, consistent with the strength and clarity of a price submission.

We have modified some elements of PREMO from the 2018 price review to reflect the nature of Melbourne Water and its services. The main changes relate to the PREMO matrix and the return on equity that may be reflected in prices, and some modification to the PREMO assessment tool to reflect the nature of services delivered by Melbourne Water.

Later in our guidance, we specify that we will release a draft decision on Melbourne Water's submission by March 2021. However, depending on our assessment of the strength and clarity of Melbourne Water's price submission, we may be able to release our draft decision earlier and fast-track the assessment process. This may be achievable if Melbourne Water provides a well justified and clear proposal facilitating our assessment against the WIRO and our guidance, limiting the scope of additional verification work to be undertaken by the commission.⁹

⁷ farrierswier 2019, *Victoria's water sector: The PREMO model for economic regulation*, March. The farrierswier review involved interviewing water businesses' management and boards on the development of our new water pricing framework and approach, and implementation of the framework during the 2018 price review.

⁸ The main elements of our new pricing framework and approach are set out in our paper, Essential Services Commission 2016a, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October.

⁹ In our 2018 price review, four water businesses were "fast-tracked" to an early draft decision, because we were able to verify their proposals quickly and simply, and we considered they did not require a longer timeframe for more extensive assessment. This was largely due to these businesses preparing well-presented and well-justified pricing proposals that were easy for us to understand, required little or no amendments, and clearly represented good value to their customers. While still undergoing a thorough verification process, we were able to complete this in a shorter timeframe.

1.4. Amendments to this guidance

We may issue additional guidance or amend this guidance during the price review. The need to issue additional guidance or amend guidance may arise from any changes to law or regulations, for example. We will consult with stakeholders where any additional guidance or amendment to the guidance is required.

1.5. Structure of this guidance

The guidance is structured as follows:

Chapter 2 sets out:

- the manner in which we regulate prices
- our approach and methodology to assessing a price submission and making a price determination
- the impact of PREMO on price submission information requirements
- our approach to consultation during the review process
- the assessment process and the 2021 price review timeline.

Chapter 3 sets out:

- the 'governing criteria' for each of the components of the building block methodology which will inform the nature and scope of the matters to be included in the price submission, and form the basis of our assessment of the price submission
- the supporting information required to be included in the price submission.

2. Our approach to the price review

This chapter sets out:

- the manner in which we will regulate prices¹⁰
- our approach and methodology to assessing Melbourne Water's price submission and making a price determination¹¹
- the impact of PREMO on price submission information requirements
- our approach to consultation during the review process¹²
- the 2021 price review process and timeline.¹³

2.1. How we will regulate Melbourne Water's prices

Clause 12(b) of the WIRO provides that a price determination may specify maximum prices, or the manner in which prices are to be calculated, determined or otherwise regulated, for regulated services in a manner consistent with section 33(5) of the ESC Act — that is, in any manner that we consider appropriate.

We will use a building block methodology to determine the revenues that will provide Melbourne Water with a reasonable opportunity to recover a rate of return on prudent and efficient capital expenditure on assets, a return of the cost of investing in those assets (through depreciation), prudent and efficient operating costs, a benchmark tax allowance and recovery of costs required to comply with relevant health, safety, environmental, social and other regulatory obligations over the regulatory period commencing 1 July 2021.

For a defined regulatory period, the building block methodology involves the following steps:

- first, outcomes that Melbourne Water proposes to deliver to its customers will be assessed to validate that they reflect government and technical regulator obligations, or demonstrated customer needs, and
- second, the following 'building blocks' will be determined in accordance with governing criteria for each element (specified in chapter 3), to:

¹⁰ WIRO, clause 13(a)(i).

¹¹ WIRO, clause 13(a)(ii).

¹² WIRO, clause 13(a)(viii).

¹³ WIRO, clause 13(a)(vi).

- establish an efficient benchmark level of forecast operating expenditure for the next regulatory period
- establish an efficient benchmark level of capital expenditure for the next regulatory period
- roll-forward the regulatory asset base
- apply a rate of return to the regulatory asset base, calculated using:
 - a benchmark cost of debt estimated using a 10-year trailing average approach, and
 - a return on equity value determined by Melbourne Water’s PREMO rating
- establish a return of capital through a regulatory depreciation allowance
- establish a benchmark tax allowance.

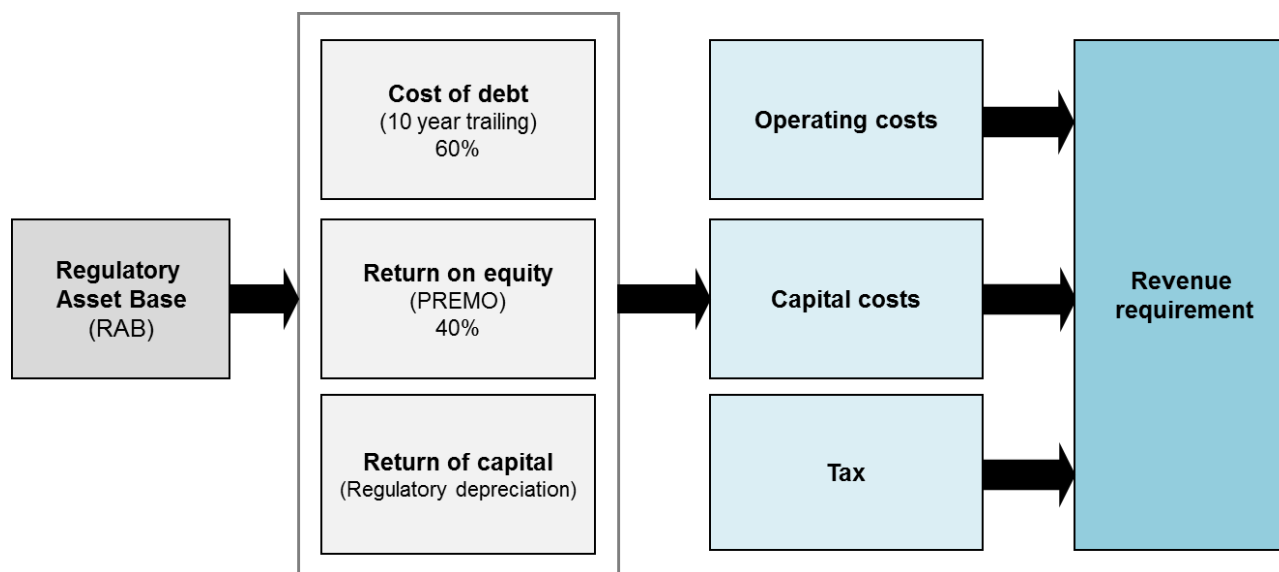
These ‘building blocks’ will determine the forecast revenue that is required for Melbourne Water to deliver on its service outcomes and obligations.

A summary of the building block methodology is shown in figure 2.1.

Once the revenue requirement for the regulatory period has been determined using building blocks, the form of price control that will be applicable to each water business specifies how this revenue is to be translated into customer prices. The prices charged by Melbourne Water have mostly been regulated under a price cap form of price control (that is, fixed maximum prices). Subject to meeting the requirements of our guidance, we continue to provide Melbourne Water with discretion to propose the form of price control to be applied for its regulatory period.

Our price determination will specify the prices that are to apply for the year commencing 1 July 2021, and the prices or the manner in which prices will be calculated for the remaining years of the regulatory period.

Figure 2.1 Revenue under Building Blocks



2.2. Approach and methodology for assessing the price submission

Our regulatory task is to assess Melbourne Water’s price submission and form a view about whether or not the price submission:¹⁴

- has adequate regard for the matters specified in clause 11 of the WIRO, and
- complies with our guidance issued under clause 13 of the WIRO.

2.2.1. Assessing the extent to which the price submission has regard for matters specified in clause 11

Clause 11 of the WIRO refers to matters specified in the ESC Act, the WI Act, our guidance issued under clause 13 of the WIRO, and a number of pricing principles (at clause 11(d)) that we must have regard to in making a price determination.¹⁵

To facilitate our assessment, Melbourne Water is required to support the proposals in its price submission by reference to the matters in clause 11 of the WIRO. In doing so, Melbourne Water is required to place particular emphasis on the matters in clause 8(b) of the WIRO which primarily relate to the promotion of various types of efficiency.¹⁶ Chapter 3 sets out a number of discrete

¹⁴ WIRO, clause 14(b)(i).

¹⁵ The matters referred to in clause 11 of the WIRO have been grouped into themes in Attachment 3.

¹⁶ In summary, clause 8(b) of the WIRO provides that in having regard to the overarching objectives in the ESC Act and the WI Act, particular emphasis is to be placed on: (i) the promotion of efficient use of prescribed services by customers; (ii) the promotion of efficiency in regulated entities as well as efficiency in, and the financial viability of, the regulated water industry; and (iii) the provision to regulated entities of incentives to pursue efficiency improvements.

considerations that a price submission must address in order to demonstrate that a water business has fully and meaningfully addressed the clause 11 matters.

2.2.2. Assessing compliance with this guidance

Melbourne Water must lodge its price submission with us by **9 October 2020**. We expect the price submission (including the financial model provided to us) to comply with chapter 3 of this guidance. We will assess whether Melbourne Water has sufficiently justified its proposals in accordance with the governing criteria in chapter 3 and satisfied the information requirements.

2.2.3. Consequences if we assess non-compliance with this guidance

Consistent with clause 14 of the WIRO, if we form a view that Melbourne Water's price submission complies with our guidance, and has adequate regard for the matters specified in clause 11 of the WIRO, then we must approve the proposals in a price submission. Otherwise, clause 14 of the WIRO allows us the discretion to specify maximum prices, or the manner in which prices are to be calculated, determined or otherwise regulated.¹⁷ This may include us specifying prices for a shorter regulatory period than proposed by Melbourne Water.

While we expect that Melbourne Water's price submission will comply with the requirements of this guidance, our review will generally prioritise matters that have a material impact on the prices customers pay or the services they receive. In practice, if Melbourne Water's price submission has not fully complied with the guidance, our intention is to provide Melbourne Water with an opportunity to provide the required information before we make a draft decision.

2.3. Impact of PREMO on price submission information requirements

A major change for Melbourne Water since its most recent price review (2016) is the introduction of PREMO. Under PREMO, the return on equity reflected in approved prices is linked to the level of ambition in a price submission. The return on equity reflected in Melbourne Water's prices will depend on whether its price submission is rated as 'Leading', 'Advanced', 'Standard' or 'Basic'.

Section 3.12 discusses the manner in which Melbourne Water should assess its price submission to decide on the submission's PREMO rating, and therefore the return on equity to be reflected in its proposed prices. Attachment 5 includes a PREMO assessment tool that Melbourne Water must use to inform its PREMO ratings.

The tool includes examples of what might constitute a 'Leading', 'Advanced', 'Standard' or 'Basic' rating for each element of PREMO. For the 2021 price review, the ambition expressed in a price

¹⁷ WIRO, clause 14(b)(i).

submission will be rated according to four elements of PREMO — Risk, Engagement, Management and Outcomes.¹⁸

Informed by its assessment for the four elements of PREMO, Melbourne Water must propose an overall PREMO rating for its price submission. The assessment tool guides Melbourne Water to consider its level of ambition in relation to matters covered in its price submission, such as proposals related to operating and capital expenditure, form of price control, tariffs, and demand.

All guidance material for establishing a PREMO rating is presented or referenced in section 3.12. The other sections of chapter 3 do not include specific information to assist with PREMO ratings.

2.4. Consultation by the commission

A greater focus on customer engagement by Melbourne Water under PREMO should result in less need for direct engagement by us with its customers. This is consistent with our objectives to emphasise the business and customer relationship, and to provide greater business autonomy.

Compared with past price reviews we expect the price submission to be more heavily informed by customer engagement. Reflecting this, we do not intend to host public meetings (as we have in the past) to test Melbourne Water's proposals before issuing a draft decision. As in past price reviews, we will invite submissions from interested parties on the proposals contained in Melbourne Water's price submission prior to making a draft decision. Following the release of our draft decision, we will invite submissions and intend to engage with customers, either by holding a public meeting and/or through online platforms, before we make a final decision and issue a price determination.¹⁹

We will consult with agencies such as the Department of Environment, Land, Water and Planning, the Department of Health and Human Services, and the Environment Protection Authority Victoria.

We will make papers (including the reports of consultants assisting with its review), water businesses' submissions, and submissions from other interested parties, available on our website (www.esc.vic.gov.au) subject to any confidentiality issues.

If there is information that Melbourne Water or a customer does not want disclosed publicly, because it is confidential or commercially sensitive, the matter should be discussed with our staff before lodging the submission.

¹⁸ The Performance element of PREMO will be assessed at price reviews subsequent to the 2021 review. For more information, see Essential Services Commission Staff Paper 2016, *Assessing and rating PREMO price submissions*, October, pp. 27–9.

¹⁹ WIRO, clause 16(b).

2.5. 2021 price review process and timeline

Melbourne Water must lodge its price submission with us by **9 October 2020**.²⁰ If Melbourne Water fails to lodge its submission by this date, we may use our discretion to specify maximum prices.²¹

We will assess Melbourne Water's price submission using a three-stage process:

- **Stage 1** — Initial evaluation to verify the quality and strength of the submission and the proposed outcomes, and to establish what further verification work might be required to inform our draft decision. If very little is required, we may fast track the draft decision.
- **Stage 2** — Conduct further verification work as required, and prepare a draft decision when completed (or reject the price submission if unable to reach a draft decision based on the information submitted).
- **Stage 3** — Public consultation on our draft decision, leading to a final decision and a price determination.

2.5.1. Our flexible assessment process

As highlighted above, to facilitate a quick and simple stage 1 assessment, Melbourne Water's price submission must clearly convey its key messages and data to us. This guidance informs Melbourne Water on what to include in its price submission, consistent with this stage 1 assessment. The financial model (section 3.21.3) must also be accurately completed for Melbourne Water to be eligible for an early draft decision.

The decision to fast track a price submission is at our discretion, taking into account the quality of the submission and any other matter we consider relevant. Our decision on fast tracking will be heavily informed by how well Melbourne Water demonstrates it has captured the views of its customers and explains how it has considered feedback. We are unlikely to fast track Melbourne Water's assessment if there are major areas of contention with metropolitan water retailers.

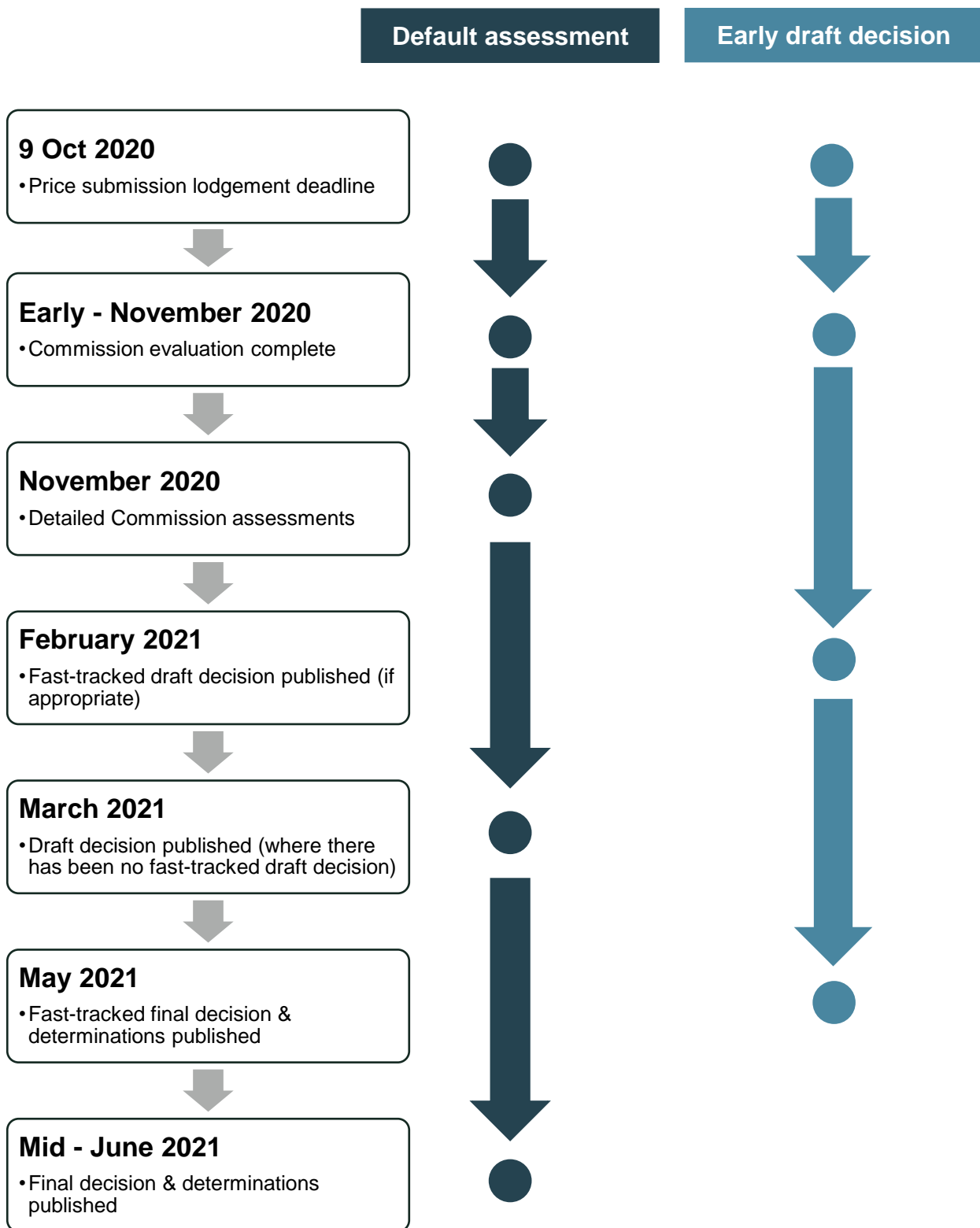
Figure 2.2 sets out our assessment process and timeline for the 2021 price review. All dates other than the price submission due date (9 October 2020) are indicative and will be confirmed later in the price review.

Following the release of an early draft decision, if our review process finds issues that need to be further explored, we may revert a price submission back to the default assessment process described in figure 2.2.

²⁰ Clause 13(a)(vi) of the WIRO requires the Commission to provide guidance on the timing and processes it proposes to follow in making a price determination. Clause 13(a)(vii) also requires the Commission to specify the date by which the water businesses are to deliver their price submissions to the Commission.

²¹ WIRO, clause 14(b)(ii).

Figure 2.2 Price review timeline



3. Required contents of Melbourne Water's price submission

This chapter sets out the governing criteria and supporting information requirements for the major components of Melbourne Water's price submission for the regulatory period commencing 1 July 2021 (the next regulatory period).²²

Melbourne Water should prepare its price submission with us as its target audience. Although the price submission will be released publicly, it is expected that the content and language will be tailored to facilitate our review. Melbourne Water should develop its own separate tools for engaging with its customers and stakeholders on its price and service proposals. We may request copies of customer focused material supporting a price submission.

The price submission must clearly and succinctly identify and explain how Melbourne Water's proposals support customer value for money — that is, what outcomes will be delivered to customers in return for the prices they pay, and how this reflects what customers value most.

The information requirements specified in this chapter reflect the information we need to undertake the 2021 price review consistent with the WIRO. Much of the information requested would already exist within normal business practice — for internal planning and corporate reporting, for example. Also, much of the detail can be provided by completing the financial model (issued by us) that forms part of Melbourne Water's price submission (see section 3.21.3).

Melbourne Water may, in the interests of brevity, choose not to include all the supporting information for the claims made in its submission. However, it must be able to provide any supporting information requested by us. For example, Melbourne Water may reference a consultant's report in its submission without providing the full report as an attachment.

We expect Melbourne Water's price submission will focus mostly on matters having a material impact on the prices customers pay or the services customers receive.

3.1. Managing risk

The WIRO requires the commission to place particular emphasis on matters relating to various efficiencies in undertaking our regulatory functions in Victoria's water sector.²³

²² Pursuant to clause 13(a)(iii) and clause 13(a)(v) of the WIRO.

Efficiency is promoted when risk is adequately identified, quantified, allocated and, where appropriate, managed by a water business. Prices should reflect the costs incurred in delivering services incorporating reasonable assumptions about risk. Melbourne Water's price submission must be informed by a robust risk identification process. Its proposals should allocate risk appropriately, and where it is best placed to do so specify mechanisms it will use to manage risk.

Attachment 4 summarises some of the major risks facing Melbourne Water, and potential approaches that Melbourne Water may propose to deal with risk.

In the past, we have observed Melbourne Water adopting overly risk-averse assumptions in its price submissions, which implies that customers are expected to bear more than an efficient allocation of risk (one result of this is that proposed prices are higher than they need to be).

For example, in past price submissions Melbourne Water has proposed to include the costs for highly uncertain projects and large contingencies in capital expenditure forecasts (and therefore, prices). We expect Melbourne Water to better manage the risk associated with uncertain capital forecasting, noting that actual prudent and efficient capital expenditure will be rolled into their asset base at the end of the regulatory period. Melbourne Water should also seek alternative ways to mitigate construction and capital forecasting risk, such as through better project or contract management.

In later sections of chapter 3, we have specified where we require information on Melbourne Water's consideration of risk to support its proposals in specific areas including length of the regulatory period, expenditure, form of price control, and tariffs.

However, we are also seeking evidence that Melbourne Water has given strategic consideration to risk and identified risks that may have a material impact on the prices customers pay, or the services they receive (taking into account a long-term planning horizon). This is the focus of the information requirements in section 3.1.1.

3.1.1. Supporting information

In its price submission Melbourne Water must:

- identify any significant risks that may impact on customer prices or services, and if requested, make available to us scenario analysis for each risk including an assessment of the nature and scale of the risk and its probability of occurring
- identify how it has addressed significant risks through its proposals, explain how it has considered the allocation of risk, and demonstrate how its proposals support efficiency

²³ WIRO, clause 8(b).

- provide evidence that it has given strategic consideration to the allocation and management of risk in developing its price submission — this may involve providing references and making available to us material on its risk identification and management framework or processes, rather than including detail in a price submission.

Upon request, Melbourne Water must also make available to us the following information about significant risks it proposes to manage that require cost allowances:

- the categorisation of the risk (as operational or financial risk, for example)
- measurement of the risk including:
 - the nature and scale of the risk
 - the probability of the risk event occurring
 - factors influencing the probability of the risk event occurring
 - the financial or service impact of the risk if it occurs
- options considered for allocating the risk
- rationale for the allocation of the risk, given alternative options
- an explanation of why the regulatory risk mitigation tools listed in Attachment 4 do not adequately mitigate the risk
- the role customers will be expected to play in dealing with these risks and how customers will be engaged in this process.

3.2. Regulatory period

3.2.1. Criteria

We are required to set the term of the regulatory period over which Melbourne Water’s price determination will apply.²⁴ We propose to set a five year regulatory period term starting 1 July 2021, but remain open to alternatives proposed by Melbourne Water.

A default five year regulatory period provides the following benefits:

- a relatively long period of certainty for customers about the outcomes to be delivered and prices to be charged
- sufficient time for Melbourne Water to focus on service delivery and for the incentive mechanisms within the pricing framework to be implemented.

A risk associated with a longer regulatory period than proposed by us is that revenue or expenditure outcomes could diverge significantly from the benchmarks used to establish prices

²⁴ WIRO, clause 9.

(possibly resulting in customers paying prices which are significantly above, or below, those required to recover efficient costs).

Accordingly, if Melbourne Water proposes a regulatory period longer than five years it is required to demonstrate that the benefits of a longer period outweigh the potential risks. The level of justification required to support a proposed regulatory period will be greater for a price submission proposing a period longer than five years. The submission should propose checks and balances that will apply during the longer period to ensure customers are receiving value for money.

If Melbourne Water is considering a regulatory period other than five years, it should engage with us as soon as possible.

3.2.2. Supporting information

If Melbourne Water proposes a five year regulatory period, it needs only to state this in its price submission, summarising how it has considered any views from customers on a different term. If Melbourne Water proposes a regulatory period different to five years, then its submission must:

- provide reasons for the regulatory period, having regard to the benefits and risks identified in section 3.2.1, including demonstrating that the benefits of a longer or shorter period outweigh the risks and costs from a customer's perspective
- outline the results of customer engagement on the length of regulatory period, and how feedback has been taken into account.

In addition, for proposed regulatory periods longer than five years, a price submission must:

- Demonstrate that the expenditure forecasts and asset management plans underpinning the price submission are sufficiently robust, particularly having regard to the capacity of the assets and demand forecasts towards the end of the proposed regulatory period.
- Include details of mechanisms that will provide customers and us with confidence that prices reflect value for money and efficient service delivery after year five of the proposed regulatory period.
- Describe how the business will keep customers engaged throughout the longer regulatory period, including how it will update customers on performance.
- Describe how it will adapt to changing customer needs during the regulatory period, within the constraints of the determination. For example, the approach to re-aligning capital programs in response to customer preferences.
- Outline its approach to dealing with uncertainty and risk during the regulatory period, particularly financial viability risk, having regard to the mechanisms for mitigating risk outlined in Attachment 4.

3.3. Customer engagement

The WIRO requires us to set out our expectations regarding customer consultation by Melbourne Water in developing its price submission.²⁵ Melbourne Water must engage with its customers to inform its price submission. The purpose of this engagement is for Melbourne Water to clearly understand the priorities of customers, including the products and services its customers expect. This is to enable Melbourne Water to deliver outcomes that matter most, as efficiently as possible.

We expect Melbourne Water to design its engagement taking into account the context within which it operates. Relevant to its operating environment are Melbourne Water's two distinct customer groups. Melbourne Water provides bulk water and sewage services to metropolitan water retailers and bulk water services to some regional urban water businesses (other than a small number of exceptions, it does not provide water and sewerage services directly to end-use customers). Melbourne Water provides waterways and drainage services to residential and non-residential end-use customers.

We have not prescribed the manner in which Melbourne Water should engage with its customers. However, we expect Melbourne Water's engagement to be tailored to suit its main customers. For example, we expect Melbourne Water to engage with water retailers and regional urban water businesses to understand the outcomes sought by end-use water and sewerage customers, and consider how its proposals might support the achievement of these outcomes.

For water and sewerage services, we see little need for Melbourne Water to engage directly with end-use customers, except on matters that were not covered by engagement undertaken by water retailers or regional urban businesses at the 2018 price review. Contrastingly, Melbourne Water will need to engage with end-use customers on its waterways and drainage proposals.

The following key principles should guide the customer engagement undertaken by Melbourne Water:

- The form of customer engagement undertaken by Melbourne Water should be tailored to suit the content on which it is seeking to engage, the nature of the customer with which it is engaging and the circumstances it is facing.
- Melbourne Water must provide customers with appropriate information, given the purpose, form and the content of the customer engagement, and a reasonable and fair opportunity to participate in the process.
- Melbourne Water's customer engagement should give priority to matters that have a significant influence on the services provided and prices charged by the business.

²⁵ WIRO, clause 13(a)(iv).

- Melbourne Water should start customer engagement early in its planning. The engagement should be ongoing, to keep testing proposals with customers.
- Melbourne Water should demonstrate in its price submission how it has taken into account the views of its customers.

3.3.1. Criteria

We will not “second guess” the form of engagement decided on by Melbourne Water. We will focus on Melbourne Water’s justification for undertaking its engagement in the way it did.

Our assessment will consider:

- Melbourne Water’s justification for its decisions on how and when to engage, and the matters that it decided to engage on
- Melbourne Water’s justification for the customers it engaged with on each of its services, and whether these customers were given a reasonable and fair opportunity to participate on the issues relevant to them
- how feedback received through customer engagement was taken into account by Melbourne Water in reaching its proposals (and what feedback was provided to customers)
- its justification for how it will address customer expectations that will not or cannot be met.

3.3.2. Supporting information

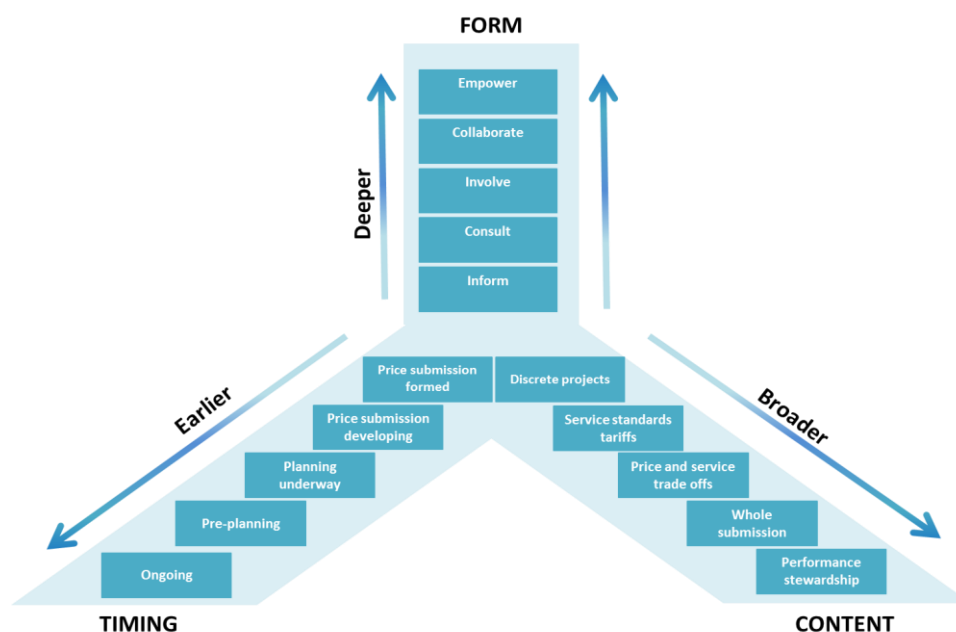
Melbourne Water’s price submission must:

- describe and justify how and when Melbourne Water engaged with its various customer groups
- describe and justify the matters covered by customer engagement
- explain what it learned from customer engagement, and how it satisfied itself that customers were given a reasonable and fair opportunity to participate and that any views expressed were sufficiently representative of its customers
- explain how feedback was taken into account by the business in reaching its proposals
- explain how it will address customer expectations that will not or cannot be met.

Melbourne Water must make available, or provide on request, resources and materials provided to customers during its engagement, and any customer feedback about the engagement program.

Melbourne Water may use the customer engagement diagram (figure 3.1) as a descriptive tool of its overall program, or of individual activities.

Figure 3.1 Customer Engagement Diagram



3.4. Outcomes

Melbourne Water must propose a set of outcomes that represent the value its customers will receive during the next regulatory period. It must define measurable outputs and deliverables, with associated annual targets, that will be monitored during the next regulatory period to demonstrate the achievement of each outcome.

This set of outcomes and performance targets is essentially Melbourne Water’s commitment to its customers for the regulatory period. Actual performance against these measures and targets will allow Melbourne Water to clearly demonstrate whether its customers received the value they paid for. It will also inform the rating for the Performance element of PREMO at the next price review.

Melbourne Water must report at least annually to its customers on its performance against the specified outputs and deliverables for each outcome. We expect Melbourne Water will be proactive in owning its performance by reporting directly to customers as soon as practical after the completion of each reporting year. We will also report annual performance against these outcome commitments for each business through a dedicated section of our website and our annual Outcomes Report.

3.4.1. Criteria

Proposed outcomes must demonstrate linkages to customer preferences, as revealed through its customer engagement program. Outcomes and associated performance targets must be prepared for each of Melbourne Water’s main services, including bulk water and sewerage, and waterways and drainage.

Required contents of Melbourne Water’s price review

3.4.2. Supporting information

Melbourne Water's price submission must:

- present a set of customer outcomes, each with clear and unambiguous measurable outputs and deliverables and associated targets
- explain how the outcomes measures and targets were informed by its customer engagement program
- specify the key actions, activities and programs that it will undertake to meet its targets (and consequently outcomes)
- demonstrate the connection between the outputs, key actions, activities and programs proposed and achievement of a specified outcome
- present and explain any significant cost increases or cost savings for operating or capital expenditure that correspond to each outcome (sections 3.5 and 3.6)
- explain how the cost increases or cost savings are reflected in prices charged to customers.

Melbourne Water may also choose to describe in its price submission:

- how it proposes to report on performance against the delivery of its outcomes to customers during the next regulatory period, including:
 - its proposed strategy for communicating its performance to customers
 - how it might respond to underperformance on outcome delivery
- how it might adapt its outcomes to respond to changing customer preferences, including an ongoing customer engagement program to inform business priorities throughout the next regulatory period.

Describing its proposed customer reporting process (that is, in addition to our outcomes reporting) and how it would respond to underperformance may support Melbourne Water's PREMO rating.

3.5. Forecast Operating Expenditure

Our assessment of Melbourne Water's operating expenditure will consider the Waterways and Drainage part of the business separately to the Bulk Water and Sewerage services. Our financial model includes separate tabs to allow the two major business service areas to be presented independently of each other.

3.5.1. Criteria

The forecast operating expenditure to be included for the purposes of determining the required revenue is operating expenditure which would be incurred by a prudent service provider acting efficiently to achieve the lowest cost of delivering on service outcomes over the regulatory period,

taking into account a long-term planning horizon (prudent and efficient forecast operating expenditure).

We consider that a prudent and efficient operating expenditure forecast has the following characteristics:

- baseline year expenditure is reflective of efficient operating costs and is used as a basis to forecast expenditure
- forecast operating expenditure incorporates expectations for a reasonable rate of improvement in cost efficiency
- expenditure requirements above the baseline year (adjusted for growth and efficiency improvements) are fully explained and justified.

3.5.2. Supporting Information

Melbourne Water's price submission must include a forecast of total prudent and efficient operating expenditure for the next regulatory period, including a forecast for each year of the next regulatory period. Forecast operating expenditure is to be presented separately for the two major business service areas, and for each major service category as applicable.²⁶

For total and annual forecast operating expenditure and for each major service category, forecast operating expenditure for each year of the next regulatory period, and beyond to at least 2030-31, must be further broken down where relevant, in the financial model for:

- operations and maintenance
- bulk charges (further broken down into bulk charges by type and system, for example, transfer charges, Greater Yarra System – Thompson River fixed charges, Victorian Desalination Plant – Water Order variable charges)
- treatment
- customer service and billing
- GSL payments
- licence fees (Essential Services Commission, Department of Health and Human Services, and EPA Victoria)
- corporate costs, and
- other operating expenditure.

Forecasts for the environmental contribution must also be provided in the financial model.

²⁶ Depending on the business, the major service categories may include water, sewerage, recycled water, bulk water, rural water, irrigation, drainage, domestic and stock, and diversions.

Melbourne Water must also provide actual operating expenditure for the current regulatory period (using forecasts for 2020-21), categorised in the same way as above, in the financial model.

Forecast operating expenditure must be presented relative to a reference or baseline operating year (box 3.1), with allowance for customer growth and cost efficiency improvements over the next period. Any significant changes in the forecast years' costs relative to this baseline year must be clearly presented and explained, including how they are reflected in the proposed customer outcomes and how they represent improved customer value (section 3.4).

Our financial model sets out the forecast operating costs consistent with this methodology.

Box 3.1 Baseline Controllable Operating Expenditure

In preparing forecast operating expenditure, a price submission must establish a baseline controllable operating expenditure which comprises efficient recurring controllable costs from the last full year of actual data (2019-20) for those activities and services that are expected to be incurred throughout the next regulatory period.

The baseline is established from the actual prescribed operating expenditure for 2019-20, adjusted as follows:

- remove any non-controllable expenditure²⁷
- remove any one-off or non-recurring expenditure items incurred in that year, or add any normally occurring items that did not occur in that year
- remove any further ongoing cost savings or efficiency commitments that will be realised in the final year of the current regulatory period (2020-21).

Melbourne Water's price submission must justify the adjustments proposed to the baseline year in order to establish the baseline controllable operating expenditure, and demonstrate that this represents efficient ongoing operating costs (consistent with any efficiency targets for the current regulatory period)²⁸. Any significant variation from the benchmark controllable operating expenditure for 2019-20, established in the previous price review, must be explained.

Using the 2019-20 baseline controllable operating expenditure, Melbourne Water must propose and justify:

²⁷ Controllable costs are those that can be directly or indirectly influenced by a water business's operational decisions. Examples of non-controllable costs include: bulk water costs (where prices are set by the Commission), regulatory licence fees, and the environmental contribution.

²⁸ We required Melbourne Water achieve at least a 2 per cent per year efficiency improvement on their controllable operating expenditure over the 2017–21 regulatory period.

- its forecast customer growth (or other basis) rate assumptions (for each year)²⁹
- its annual cost efficiency improvement rate (for each year)
- how proposed cost changes deliver improved customer value.

A price submission must also:

- demonstrate why any proposed cost increases are not covered within the growth allowance, or by inflation, or absorbed within the stated net efficiency improvement rate
- demonstrate how proposed cost changes relate to the proposed customer outcomes and the associated outputs and deliverables (section 3.4), and in particular:
 - identify and explain operating expenditure savings or new operating expenditure arising from capital expenditure and projects (including desal capitalisation)
 - explain any trend or major annual variations in forecast operating expenditure (including identifying cost items that are having an upward or downward influence on operating expenditure)³⁰ compared with historic operating expenditure.
- demonstrate that proposed costs associated with new or revised regulatory obligations and policy requirements are prudent and efficient
- set out and where relevant, justify the non-controllable cost forecasts including:
 - bulk water purchases from other water businesses
 - regulatory licence fees
 - environmental contribution
 - any other proposed non-controllable costs

The price submission should explain Melbourne Water's approach to allocating shared costs, or reference documentation that may be requested by the commission to verify the business's approach.

3.6. Forecast Capital Expenditure

Capital expenditure forecasting essentially involves anticipating the scope, timing and costs for a large number of various sized projects, ranging from the replacement of existing assets at the end of their lives to the construction of major new assets and facilities.

²⁹ Melbourne Water should draw on Victoria in Future forecasts, Australian Bureau of Statistics data, and other information as required. For Waterways and Drainage service, the growth rate may be indexed off a different base to customer numbers – square kilometres drained, for example.

³⁰ Including, but not limited to, assumptions and trends relating to:

- wage and salary escalations, total labour costs and employee number assumptions
- electricity and energy costs, and underlying volume and load assumptions
- information technology costs.

In preparing capital forecasts, Melbourne Water should avoid including speculative capital expenditure in its price submission forecasts. Where capital projects are not fully scoped, costed or internally approved (via an approved business case, for example) at the time of preparing the price submission, Melbourne Water should consider the following options so that customers are not asked to bear the full cost should the project scope or timing change:

1. Include sufficient expenditure to cover only the development costs of the project, with efficient actual construction costs incurred during the period to be rolled into the RAB at the end of the period, along with any accumulated interest. This provides sufficient revenue allowance for the project to proceed during the next regulatory period, with cost recovery to commence in the following regulatory period at no net loss to the business.
2. Include development costs and a notional allowance for construction, with the balance of efficient construction costs (plus associated interest) to be rolled into the RAB at the end of the period. This allows a reasonable portion of the project, based on the various options and cost estimates at the time of preparing the price submission, to be included in prices.
3. Identify the project as a possible 'uncertain and unforeseen event' to be addressed via the mechanisms outlined in section 3.18 during the regulatory period.

3.6.1. Criteria

The forecast capital expenditure to be included for the purposes of determining the required revenue is capital expenditure that would be incurred by a prudent service provider acting efficiently to achieve the lowest cost of delivering service outcomes, taking into account a long-term planning horizon (prudent and efficient forecast capital expenditure).

We consider that prudent and efficient capital expenditure has the following characteristics which reduce the risk borne by customers:

- required expenditure is based on a P50 estimate, in which there is an equal likelihood of project costs being higher or lower than forecast (noting a P50 estimate may not be appropriate where a business's proposed capital program is dominated by one or two major projects)
- contingency allowances are optimised
- forecast capital expenditure for renewals incorporates expectations for a reasonable rate of improvement in cost efficiency
- risks of project delays and cost overruns are managed through contractual agreements with service providers.

Where actual construction costs are found to exceed their efficient level, we will not roll these inefficient expenditures into the regulatory asset base. Inefficient costs will be worn by Melbourne Water and will not be recovered from customers.

3.6.2. Supporting Information

Melbourne Water's price submission must include a forecast of total prudent and efficient capital expenditure for the next regulatory period, including forecast capital expenditure for each year of the next regulatory period.

Forecast capital expenditure is to be presented separately for the two major business service areas, by major service category³¹ and by the following cost drivers:

- forecast capital expenditure to maintain service standards — that is, renewals
- forecast capital expenditure to expand or improve services — that is, growth and improvements/compliance (improvements or upgrades to existing services or to comply with existing or changed government or regulator obligations).

Melbourne Water's financial model must also specify actual capital expenditure for the current regulatory period (including a forecast for 2020-21), categorised in the same way as above.

Capital expenditure will fall into one of three key types:

- Major capital projects — large, discrete capital investment projects (may be completed within a regulatory period, or may span more than one period)
- Capital programs — ongoing programs of capital expenditure allocation, containing multiple works or projects (for example; water main renewals, sewer odour management, ICT equipment upgrades, etc.)
- Other capital expenditure — typically smaller discrete projects and programs.

Melbourne Water's price submission must present the capital expenditure forecasts for both business service areas set out according to these three key types, as follows:

Major capital projects — comprising the 'top 10' discrete capital projects, by total capital cost, to be started or completed during the next regulatory period. Melbourne Water may also include significant discrete projects that fall outside the top 10 by cost — those large but uncertain projects to be addressed by the alternative options described above, for example. For each of these major projects, provide:

- the project name and scope, and relevant major service and asset category
- justification for the project, including the cost driver
- start and completion dates
- total capital cost (itemising any government or customer contributions), and expenditure by year

³¹ Depending on the business, the major service categories may include water, sewerage, recycled water, bulk water, rural water, irrigation, drainage, domestic and stock, and diversions.

- objectives of the project, including how the project aligns with the various customer outcomes proposed (section 3.4)
- and have available:
 - a business case outlining the options considered for achieving the identified objectives and the approach to identifying the optimal solution³²
 - risk analysis of the selected option and plans to mitigate the identified risks to ensure the project can be delivered on budget and on time
 - the incentive and penalty payment arrangements with contractors³³
 - information to identify whether the project has (or will be) the subject of competitive tendering.

Capital programs — all key capital expenditure programs or allocations that will be ongoing throughout the regulatory period (excluding any discrete projects separately specified in the ‘top 10’ above). For each program, provide:

- the program (or cost allocation) name, and relevant major service category
- the cost driver
- total capital cost (itemising any contributions), and expenditure by year
- objectives of the program, including how the program aligns with the various customer outcomes proposed (section 3.4)
- historical annual costs, and an explanation for significant increases or decreases in the forecast average annual expenditure
- and have available:
 - the list of projects included within the program or cost allocation for the next regulatory period, and business cases and options analyses
 - a description of the methodology for assessing risk and prioritising projects within the program
 - the cost estimation basis.

Other capital expenditure — all other capital expenditure not associated with a defined major project or major capital program should be grouped into one or more programs as appropriate, to be included under the capital programs list, as above.

³² This should also include an assessment of a ‘do nothing’ option. Cost comparisons of various options should consider P5, P50 and P95 estimates. Forecasts for capital expenditure must be based on the P50 estimate.

³³ Melbourne Water’s proposed prices must reflect incentive and penalty payment arrangements that are based on a symmetrical sharing of risk for delivery or non-delivery of projects.

Consistent with the above capital expenditure breakdowns (by type and major service category) in the price submission or financial model where appropriate, a water business must also:

- for each year of the next regulatory period, and beyond to at least 2030-31, provide annual forecasts for capital expenditure separately identifying (where appropriate) and reconciling:
 - total capital expenditure
 - contributions (government and customer)
 - gifted assets
 - proceeds from asset sales
 - written down value of assets disposed, and
 - net capital expenditure.
- explain the methodology used to estimate forecast capital expenditure
- identify and explain the key assumptions which underpin the capital expenditure forecasts by each major service category, and how any risks or uncertainties have been addressed
- justify the timeframe for delivering the proposed new capital expenditure given Melbourne Water's delivery of major projects in the past
- explain the reasons for the trend or any major annual variations in forecast capital expenditure (including identifying cost items that are having an upward or downward influence on capital expenditure), compared with historic capital expenditure
- justify the total forecast capital expenditure against the criteria in section 3.6.1, taking into account:
 - forecast demand
 - any relevant industry or economy-wide benchmarks of expenditure
 - the substitution possibilities between forecast operating expenditure and forecast capital expenditure.

Our financial model sets out the forecast capital expenditure consistent with the breakdowns and methodology described above. It includes separate tabs to allow the two major business service areas to be presented independently of each other.

3.7. Treatment of desalination security payments

Melbourne Water's expenditure related to desalination includes annual security payments, and payments for any water ordered from the desalination plant. This section covers the annual desalination security payments. Our guidance on expenditure related to water orders is covered at section 3.5.2.

3.7.1. Criteria

For the purposes of determining the required revenue, Melbourne Water must propose an approach to the recovery of forecast annual security charges that:

- reflects reasonably based assumptions about the operating and capital-related components of the desalination security charge, and
- adopts a time profile for recovery of the capital-related component of the desalination security charge which best meets the following:
 - that prices provide signals about the efficient costs of providing services to current and future customers
 - the alignment of the recovery of costs by Melbourne Water with the time period over which the security service will be provided
 - the views of customers (the water retail businesses and their customers)
 - the alignment of the benefits that customers receive from the desalination security service with the payments that customers make
 - the financial viability of Melbourne Water (taking into account the financial indicators specified in section 3.20).

3.7.2. Supporting information

Melbourne Water's price submission must, in relation to the annual security payments associated with the Victorian desalination plant, specify the amount attributed to forecast operating and capital expenditure. Melbourne Water's price submission must also:

- describe and quantify capitalisation scenarios considered, including in terms of:
 - estimated impact on residential and non-residential water and sewerage customers, and
 - Melbourne Water's financial position (in accordance with our financial indicators specified in section 3.20)
- identify its preferred approach to recovering the desalination security payments and justify how this approach best meets the matters raised in section 3.7.1
- provide a description of how Melbourne Water consulted with customers, and a summary of the views received from customers, and
- describe how the views received from customers were taken into account in determining the time profile for recovering the desalination security payments.

The price submission must also include, and justify, all assumptions used in modelling various scenarios. This includes assumptions about:

- forecasts for desalination security payments (including assumptions about estimates of the breakdown of the desalination security payments between operating costs and the capital-related costs), and
- depreciation (asset life) assumptions for the desalination plant.

Melbourne Water’s approach to capitalisation of desalination security payments will be a key input to our assessment of its PREMO rating. Due to the size of Melbourne Water’s desalination security payments, their treatment for pricing purposes can have a relatively large impact on the ability to address customer affordability, which was a key issue raised by customers during the 2018 water price review for water retail businesses. We note that the amounts capitalised by Melbourne Water so far (since 2016) appear to be well below the implied capital expenditure components of its annual desalination security payments.

3.8. Return on the RAB

A regulatory rate of return is applied to the RAB to calculate the annual return on the RAB to be included in the revenue requirement. The regulatory rate of return comprises two components: a return on equity and a cost of debt.

A key feature of our new pricing approach is that the return on equity reflected in prices will be established via the PREMO rating process (detailed in section 3.12).

The benchmark cost of debt is determined based on a trailing average approach. A benchmark gearing level of 60:40 debt to equity will apply.

The formula for the regulatory rate of return is therefore:

$$\text{Regulatory rate of return} = \text{Re } 0.4 + \text{Rd } 0.6$$

Where:

Re = PREMO rate of return on equity

Rd = benchmark 10 year trailing average cost of debt.³⁴

³⁴ The benchmark cost of debt is provided to us by Treasury Corporation Victoria in nominal terms. We then convert it into real terms. The Fisher equation will be used to convert from nominal to real estimates; that is: $(1 + \text{nominal rate}) = (1 + \text{real rate}) * (1 + \text{inflation rate})$

We will use a market based inflation estimate and specify the applicable inflation rate in the financial model.

3.9. Forecast regulatory asset base

3.9.1. Criteria

The regulatory asset base (RAB) calculated for the purposes of determining the required revenue must reflect capital expenditure (less regulatory depreciation, contributions and/or asset disposals) which would be incurred by a prudent service provider acting efficiently to achieve the lowest cost of delivering on service outcomes, taking into account a long-term planning horizon (prudency criteria).

The opening RAB must be calculated as follows:

$$\begin{aligned} \text{Opening RAB 1 July 2021} &= \text{RAB at 1 July 2016} \text{ (adjusted to reflect 2015-16 actual)} \\ &+ \text{Actual capital expenditure (gross)} \text{ 2016-17 to 2019-20} \\ &+ \text{Forecast capital expenditure (gross)} \text{ 2020-21}^* \\ &- \text{Actual contributions} \text{ 2016-17 to 2019-20} \\ &- \text{Forecast contributions} \text{ 2020-21}^{**} \\ &- \text{Forecast regulatory depreciation} \text{ 2016-17 to 2020-21}^* \\ &- \text{Proceeds from disposal of assets} \text{ 2016-17 to 2019-20} \\ &- \text{Forecast proceeds from disposal of assets} \text{ 2020-21}^{**} \end{aligned}$$

(*denotes the forecast used in the 2016 price determination)

(** denotes the latest available forecast for 2020-21)

Where the up-to-date 2020-21:

- gross capital expenditure forecast is lower than the forecast benchmark for that year in the 2016 price determination, then Melbourne Water must use the lower amount.
- developer contribution forecast is higher than the forecast benchmark for that year in the 2016 price determination, then Melbourne Water must use the higher amount.

The same approach must be used to determine the opening value on 1 July for each subsequent year in the next regulatory period, using the forecasts for capital expenditure, customer and government contributions, regulatory depreciation and asset disposals.

In addition, the opening RAB (at 1 July 2016) must be adjusted for inflation (based on the Consumer Price Index – all Groups, Australia) over the current regulatory period.

3.9.2. Supporting information

A price submission must propose:

- the closing value for the RAB at 30 June 2020 (using actual data)
- the opening value of the RAB at 1 July 2021 (calculated according to the criteria above)
- the forecast value of the RAB for each year of the next regulatory period, in accordance with the prudence criteria set out above
- the forecast value of the RAB for each year after the next regulatory period until at least 2030-31.

A price submission must also:

- provide estimates for regulatory depreciation (section 3.10)
- provide separate data and justify estimates for:
 - government contributions — federal, state and local government contributions towards the capital cost of a project
 - customer contributions — upfront cash payments made by new customers
 - the value of gifted assets — assets constructed and then handed over to the water business to operate and maintain
- include estimates of revenue expected from disposal of assets for each year from 1 July 2021, to be deducted from the roll forward of the RAB.

To assist with its review, we may seek further information on a water business's justification for capital expenditure in 2015-16 and in the period 2016-17 to 2019-20. We may also request a reconciliation of actual net capital expenditure against the benchmarks allowed in the water business's 2016 price determination.

3.10. Regulatory depreciation

We recognise a return of capital expenditure (regulatory depreciation), commencing when the asset enters service. We prefer a straight-line depreciation profile.

The estimates and profiles for regulatory depreciation should reflect reasonable assumptions about asset life and utilisation.

Melbourne Water can propose an alternative approach to straight line depreciation having regard to the following:

- the depreciation rate should account for technological change, projected future demand and any other factors that may affect the value of the assets in the future
- the technical lives of assets, and
- impact on prices over the long-term.

Required contents of Melbourne Water's price review

Where a change is proposed, Melbourne Water will need to provide evidence to demonstrate how the alternative depreciation approach better satisfies the requirements in clause 11 of WIRO.

3.11. Cost of debt

We will use a 10 year trailing average approach to estimate the benchmark cost of debt. The trailing average approach will determine the whole cost of debt (risk free rate and debt risk premium). The averaging period will be the 10 years preceding the year in which the rate applies.

Each year, the 10 year trailing average cost of debt will be updated by rolling forward the data series by one year, such that:

- the cost of debt for the roll-forward (previous) year reflects the yields of the RBA 10 year BBB rated corporate bond – Reserve Bank of Australia Table F3 series FNFYBBB10M
- the annual update is a simple average of 12 months of the RBA 10 year BBB rated corporate bond over 1 April to 31 March
- the trailing average is a simple average of 10 years of cost of debt
- the cost of debt is calculated in nominal terms then converted to real terms applying our inflation rate, and
- implemented in the same manner as we implemented the trailing average approach to estimating the cost of debt for the Victorian water businesses during our 2018 water price review.

Where a change is proposed, Melbourne Water will need to provide evidence to demonstrate how the new approach to estimating the trailing average cost of debt better satisfies the requirements in clause 11 of the WIRO.

The historical data series for the cost of debt calculated using the method described above is set out in table 3.1.

Table 3.1 Historical Cost of Debt

Nominal

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Cost of debt	5.3%	7.1%	5.4%	5.3%	4.9%	4.5%	4.6%	4.6% ^a	4.6% ^a

^a The cost of debt for 2019-20 and 2020-21 will be updated to reflect annual averages based on actual data, prior to the final decision.

Data source: Treasury Corporation Victoria and the Essential Services Commission

Melbourne Water is not required to submit information on the cost of debt in its pricing proposals, as the cost of debt will be determined on the basis of the external data outlined above. However, it must use the values above to estimate its revenue requirement and prices (the values in table 3.1 will be reflected in the financial model).

The cost of debt specified in a price determination for each year of the next regulatory period will be the rate calculated for the ten years up to and including 2020-21. During the next regulatory period, the cost of debt will be updated annually as outlined above.

3.12. PREMO Rating

We have reviewed the PREMO framework and assessment process to consider the nature of services delivered by Melbourne Water, including its role as Melbourne's supplier of bulk water and sewerage services. As noted earlier, we consider that PREMO framework and incentive mechanisms should apply to Melbourne Water, but with minor amendments. These amendments mostly impact the return on equity values in our PREMO matrix and is discussed further below.

The return on equity to be reflected in prices will be established via the PREMO incentive mechanism,³⁵ under which Melbourne Water's return on equity will be linked to the level of ambition expressed in its price submission.

Under PREMO, Melbourne Water must self-assess the level of ambition of its price submission as either 'Leading', 'Advanced', 'Standard' or 'Basic'. We will also independently assess the price submission and also rate it as 'Leading', 'Advanced', 'Standard' or 'Basic'. This two stage PREMO assessment and rating process will determine the return on equity to be reflected in approved prices.

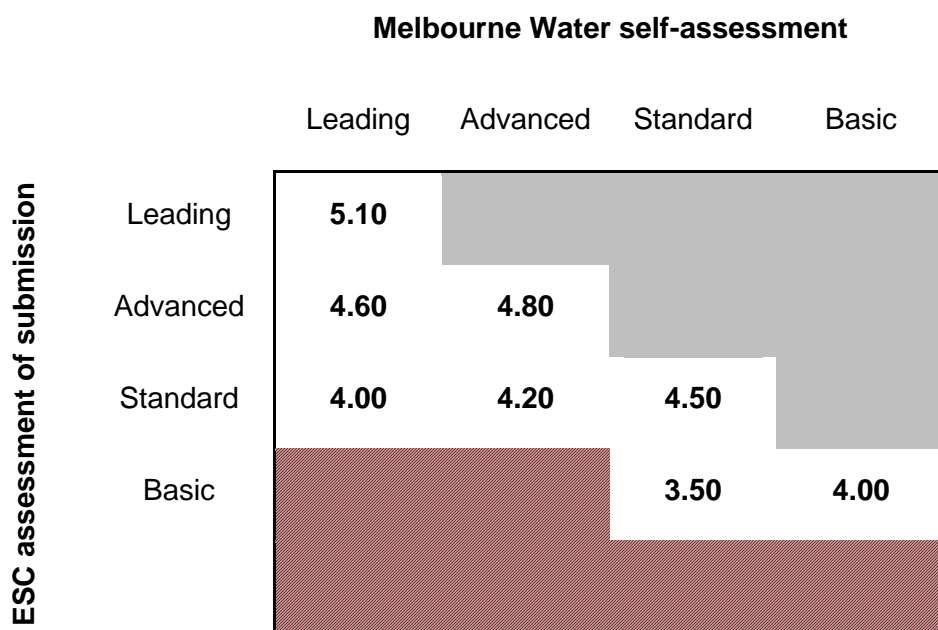
The range of possible outcomes (in real terms) for the return on equity resulting from the two stage assessment and rating process is provided in figure 3.2. We amended the incentive return on equity values for Melbourne Water from the values applied in our 2018 price review. The step increases from 4.5 per cent ("Standard") are now 30 basis points.³⁶ The step increases reflect about a 1 per cent change in Melbourne Water's revenue requirement, which on average, is

³⁵ For more detail, see Essential Services Commission 2016a, *op. cit.*, pp. 9–13.

³⁶ We reviewed the "Standard/Standard" return of 4.5 per cent against recent regulatory decisions and the long-term average returns from decisions of other relevant regulators. We consider that 4.5 per cent remains the appropriate long-term real return on equity for a "Standard" Victorian bulk water supplier.

equivalent to the impact of the step increases in the PREMO matrix applied to businesses in our 2018 water price review.³⁷

Figure 3.2 Regulated return on equity (real)



We also amended the off-diagonal return on equity values to reflect the relativities to the current PREMO matrix and prevailing market conditions. For example, we amended the lowest possible return on equity in the matrix (for a price submission rated by the commission as “Basic”, compared to a proposed rating of ‘Standard’) to reflect our estimate of the long-run cost of debt, calculated on a 10-year trailing average basis.

The best outcomes for Melbourne Water in terms of the return on equity will be achieved when we and the business align in our respective assessments. Situations of aligned assessments are represented by the upper diagonal of the matrix shown in figure 3.2. The more ambitious the submission according to both the business and us, the greater will be the allowed return on equity.

The grey shaded area above this diagonal indicates we will not assess a price submission more favourably than Melbourne Water’s self-assessment. This provides an incentive for Melbourne Water to put forward its best offer, and to provide an honest assessment of the appropriate price submission rating.

³⁷ We consulted with Melbourne Water and metropolitan and affected regional businesses, and CALC on our proposed changes to the PREMO matrix, who were all supportive of the amended PREMO matrix.

If we find Melbourne Water has overstated its ambition, then the return on equity will be lower than had Melbourne Water accurately assessed itself. This can be seen in the diminishing values moving left along each row in figure 3.2.

Consistent with the WIRO, we consider that the incentives embedded in the return on equity matrix at figure 3.2 are in the best interests of Victorian water customers, as it reduces the likelihood of water businesses being allowed rates of return that are not commensurate with the outcomes it proposes to achieve. It also supports an incentive-based framework that will deliver better consumer outcomes.

The (red) shaded zone at the bottom of the matrix represents an area within which we will reserve our discretion. For example, we may require Melbourne Water to resubmit its proposal, or approve a shortened pricing period if we rate its submission to be in this part of the matrix.

Together, the design features of the matrix provide Melbourne Water with a strong incentive to assess its price submissions accurately and honestly.

For the 2021 price review, the ambition expressed in the price submission will be rated according to four elements of PREMO — Risk, Engagement, Management and Outcomes.

Melbourne Water must self-rate its price submission for each of these four elements, and use these ratings to arrive at its overall PREMO rating and corresponding return on equity.

3.12.1. Criteria

A price submission must identify Melbourne Water's self-rating of its submission as 'Leading', 'Advanced', 'Standard' or 'Basic'. A price submission must also identify the rating for the Risk, Engagement, Management and Outcomes elements of PREMO.

We will agree with Melbourne Water's self-ratings where it provides transparent and credible evidence to justify the ratings. The guiding questions in table 3.2 set out the matters that we will consider in assessing Melbourne Water's proposed PREMO ratings.

Attachment 5 includes a PREMO assessment tool that Melbourne Water must use to inform its PREMO ratings. The tool includes examples of what might constitute a 'Leading', 'Advanced', 'Standard' or 'Basic' rating for each element of PREMO. Informed by the assessment for each element of PREMO, Melbourne Water must propose an overall PREMO rating for its price submission. Attachment 5 also includes a scoring methodology to assist Melbourne Water with this rating process.

Table 3.2 Guiding questions for PREMO assessment

PREMO Element	Guiding questions
Outcomes	<p>Has Melbourne Water provided evidence that the outcomes proposed have taken into account the views, concerns and priorities of its end-use customers and water retailers?</p> <p>Has Melbourne Water provided sufficient explanation of how the outcomes it has proposed align to the forecast expenditure requested?</p> <p>Has Melbourne Water proposed outputs to support each of its outcomes, which are measurable, robust and deliverable?</p> <p>Has Melbourne Water provided evidence that the outputs it has proposed are reasonable measures of performance against stated outcomes?</p> <p>Has Melbourne Water demonstrated a process to measure performance against each outcome and to inform its end-use customers water retailers?</p>
Management	<p>To what extent has Melbourne Water demonstrated how its proposed prices reflect only prudent and efficient expenditure?</p> <p>To what extent has Melbourne Water justified its commitment to cost efficiency or productivity improvements?</p> <p>To what extent have senior management, including the Board, demonstrated ownership and commitment to the proposals in its submission?</p> <p>To what extent has Melbourne Water justified or provided assurance about the quality of the submission, including the quality of supporting information on forecast costs or projects?</p> <p>To what extent has Melbourne Water provided evidence that there is senior level, including Board level, ownership and commitment to its submission and its outcomes?</p>
Engagement	<p>To what extent has Melbourne Water justified how the form of engagement suits the content of consultation, the circumstances facing it and its various customer groups?</p> <p>To what extent has the Melbourne Water demonstrated that it provided appropriate instruction and information to its various customer groups about the purpose, form and content of the customer engagement?</p> <p>To what extent has the Melbourne Water demonstrated that the matters it has engaged on are those that have the most influence on the services provided to its various customer groups and prices charged?</p> <p>To what extent has Melbourne Water explained how it decided when to carry out its engagement?</p> <p>To what extent has Melbourne Water demonstrated how its engagement with</p>

its various customer groups has influenced its submission?

Risk To what extent has Melbourne Water demonstrated a robust process for identifying risk, and how it has decided who should bear these risks?

3.12.2. Supporting information

A price submission must provide information that satisfies the procedural requirements set out in the criteria above. The price submission must also:

- identify the reasons for the self-ratings for the Risk, Engagement, Management and Outcomes elements of PREMO, with reference to the guiding questions above
- identify the reasons for the price submission's overall PREMO rating.

3.13. Return on equity

The price submission PREMO rating proposed by Melbourne Water will correspond with a value for a return on equity to be reflected in its price submission (table 3.3).

Table 3.3 Maximum return on equity for each PREMO rating

Real per annum rate

	Leading	Advanced	Standard	Basic
Maximum return on equity to be reflected in Melbourne Water's proposed revenue requirement	5.1	4.8	4.5	4.0

3.13.1. Criteria

Melbourne Water's proposed revenue requirement must incorporate a value for the return on equity that is no higher than the value specified in table 3.3 for its proposed price submission rating. For example, an 'Advanced' rating will correspond with a maximum return on equity of 4.8 per cent. No further supporting information regarding the water business's return on equity is required.

3.14. Tax allowance

3.14.1. Criteria

The tax allowance included for the purposes of determining the required revenue must reflect an estimate of the corporate income tax to be paid, less the imputation credits that would be received by a hypothetical private investor in Melbourne Water. In estimating the value of imputation credits

Melbourne Water must multiply the annual estimated corporate income tax bill by an imputation factor.

This is consistent with the income tax calculation in the financial model.

3.14.2. Calculating the tax allowance

Once populated by Melbourne Water, the financial model will include an estimate of Melbourne Water's future nominal tax allowance based on the following formula:

$ETC_t = (ETI_t \times r_t) (1 - \gamma)$, where:

- ETC_t is an estimate of the future nominal tax allowance
- ETI_t is an estimate of the taxable income for each regulatory year
- r_t is the expected statutory income tax rate for each regulatory year
- γ is the value of imputation credits (which will be at the rate of \$0.50 for every \$1 of company tax paid, as in past price reviews).

In relation to the estimate of ETI_t for each year of the next regulatory period:

- the revenue and expenditure estimates used in the calculation are the same revenue and expenditure estimates used to establish maximum prices (except that customer contributions and gifted assets are treated as revenue)
- the interest expenses (deductions) reflect the nominal cost of debt and the assumed stock of debt (that is, gearing multiplied by the regulatory asset base)³⁸
- the calculation allows for an adjustment to reflect tax depreciation.

The financial model provides an adjustment to the nominal tax allowance for inflation, in order to derive the real tax allowance for each regulatory year. This estimate must be used by Melbourne Water as the basis for its tax allowance forecasts. The forecast tax allowance may also be informed by Melbourne Water's latest estimate of tax to be paid over the next regulatory period.

While in past price reviews the statutory tax rate has been fixed in the financial model at 30 per cent, the financial model now allows the rate to be entered for each year of the next regulatory period, to allow a business to reflect any expected changes in the applicable tax rate. Melbourne Water should estimate the applicable tax rate and include it in the relevant input fields in the financial model.

³⁸ The nominal cost of debt will be calculated using a 10 year trailing average (section 3.11). The tax allowance will be kept constant for the regulatory period consistent with the values in the price determination and will not vary with the cost of debt

3.14.3. Supporting information

The price submission must propose a total tax allowance for the next regulatory period. An estimate must also be provided for each year of the next regulatory period.

The price submission must also:

- state the basis on which the tax allowance for the next regulatory period has been calculated
- provide an estimate of the income tax for each year after the next regulatory period up until at least 2030-31
- provide the business's latest corporate forecasts for annual tax payments for the next regulatory period, and make available to us the basis for the forecasts.

3.15. Demand

3.15.1. Criteria

Demand forecasts proposed by Melbourne Water must represent the best available estimates derived from an appropriate forecasting methodology. Assumptions on the key drivers of demand over the next regulatory period must be well explained and reasonable.

3.15.2. Supporting information

A price submission must summarise Melbourne Water's demand forecasts, including expected trends for the next regulatory period, as well as outline the key assumptions adopted to develop those forecasts. Melbourne Water should use at least a 10 year horizon for demand forecasting and scenario work, and reflect this in its price submission.

A price submission must also include:

- a description of the key demand forecasting issues that lists and justifies the most important assumptions adopted in generating the forecasts — demand forecasts should be based on the latest Victoria In Future forecasts issued by the Victorian Government
- a description of the forecasting methodology used, and the justification for using the methodology
- reference to any external reports or information relied upon
- a description of how forecasts have accounted for the impact of any proposed changes to tariff structures or form of price control expected in the next regulatory period
- details on the levels of restrictions or nature of any permanent water conservation measures reflected in the forecast
- written information on where price elasticity was applied, the input assumptions used, and how the assumptions were translated into the business's demand forecasts

- an explanation of how demand forecasts are consistent with proposed expenditure (in terms of the level and nature of expenditure).

Melbourne Water must also make available on request by us, evidence that a range of supply and demand scenarios were modelled, including low, normal and high water inflow scenarios, and written justification for the selection of the modelled scenario.

The financial model will require Melbourne Water to provide detailed demand forecasts for every tariff and tariff category, by residential and non-residential customers. If detailed forecasts at this level are unavailable, Melbourne Water must explain why and provide estimated demand for these services. The detail in the model does not need to be reproduced in the price submission.

3.16. Form of price control

Melbourne Water currently uses a price cap form of price control for most of its services. In considering whether to approve a proposed price control, we will have particular regard to whether the proposal involves a continuation of an existing structure or whether changes are proposed.

We note that different forms of price control may apply to different services. Where an existing price control structure is being continued, the justification requirements below may be satisfied more easily. Where a change is proposed, however, Melbourne Water will need to provide evidence to demonstrate that the new price control better satisfies the requirements in clause 11 of the WIRO than the existing structure.

3.16.1. Criteria

We will assess proposals against the following factors:

- Melbourne Water's justification for the proposed form of control, including its consideration of efficiency and risk allocation and management
- Melbourne Water's approach to consultation on the form of control and how the views of customers were taken into account
- whether Melbourne Water has considered and demonstrated that appropriate transition strategies will be implemented for affected customers
- the administrative complexity of the proposed form of control
- the ability of customers to understand the resulting tariffs and tariff movements throughout the regulatory period.

In assessing Melbourne Water's proposed form of price control, in particular where a change is proposed, we will place a strong weighting on the feedback Melbourne Water receives from customers and water retailers.

3.16.2. Supporting information

A price submission must clearly state the proposed form of price control to apply to each service over the next regulatory period.

If changes to the form of price control are proposed, then a price submission must:

- explain how the proposed form of control would operate and services affected
- demonstrate that Melbourne Water has consulted with potentially affected customers, and explain how the feedback from customers informed its proposals, and how the change benefits customers
- provide data and supporting information that describes how the proposed form of price control is consistent with providing signals about the efficient cost of delivering services and how it is likely to impact on price stability
- explain how Melbourne Water considered risk allocation and management (including demand and financial risk)
- explain how a transition to a new form of price control may impact customers and Melbourne Water's approach to minimising any adverse impacts.

3.17. Prices and tariff structures

We have typically given Melbourne Water a large degree of discretion to decide on tariff structures. Melbourne Water's bulk water tariffs were reformed in 2016 following Victorian Government changes to the structure of bulk water entitlements. From 1 July 2016, the bulk entitlements set out the annual entitlements held by water retailers³⁹ for each of Melbourne's three main water supply sources: the Greater Yarra System – Thompson River, North-South Pipeline, and the Victorian desalination plant. Water retailers can trade their entitlements.⁴⁰

Prior to proposing changes to bulk water tariffs in its 2016 price submission, Melbourne Water consulted with stakeholders with the changes approved by the commission as part of our 2016 water price review. We considered the changes provided for better price signals, with tariffs better reflecting the different costs of providing bulk water services from each of the main water sources.

Recognising current bulk water entitlement and tariff arrangements have only been in place since mid-2016, we do not see a major need for further reforms to bulk water tariff arrangements.

³⁹ Western Water, Gippsland Water, South Gippsland Water, Barwon Water, Westernport Water.

⁴⁰ Prior to the 2016 reforms to bulk entitlements, Melbourne Water had separate wholesale water headworks and transfer tariffs, each having a fixed and variable component, reflecting the aggregated bulk entitlement arrangements.

We understand however, that Melbourne Water is consulting with water retailers on possible changes. Any reforms to bulk water tariffs must be justified by Melbourne Water as better meeting the requirements in clause 11 of the WIRO. Melbourne Water’s price submission must also provide a summary of stakeholder views on bulk water tariffs, and how these views have been considered in reaching its final proposals.

In our 2016 final decision, we noted Melbourne Water should continue with tariff reforms for non-residential waterways and drainage customers. Specifically, we noted that:

Melbourne Water proposed that during the fifth regulatory period, the remaining customers on the property based tariff will either shift to the flat minimum tariff, or move to an alternative cost reflective tariff arrangement, to be developed between now and Melbourne Water’s next price submission.⁴¹

We require Melbourne Water to continue to move to a more cost-reflective non-residential waterways and drainage tariff, and consider the customer impacts, including impacts to water retailers, and any transition strategies for non-residential customers most affected by the reforms.

We anticipate pricing principles will be used for recycled water, unique services such as trade waste, and miscellaneous services. The pricing principles for the regulatory period commencing 1 July 2021 are outlined in Attachment 6. There may be instances where tariffs are proposed that relate to a very small proportion of revenue or are applicable to very few customers, in these cases, Melbourne Water may propose specific pricing principles.

In developing its pricing proposals, Melbourne Water should consider the tariff assessment principles listed in table 3.4.

Table 3.4 Tariff principles

Tariff issue	Principle
Sustainable revenue	Tariff structures, levels and the form of price control should ensure an economically sustainable revenue stream over the regulatory period.
Subsidy free pricing and inefficient bypass	For each tariff class, the revenue expected to be recovered should lie on or between an upper bound representing the stand alone cost of serving the customers in that class and a lower bound representing the avoidable cost of not serving those customers.
Tariff structures	Tariff structures should be simple, understandable and cost

⁴¹ Essential Services Commission 2016, *Melbourne Water Price Review 2016 – Final Decision*, June, p75.

	<p>reflective.</p> <p>Bulk Water Charges Structure — A two part charge comprising a fixed charge and a volumetric component to recover a bulk supplier’s revenue requirement from its customers for each bulk water service.</p> <p>Bulk Sewerage Charges — The tariff structure should reflect the cost structure - and may comprise a one or two part tariff (all fixed, all volumetric or a fixed charge and a volumetric component).</p> <p>Trade Waste — Trade waste charges should be load-based where measurement is feasible and where the benefits outweigh the costs.</p>
Determining fixed charges	Fixed charges should be calculated to recover the difference between the total revenue requirement for a tariff class and the revenue recovered through volumetric charges.
Determining volumetric charges	The volumetric charge should have regard to the long run or short run marginal costs, where appropriate.
Customer focus and equity	Tariffs and charges and service offerings, and the form of price control, should have regard to the ability of customers to understand the tariff and service offering and respond to price signals, customer preferences and needs in relation to service standards or new services, the costs of implementing the tariff offering, including administration and marketing costs and price path stability.
Locational and postage stamp pricing	<p>Postage stamp pricing comprises retail tariffs that do not reflect any differences in costs of distribution systems by time or location.</p> <p>Postage stamp pricing should be applied when water supply is predominantly interconnected and/or is more equitable and administratively simple.</p> <p>Locational pricing comprises tariffs that vary by location – reflecting the cost structure of water supply, transport and treatment across the business.</p> <p>Locational pricing should be applied when water supply is less integrated and where there are material differences in costs between water networks.</p> <p>The WIRO does not specify whether a business should use locational or postage stamp pricing. It is up to the business to make the case for which is most appropriate.</p>

The principles in table 3.4 provide guidance for Melbourne Water to check their proposed tariffs are consistent with the WIRO, including that tariffs provide signals to customers about the efficient costs of providing services. Compliance with the tariff assessment principles may also support Melbourne Water’s proposed PREMO rating.

3.17.1. Criteria

We will assess proposals against the following factors:

- Melbourne Water’s consideration of risk and efficiency — particularly how proposed tariffs are consistent with providing signals about the efficient cost of delivering services
- Melbourne Water’s approach to consultation on the tariff structures and how the views of customers were taken into account
- whether Melbourne Water has considered and demonstrated that appropriate transition strategies will be implemented for any materially affected customers
- the ability for customers to understand the resulting tariffs and tariff movements throughout the regulatory period.

For price levels, we will assess proposals against the following factors:

- Melbourne Water’s justification for the proposed prices, particularly how proposed prices are consistent with providing signals about the efficient cost of delivering services, and providing incentives for Melbourne Water to pursue efficiency improvements
- how Melbourne Water has taken into account the interests of its end-use customers and water retailers whether Melbourne Water has adequate transition strategies in place to manage the impacts of significant price shocks for affected customers.

In making a decision under clause 11 of the WIRO, we will have particular regard to whether tariffs are continuing in the same form as applied during the last period, or whether changes are proposed.

We recognise that an important objective includes avoiding price shocks for end-use customers and water retailers where possible. Where an existing tariff structure is being continued, this may be satisfied more easily. Where changes are proposed, however, Melbourne Water will need to provide evidence to demonstrate that the amended tariff structure better satisfies the requirements in clause 11 of the WIRO than the existing structure.

3.17.2. Supporting information

A price submission must:

- Include a tariff schedule listing each tariff and the price (or principles) proposed, including each element of a multi-part tariff structure.
- For any changes in tariff structures and principles, or new tariffs:
 - state how each tariff is to be applied — for example, frequency of charging, customer class, applying prices through connection or meter size
 - describe the relationship between the proposed price for a service and the associated short run or long run marginal cost

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- provide data and supporting information that describes how proposed tariffs are consistent with providing signals about the efficient cost of delivering services⁴²
 - justify how the proposed change delivers better signals to customers about the efficient costs of service provision
 - describe how Melbourne Water considered risk and its allocation and management
 - provide a summary of Melbourne Water’s approach to consultation and how the views of end-use customers and water retailers informed the price submission.
- For price changes of more than 10 per cent for any tariff in any year for the regulatory period commencing 1 July 2021:⁴³
 - describe the relationship between the cost of service provision and the proposed price
 - provide a summary of Melbourne Water’s approach to consultation (including the approach to identifying affected end-use customers and water retailers)
 - summarise the customer feedback received on the proposed price increase
 - describe the transition arrangements considered, and ultimately proposed, for affected customers.
 - Provide estimated tariffs for each service for each year beyond the next regulatory period up until at least 2030-31, in the financial model.

3.18. Adjusting prices

Melbourne Water’s price submission must specify any proposed price adjustment mechanisms to apply in the regulatory period commencing 1 July 2021. The 2016 price determinations include mechanisms that allow for prices to adjust in order to take into account:

- uncertain and unforeseen events
- differences between forecast and actual desalination costs (covering desalination security payments and the cost of any water ordered)
- benchmark cost of debt adjustments
- a ‘pass through’ of changes in some costs (such as taxes, desalination water order) during the regulatory period.

⁴² We require price submissions to propose prices that seek to reduce and minimise cross-subsidies. The extent to which this may be achieved will depend on a range of factors, including how well any adverse customer impacts may be managed. These issues will need to be explored in price submissions.

⁴³ Clause 11(d)(ii) of the WIRO requires us to have regard to the principle that prices should provide signals about efficient costs of providing services, while avoiding ‘price shocks’ where possible. For the purposes of the 2021 price review, we have defined a price shock as an increase of greater than 10 per cent in any year for any individual tariff. For any proposed price increases of greater than 10 per cent in any year, we will consider the merits of the increase while having regard to the cost of delivering the particular service (that is, cost reflectivity) and the impacts on customers.

The proposed price control formulas must continue to include a mechanism to allow for price adjustments to occur on an annual basis, including desalination water orders and cost of debt.

If Melbourne Water proposes to continue with the existing adjustment mechanisms, the supporting information requirements will be easily satisfied. Where a change is proposed, Melbourne Water will need to provide evidence to demonstrate how the new adjustment mechanism satisfies the requirements in clause 11 of the WIRO.

We will consider proposals addressing other events that may require a pass through to adjust prices during the regulatory period, provided a clearly articulated justification is included in the submission. Where there is a potential policy or regulatory change that is known but uncertain in its impact on Melbourne Water's costs, the change may be nominated in Melbourne Water's price submission as a potential pass through, or uncertain or unforeseen event. Capital projects which are anticipated, but have not been fully scoped or costed (as described in section 3.6) may be nominated as an uncertain and unforeseen event.

3.18.1. Criteria

In approving proposed pass through or uncertain or unforeseen events nominated in price submissions, we will consider:

- the extent to which the event is outside Melbourne Water's control and poses significant risk of cost changes during the period
- the extent to which the nominated event is uncertain in its impacts and timing
- whether it is reasonable that customers should bear risk associated with the nominated event
- the impact of the nominated event on efficiency incentives for Melbourne Water
- the ability for Melbourne Water to otherwise manage the risk posed by the event — for example, in its form of price control, tariff structures or approach to contracting.

3.18.2. Supporting Information

Melbourne Water's price submission must:

- specify any proposed price adjustment mechanisms to apply in the regulatory period commencing 1 July 2021, and specify the proposed process and/or formula for adjusting prices
- if proposing new or changed price adjustment mechanisms, then the price submission must:
 - clearly specify and explain how the adjustments would work
 - demonstrate Melbourne Water has sought to appropriately balance revenue and cost risk between it and its customers, without materially impacting on price stability
 - justify any proposal against relevant matters in clause 11 of the WIRO and consistency with proposed outcomes.

For any identified pass through or uncertain and unforeseen events, a price submission must also:

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- describe each proposed event, and explain why it is uncertain in its timing or impacts on the business or its end-use customers and/or water retailers
- explain why it is appropriate that either end-use customers and/or water retailers should bear risk associated with the event
- explain how Melbourne Water considered the impacts on its incentives to pursue efficiencies
- propose a price adjustment mechanism to implement the pass through.

3.19. Developer charges

Services to which developer charges apply are a prescribed service for Melbourne Water (also known as new customer contributions). Developers pay Melbourne Water for the capital investment required to provide drainage and waterway services on undeveloped land.

In our 2016 price review for Melbourne Water, we approved a set of pricing principles that determine how developer charges are calculated by Melbourne Water. The pricing principles for developer charges for drainage schemes are outlined in Box 3.2.

3.19.1. Criteria

If Melbourne Water does not propose any changes to the pricing principles outlined in Box 3.2 to calculate developer charges, we are likely to approve them for the 2021 price review, as these principles have worked well in the past.

However, if Melbourne Water proposes changes to these pricing principles, then we would assess the changes against the matters in clause 11 of the WIRO.

Box 3.2 Developer charges pricing principles

Developer charges will be calculated by:

- identifying future capital expenditure for each year of the expected life of the scheme
- identifying forecast developable hectares for each year using an estimate of development density
- applying a pre-tax real discount rate (consistent with that determined by us) to convert future cash flows into present value terms
- setting the developer charge such that the present value of future income equals the present value of future costs, where future income is equal to the developable hectares in each year multiplied by the developer charge, and
- reviewing the financial assumptions relating to each scheme on an annual basis and reviewing engineering specifications every five years.

3.19.2. Supporting Information

Melbourne Water’s price submission must specify the pricing principles that will apply for developer charges, and if changes to the pricing principles are proposed:

- provide the rationale for the changes, having regard to the relevant matters in clause 11 of the WIRO and feedback received from customers, and
- describe the consultation that has occurred with interested parties, including how their feedback was incorporated into Melbourne Water’s proposal.

3.20. Financial position

The financial model will calculate estimates for the four financial indicators specified in table 3.5 for each year to 2030-31. Melbourne Water must populate the financial model to enable us to assess its financial position in the context of the prices proposed in its price submission. Melbourne Water must not change references in the model or include additional lines without consulting with commission staff.

Melbourne Water should also provide us with the findings of any independent ratings assessments conducted by an independent credit ratings agency since 1 July 2016.

Table 3.5 Financial indicators

Indicator	Calculation	Benchmark Range	Description
Primary indicator — used to determine size of any viability adjustments			
FFO interest cover	$(\text{FFO} + \text{net interest}) / \text{net interest}$	> 1.5 times < 1.8 times used as a caution	Measures the extent of the cash flow buffer a business has to meet its debt obligations.
Secondary indicators — used only as contextual information to determine whether an adjustment is necessary			
Net Debt / Regulatory Asset Value (%) (Gearing)	$(\text{Interest bearing liabilities} - \text{cash}) / \text{RAV}$	< 70 per cent	Measures the debt component of the regulatory capital structure.
FFO / Net debt (%)	$\text{FFO} / (\text{Interest bearing liabilities})$	> 10 per cent	Measures the extent to which the serviceability of

	– cash)		debt is improving, remaining stable, or declining.
Internal financing ratio (%)	(FFO – dividends) / net capital expenditure	> 35 per cent	Measures the extent to which an entity has cash remaining to finance a prudent portion of capital expenditure after making dividends.

Notes:

- 1) FFO refers to ‘funds from operations’ and RAV refers to the ‘regulatory asset value’.
- 2) Regarding FFO interest cover, the Commission believes the 1.8 times benchmark signals a need for caution from businesses and closer observation by the Commission in its price reviews and performance reporting. But until a business breaches or is forecast to breach the benchmark of 1.5 times, it is unlikely the Commission would make a viability adjustment.

3.21. Additional requirements

3.21.1. Executive summary

A price submission must contain a summary which outlines and brings together the key elements of its proposals. The summary should include:

- an overview of proposed prices
- an overview of the outcomes proposed for Melbourne Water’s end-use and water retail customers, including how services will change from previous levels
- Melbourne Water’s nominated PREMO rating
- an attestation from the board on the quality and accuracy of information provided in the price submission.

3.21.2. Board assurance

The board of Melbourne Water is required to attest to the quality and accuracy of the information included in its price submission, and that the price submission complies with our guidance in all material respects. This attestation, endorsed by a resolution of the board of directors of Melbourne Water, must be included in the price submission.

The form of the required assurance is below:

- The directors of Melbourne Water having made such reasonable inquiries of management as we considered necessary attest that, to the best of our knowledge, for the purpose of proposing prices for the Essential Services Commission's 2021 Melbourne Water Price Review:
- information and documentation provided in the price submission and relied upon to support Melbourne Water's price submission is reasonably based, complete and accurate in all material respects;
- financial and demand forecasts are Melbourne Water's best estimates, and supporting information is available to justify the assumptions and methodologies used; and
- the price submission satisfies the requirements of the 2021 Melbourne Water Price Review Guidance paper issued by the Essential Services Commission in all material respects.

3.21.3. Financial model

Melbourne Water must complete the financial model prepared by us to accompany its price submission. Melbourne Water's price submission must be consistent with the data provided in the financial model.⁴⁴ The financial model will clearly identify the cells for which Melbourne Water must provide data. Melbourne Water must not amend any other cells in the financial model — this includes adding rows, columns, or information not requested by us.

The model will include a forecast inflation rate (based on the Victorian Department of Treasury and Finance inflation forecasts). The inflation rate will be used to estimate components of the regulatory rate of return (see section 3.8) and estimates for financial indicators (see section 3.20). We will use the latest market forecasts for inflation.

We intend to release for public comment and consultation the populated financial model that is used to inform the prices approved in the determination for each water business.

3.21.4. Requirement for reasonably-based information

All information contained in the price submission (and financial model — see section 3.21.3) must be reasonably-based. All financial and demand related information must represent the best available estimates at the time of finalising the submission.

⁴⁴ The financial model requires Melbourne Water to provide detailed information on key assumptions underpinning its prices (such as expenditure estimates) so we can assess Melbourne Water's proposal. The model also provides a mechanism for Melbourne Water to estimate its revenue allowance and prices. The model will require both historic and forecast data.

3.21.5. Basis upon which information is provided

All financial information (including prices, operating and capital expenditure) in Melbourne Water's price submission (and financial model) must be in 2020-21 dollars. We will provide the forecast inflation in the financial model we provide to Melbourne Water to complete and submit as part of its price submission.

All reports, studies or any other materials (for example, research reports, policy documents, and cost benefit analysis or studies) which are relied upon in the price submission must be made available to us.

3.21.6. Confidentiality

Our normal practice is to make submissions publicly available on its website. If there is information that Melbourne Water does not want disclosed publicly, because it is confidential or commercially sensitive, then Melbourne Water should discuss the matter with us before lodging the price submission.

3.21.7. Notification of changes to assumptions

During the price review, Melbourne Water must promptly advise us if it becomes aware of any substantial changes to the assumptions underpinning the proposals in its price submission. Melbourne Water must also explain the basis for the changed assumptions and explain the impact on its proposals (if any).

In the event of any changes, Melbourne Water must promptly provide us with an updated financial model, reconciling changes to the financial model provided to us with its price submission on **9 October 2020**.

3.21.8. Non-prescribed services

While we have no role in regulating prices for non-prescribed services, we need to be satisfied that these services have been correctly classified as not related to regulated services, and that the costs of these services are accurately identified and excluded from the regulated cost base. Melbourne Water's price submission must provide or reference information that demonstrates that the costs of non-prescribed services have been excluded from its expenditure and price calculations.

Attachment 1

Matters to include in guidance

WIRO Clause 13(a)

Before making a price determination and following consultation, including with the relevant regulated entity, the Commission must provide guidance to the regulated entity setting out:

- i. the manner in which the Commission proposes to regulate the prices which the regulated entity may charge for prescribed services for the regulatory period consistent with section 33(5) of the ESC Act and this Order;
- ii. the approach and methodology which the Commission proposes to adopt to assess a price submission and make a price determination for the regulatory period consistent with section 33(2) of the ESC Act and this Order;
- iii. the Commission's expectations of the nature and scope of matters to be addressed by the regulated entity in its price submission;
- iv. the Commission's expectations regarding customer consultation by the regulated entity in developing its price submission;
- v. the Commission's expectations of the information required to be provided by the regulated entity to enable the Commission to make a price determination;
- vi. the timing and processes the Commission proposes to follow in making a price determination consistent with section 35 of the ESC Act and the Commission's Charter of Consultation and Regulatory Practice;
- vii. the date by which the regulated entity is to deliver its price submission to the Commission; and
- viii. any other matter that the Commission considers should be included in the guidance provided to the regulated entity or in the regulated entity's price submission.

Attachment 2

Approach for making a price determination

WIRO Clause 14

- a) In making a price determination the Commission may either:
 - i. approve the maximum prices the regulated entity may charge for prescribed services, or the manner in which the regulated entity's prices are to be calculated, determined or otherwise regulated, as proposed by the regulated entity in its price submission; or
 - ii. specify the maximum prices the regulated entity may charge for prescribed services, or the manner in which the regulated entity's prices are to be calculated, determined or otherwise regulated.
- b) The Commission may only specify the maximum prices, or the manner in which prices are to be calculated, determined or otherwise regulated, if:
 - i. the price submission of the regulated entity does not, in the Commission's opinion, comply with the guidance provided by the Commission under clause 13 or have adequate regard for the matters specified in clause 11; or
 - ii. the regulated entity failed to submit a price submission to the Commission within the time period specified for this by the Commission.

Attachment 3

Matters that water businesses and the commission must have regard to

Economic efficiency and viability matters	Industry/business specific matters	Customer matters
<ul style="list-style-type: none"> • promotion of efficient use of prescribed services by customers [cl 8(b)(i), WIRO] • promotion of efficiency in regulated entities as well as efficiency in, and the financial viability of, the regulated water industry [cl 8(b)(ii), WIRO] • provision to regulated entities of incentives to pursue efficiency improvements [cl 8(b)(iii), WIRO] • efficiency in the industry and incentives for long term investment [s 8A(1)(a), ESC Act] • efficient costs of producing or supplying regulated goods or services and of complying with relevant legislation and relevant health, safety, environmental and social legislation applying to the regulated industry [s 33(3)(b), ESC Act] • financial viability of the industry [s 8A(b)(1), ESC Act] 	<ul style="list-style-type: none"> • particular circumstances of the regulated industry and the prescribed goods and services for which the determination is being made [s 33(3)(a), ESC Act] • return on assets in the regulated industry [s 33(3)(c), ESC Act] • ensure that regulatory decision making and regulatory processes have regard to any differences between the operating environments of regulated entities [s 4C(b), WI Act] 	<ul style="list-style-type: none"> • in performing its functions and exercising its powers, the objective of the Commission is to promote the long term interests of Victorian consumers [s 8(1), ESC Act] without derogating from that objective. The Commission must in seeking to achieve the objective have regard to the price, quality and reliability of essential services [s 8(2), ESC Act] • enable customers or potential customers of the regulated entity to easily understand the prices charged by the regulated entity for prescribed services or the manner in which such prices are calculated, determined or otherwise regulated [cl 11(d)(i), WIRO] • provide signals about the efficient costs of providing prescribed services to customers (either collectively or to an individual customer or class of customers) while avoiding price shocks where possible [cl 11(d)(ii), WIRO] • take into account the interests of customers of the regulated entity, including low income and vulnerable customers [cl 11(d)(iii), WIRO]

Benchmarking	Health, safety and social obligations	Other
<ul style="list-style-type: none"> any relevant interstate and international benchmarks for prices, costs and return on assets in comparable industries [s 33(3)(d), ESC Act] 	<ul style="list-style-type: none"> the relevant health, safety, environmental and social legislation applying to the industry [s 8A(1)(d), ESC Act] to ensure that regulatory decision making has regard to the health, safety, environmental sustainability (including water conservation) and social obligations of regulated entities [s 4C(c), WI Act] 	<ul style="list-style-type: none"> the degree of, and scope for, competition within the industry, including countervailing market power and information asymmetries [s 8A(1)(c), ESC Act] consistency in regulation between States and on a national basis [s 8A(1)(f), ESC Act] the benefits and costs of regulation (including externalities and the gains from competition and efficiency) for—(i) consumers and users of products or services (including low income and vulnerable consumers) (ii) regulated entities [s 8A(1)(e), ESC Act] wherever possible, to ensure that the costs of regulation do not exceed the benefits [s 4C(a), WI Act]

Attachment 4

Types of risk

Melbourne Water faces a range of risks, both within and outside of its control, for example:

- Inflow risk, which presents as an inability for Melbourne Water to meet customer demand due to extended low rainfall and inflows.
- Demand forecasting risk, where actual customer demand during a regulatory period differs materially from the forecasts. This can be mitigated through effective demand forecasting and variable tariff structures.
- Operational risks, such as breaching of health, environmental or customer performance standards, which can result from inadequate processes within Melbourne Water, asset failures or external factors. Melbourne Water manage these risks through appropriate operating policies, capital investment, maintenance policies, contracts and insurance.
- Construction risks arise from underestimating costs or project delays. Melbourne Water can manage these risks through effective forecasting and contract management, as well as including contingency allowances in cost forecasts. Including cost contingencies in revenue allowances transfers risk of project cost overruns to customers.
- Regulatory and policy risks result from changes in laws and regulations that materially affect Melbourne Water's costs or revenue potential, and are typically mitigated via a pass through mechanism.
- Financial risks are those arising from factors which affect the whole economy, such as rising interest rates or economic downturn. These risks are reflected in the cost of debt which forms part of the regulatory rate of return.
- Business risks result from a loss of revenue due to new technology or a change in the competitive landscape. Melbourne Water can mitigate some of these risks through innovative business practices and continually seeking cost efficiencies.

Regulatory risk mitigation tools

The regulatory regime established through the WIRO and developed in detail through previous reviews generally identifies, categorises and allocates risk in accordance with standard principles and seeks to provide efficiency incentives to Melbourne Water. The regulatory framework provides the following tools to mitigate or manage risk:

- Recovery of forecast operating and capital expenditure — the forecast expenditure contained within price submissions must be consistent with the risk allocation and incentives provided within the regulatory framework. Therefore, it is important that forecasts are prepared on this basis. Where Melbourne Water seeks recovery of costs for managing risks, we expect it to

demonstrate the need for this and provide supporting information in price submissions (sections 3.5 and 3.6).

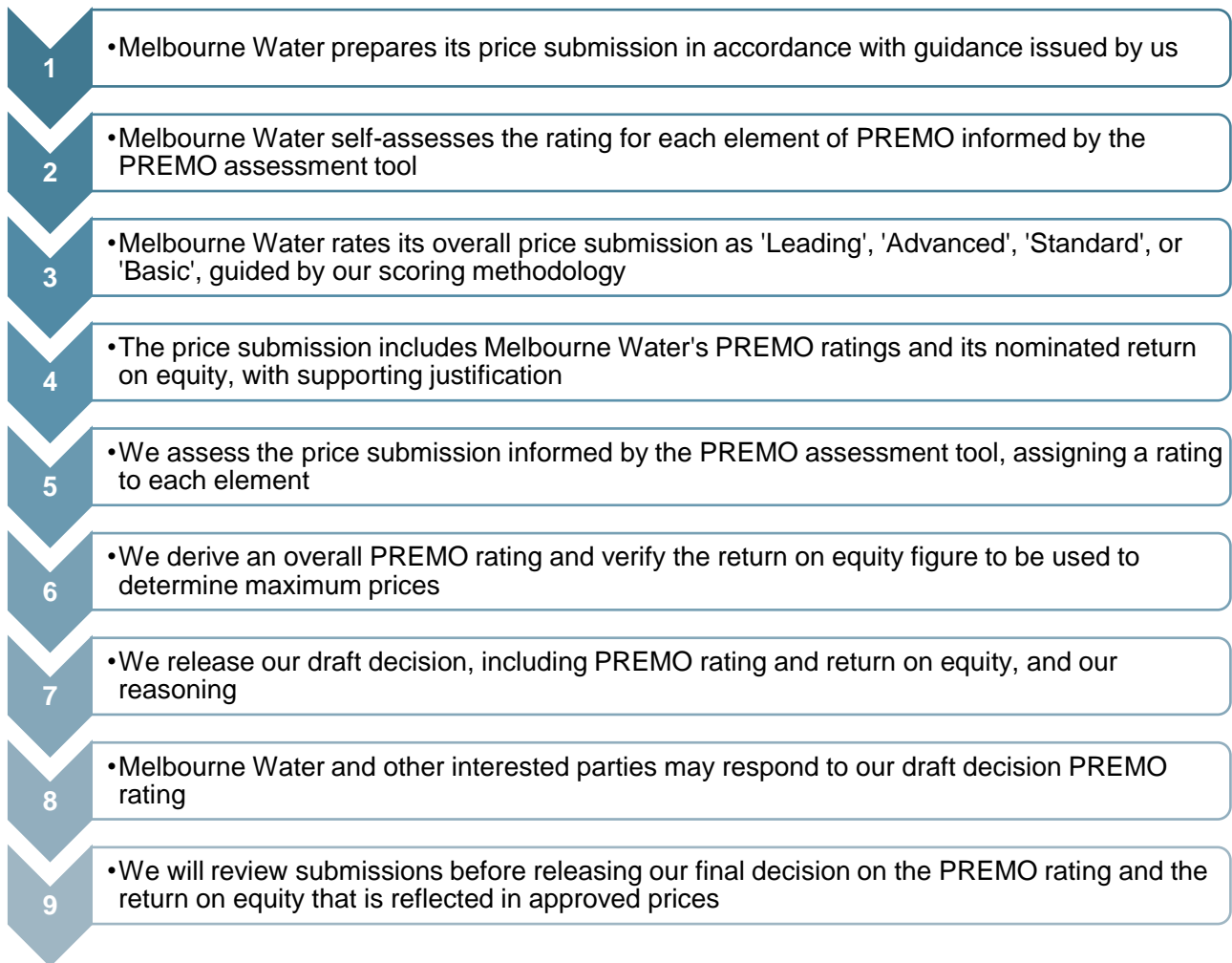
- Indexation of prices — this ensures that Melbourne Water remain fully responsible for management of their controllable costs, and that it does not need to bear the full risk associated with general price inflation.
- Cost of capital — this provides compensation for non-diversifiable risk (section 3.8).
- Form of the price control — this provides a mitigating tool for Melbourne Water. Section 3.16 contains our views on the form of the price control for the next regulatory period. The form of price control can assist in managing the risk that actual demand varies from forecast demand.
- Tariff structures — Section 3.17 sets out the guiding pricing principles for new tariff structures. The impacts of any shift in the mix of service and variable charges in tariffs on risk sharing between Melbourne Water and customers will need to be addressed in price submissions.
- Length of the regulatory period — a shorter regulatory period can reduce the risk of forecasting uncertainty (see section 3.2).
- Pass through mechanisms — significant uncertainties that materially affect Melbourne Water and that occur within the regulatory period are generally treated as pass through events. These events must be clearly identified in the price determination. The uncertain and unforeseen events mechanism established by us for the 2016 water price review provides another option for managing and mitigating risks, subject to certain criteria (see section 3.18)

Attachment 5

PREMO rating process

The steps for Melbourne Water and us to establish the PREMO rating for its price submission is outlined in figure A below.⁴⁵

Figure A Process for rating a price submission



PREMO assessment tool

The PREMO assessment tool provides:

⁴⁵ For further information, see Essential Services Commission Staff Paper 2016b, *Assessing and rating PREMO price submissions*, October, pp. 5–7.

- A set of guiding questions for rating price submissions. These will help Melbourne Water understand what evidence and justification we expect.
- Examples to demonstrate what might constitute 'Leading', 'Advanced', 'Standard' or 'Basic' ambition for the PREMO elements.

The assessment tool **does not** provide an exhaustive list of what may be taken into account by Melbourne Water or us in arriving at a price submission rating. Melbourne Water may provide further arguments to support its ratings. Further, if Melbourne Water considers that it does not meet one of the examples in the tool for a given rating, this does not mean it cannot achieve that overall rating, as Melbourne Water should consider on-balance how it meets the guiding questions.

In addition, the assessment tool **does not** preclude Melbourne Water from making a case for its existing level of ambition to be recognised in the PREMO rating. It will be up to Melbourne Water to explain in its price submission why the PREMO rating should take into account past achievements.

The PREMO assessment tool is provided in the following pages for the Risk, Engagement, Management and Outcomes elements of PREMO.

Outcomes

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
Has Melbourne Water provided evidence that the outcomes proposed have taken into account the views, concerns and priorities of its end-use and retail customers?	The outcomes proposed (for both water & sewerage and waterways & drainage services) are broadly consistent with existing levels of service provided to Melbourne Water's end-use and retail customers.	The outcomes proposed reflect a significant improvement in Melbourne Water's end use and retail customer value delivered. This might be demonstrated by significant improvements in output targets (or performance measures) for outcomes that matter most to most its end-use and retail customers.	The outcomes proposed reflect a very significant improvement in Melbourne Water's end use and retail customer value delivered.	Melbourne Water has proposed degradation in customer outcomes, not justified or supported by customer feedback.
Has Melbourne Water provided sufficient explanation of how the outcomes it has proposed align to the forecast expenditure requested?		Melbourne Water proposes outcomes that are well ahead of the industry average or past performance (measured by reference to output targets).	Melbourne Water proposes outcomes that lead the industry.	
Has Melbourne Water proposed outputs to support each of its outcomes, which are measurable, robust and deliverable?	The outcomes proposed (for both water & sewerage and waterways & drainage services) have mostly been defined in ways that reflect Melbourne Water's end-use customer service experience (e.g. safe, clean water supply) and retail customer expectations.	All outcomes proposed have been defined in ways that reflect Melbourne Water's end-use customer service experience and retail expectations		Most outcomes are defined as outputs (that is, at a granular level consistent with practice in the 2016 water price review).
Has Melbourne Water provided evidence that the outputs it has proposed are reasonable measures of performance against stated	Melbourne Water has proposed outputs that are appropriate measures of performance for each outcome proposed.			Melbourne Water has proposed outputs that are not appropriate measures of performance for each outcome proposed.

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
<p>outcomes?</p> <p>Has Melbourne Water demonstrated a process to measure performance against each outcome and to inform its end-use and retail customers?</p>	<p>The outcomes proposed generally reflect Melbourne Water's end-use customer and retail customer preferences and priorities, revealed through engagement.</p>	<p>The outcomes proposed have been prioritised by Melbourne Water in terms of importance to its end-use and retail customers as revealed through customer engagement. Melbourne Water's expenditure forecasts reflect the prioritisation of outcomes.</p>		<p>The outcomes proposed do not clearly reflect Melbourne Water's end-use and retail customer preferences and priorities revealed through engagement.</p>
	<p>Where applicable, Melbourne Water has explained or justified why outcomes proposed are not consistent with its end-use and retail customer preferences and priorities.</p>			<p>Where applicable, Melbourne Water has not explained or justified why outcomes proposed are not consistent with its end-use and retail customer preferences and priorities.</p>
	<p>The level and composition of forecast expenditure is consistent with the outcomes proposed.</p>			<p>The level and composition of forecast expenditure is inconsistent with the outcomes proposed.</p>
	<p>The expenditure profile has changed where required to reflect Melbourne Water's end-use and retail customer priorities.</p>			<p>The expenditure profile has not changed to reflect Melbourne Water's end-use and retail customer priorities.</p>
	<p>Melbourne Water has committed to a process for monitoring and reporting to its end-use and retail customers on its performance against outcomes.</p>	<p>Engagement with Melbourne Water's end-use and retail customers has led to the development of a customer performance reporting approach that is targeted to customer needs, including across different regions and customer types.</p>		<p>Melbourne Water has not committed to a process for monitoring and reporting to its end-use and retail customers on its performance against outcomes.</p>
		<p>The performance reporting</p>		

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
		<p>approach is justified as being well ahead of peers in terms of accessibility, transparency, and information provided to customers on performance.</p>		

Management

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
<p>To what extent has Melbourne Water demonstrated how its proposed prices reflect only prudent and efficient expenditure?</p> <p>To what extent has Melbourne Water justified its commitment to cost efficiency or productivity improvements?</p> <p>To what extent have senior management, including the Board, demonstrated ownership and commitment to the proposals in its submission?</p>	<p>Forecast operating expenditure incorporates an annual rate of efficiency improvement (for both water & sewerage and waterways & drainage services) equivalent to the industry efficiency hurdle for a standard business established in the 2018 water price review of 17 water businesses – this was in the range of 1.0 to 1.5 per cent.</p>	<p>Melbourne Water has proposed a significant improvement in the cost efficiency of the services delivered.</p> <p>Forecast operating expenditure incorporates an annual rate of efficiency improvement (for both water & sewerage and waterways & drainage services) equivalent to the industry efficiency hurdle for an advanced business established in the 2018 water price review of 17 water businesses – for the metropolitan water businesses, this was above 2.0 per cent.</p>	<p>Melbourne Water has proposed a very significant improvement in the cost efficiency of the services delivered.</p> <p>Forecast operating expenditure incorporates an annual rate of efficiency improvement (for both water & sewerage and waterways & drainage services) significantly above the industry efficiency hurdle for an advanced business established in the 2018 water price review of 17 water businesses.</p>	<p>Melbourne Water has not proposed productivity improvements.</p> <p>Forecast operating expenditure incorporates an annual rate of efficiency improvement that is below 1.0 per cent.</p>
<p>To what extent has Melbourne Water justified or provided assurance about the quality of the submission, including the quality of supporting information on forecast costs or projects?</p>	<p>Melbourne Water can provide business cases and justification for all major projects and capital programs, including evidence that a range of options have been considered.</p> <p>Forecast depreciation preferably aligns with asset utilisation. Where forecast depreciation is not aligned with asset utilisation over the regulatory period, impact on intergenerational equity is reasonable.</p>	<p>Melbourne Water has proposed a significant improvement in the efficiency of its capital program.</p>	<p>Melbourne Water has proposed a very significant improvement in the efficiency of its capital program.</p> <p>The rate of improvement in capital expenditure efficiency places the Melbourne Water as a leader in the industry.</p>	<p>Melbourne Water has not provided timely access to robust business cases that validate the basis for all major projects and capital programs. Melbourne Water has not proposed efficiency improvements in relation to its capital renewals program.</p>
<p>To what extent has</p>				

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
<p>Melbourne Water provided evidence that there is senior level, including Board level, ownership and commitment to its submission and its outcomes?</p>	<p>Melbourne Water continues to capitalize its desalination costs at the current level.</p>	<p>Melbourne Water proposes to increase the amount of desalination costs it capitalizes.</p>	<p>Melbourne Water proposes a new approach to managing desalination costs that reflects better long term value for Victorian consumers.</p>	
	<p>The Board of Directors has attested that it has undertaken appropriate internal procedures to assure themselves of the quality and accuracy of their price submission. The attestation is included with the price submission.</p>			<p>The Board of Directors has not attested that that it has undertaken appropriate internal procedures to assure themselves of the quality and accuracy of their price submission. The attestation is not included with the price submission.</p>
	<p>The price submission addresses all requirements specified in our Guidance Paper.</p>			<p>The price submission does not address all requirements set out in our Guidance Paper</p>
	<p>The price submission and its supporting documents contain no material or obvious errors or omissions.</p>			<p>The price submission and its supporting documents contain errors and/or omissions of sufficient concern to us.</p>
	<p>The financial model provided to us is completed with no material error and requires minimal adjustment by</p>			<p>The financial model is incomplete and/or inconsistent with the price submission.</p>

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
	us. The financial model is consistent with the written price submission.			
	The price submission and supporting information are provided to us by the time requested.			The price submission and supporting information are provided to us after the time requested.
	The price submission is internally consistent, demonstrating alignment between different elements of the price submission (e.g. there is consistency between the outcomes proposed, and demand and expenditure forecasts).			The price submission is contradictory across main elements of the submission (e.g. there is inconsistency between the business's demand forecasts and capital works program for example).
	Forecasts for expenditure (including benchmarks for labour, energy and construction costs) and demand are based on sound methodologies and assumptions.			Forecasts for expenditure (including benchmarks for labour, energy and construction costs) and demand are not based on sound methodologies and assumptions.
	Melbourne Water can demonstrate that it has actively sought to reprioritise its expenditure plans to mitigate the cost and price impacts of any new obligations (whether imposed by government or technical regulator, or to address a new service priority revealed through engagement).			Melbourne Water has not provided evidence that it has actively sought to reprioritise its expenditure plans to mitigate the cost and price impacts of any new obligations (whether imposed by government or technical regulator, or to address a new service priority revealed through engagement).
	Melbourne Water has proposed adequate mitigation strategies to avoid any price shocks.			Melbourne Water has not proposed adequate mitigation strategies to avoid any price shocks.

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
	Melbourne Water retains meaningful and robust supporting documentation to justify its proposals, with ongoing access available to us.			Melbourne Water has not provided timely access to meaningful and robust supporting documentation, on request by us.

Engagement

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
<p>To what extent has Melbourne Water justified how the form of engagement suits the content of consultation, the circumstances facing it and its end-use and retail customers?</p> <p>To what extent has Melbourne Water demonstrated that it provided appropriate instruction and information to its end-use and retail customers about the purpose, form and content of the customer engagement?</p> <p>To what extent has Melbourne Water demonstrated that the matters it has engaged on are those that have the most influence on the services provided to its end-use and retail customers and prices</p>	<p>The form of customer engagement is justified as being fit for purpose given the content and circumstances facing Melbourne Water and its end-use and retail customers.</p> <p>Melbourne Water demonstrates that the information provided to its end-use and retail customers was appropriate given the purpose, form and content of customer engagement</p> <p>Melbourne Water demonstrates that engagement has occurred on matters that its end-use and retail customers reveal are the most important to them.</p>	<p>The onus is on Melbourne Water to make the case as to why they might rate its customer engagement as Advanced or Leading. This justification could be based on:</p> <ul style="list-style-type: none"> Unbiased feedback from a representative group of end-use and retail customers about Melbourne Water's choice of engagement method and the quality of the engagement program it delivered. For example, do customers believe they were given appropriate information and time to learn about the issues, form opinions, and influence Melbourne Water's proposals? Participants in the engagement program provide feedback that Melbourne Water has delivered on the engagement commitments given by Melbourne Water (e.g. on what matters would participants provide feedback on, and the influence they would have on the decisions of Melbourne Water). The level of its end-use and retail customer influence on proposals. A strong alignment between Melbourne Water's proposals and the preferences and interests elicited in its engagement program would correspond to a higher rating. 		<p>The form of customer engagement is not justified as being fit for purpose given the content and circumstances facing Melbourne Water and its end-use and retail customers.</p> <p>Information provided to Melbourne Water's end-use and retail customers was written in technical jargon, and/or was not appropriate for customer use.</p> <p>Melbourne Water provided selective or incomplete information to its end-use and retail customers that biased the responses or did not provide sufficient context for customer input.</p> <p>Engagement has not occurred on matters that are important to end-use and retail customers or significant to the outcomes they receive and prices they are charged.</p>

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
<p>charged?</p> <p>To what extent has Melbourne Water explained how it decided when to carry out its engagement? To what extent has Melbourne Water demonstrated how its engagement with its end-use and retail customers has influenced its submission?</p>	<p>Melbourne Water demonstrates that engagement was undertaken early, prior to locking in key strategies and priorities.</p> <p>Melbourne Water demonstrates it used engagement methodologies that elicit views that are representative of its end-use and retail customer base.</p> <p>Melbourne Water demonstrates that it retested its position and proposals with its end-use and retail customers as it developed its price submission.</p> <p>The price submission describes what was learned from end-use and retail customer engagement, and how this influenced its proposed outcomes, expenditure (composition and level) and prices.</p> <p>In any instances where outcomes proposed are not consistent with end-use and retail customer views, Melbourne Water provides reasonable justification.</p>			<p>Engagement was undertaken late, after Melbourne Water had developed its key strategies and priorities.</p> <p>Melbourne Water has failed to demonstrate that its engagement program elicited information that it could use to shape the strategic direction and priorities in its price submission.</p> <p>Melbourne Water has not retested its position and proposals with its end-use and retail customers as it developed its price submission.</p> <p>The price submission does not clearly link the outcomes of engagement to the outcomes proposed, and the alignment of outcomes to expenditure and prices.</p> <p>Melbourne Water has not provided reasonable justification for instances where its proposed outcomes are not consistent with its end-use and retail customer views.</p>

Risk

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
To what extent has Melbourne Water demonstrated a robust process for identifying risk, and how it has decided who should bear these risks?	Melbourne Water meets the requirements of our Guidance Paper in relation to risk.	Melbourne Water has implemented a new approach that reduces prices through better risk management.	Melbourne Water has implemented an approach that reduces costs through better risk management, to a level that sets it apart from industry peers.	Melbourne Water has not met the requirements of our Guidance Paper in relation to risk. Melbourne Water has sought to transfer risk to its end-use and retail customers which is not supported by customer views. Melbourne Water has not sought to minimise cost and/or price impacts from risk management.
	Melbourne Water demonstrates compliance with risk standards specified in the Statement of Obligations (e.g. ISO 55000).	Melbourne Water has been accredited for compliance with risk standards specified in the Statement of Obligations.		Melbourne Water cannot demonstrate compliance with risk standards specified in the Statement of Obligations.
	Melbourne Water can demonstrate that it has thoroughly evaluated the feasibility of commencement and completion dates for major projects. Business cases are available for all major projects.	Melbourne Water can demonstrate a robust optimisation process that has informed what projects need to be completed, and the timing of those projects. For example, real options analysis has informed planning.		Projects are proposed that have incomplete scope, no business cases, or are not feasible in terms of timelines for delivery.
	Melbourne Water has undertaken a Monte Carlo analysis for all major projects. Melbourne Water can demonstrate that its aggregate capital expenditure	Melbourne Water uses regulatory tools such as the pass through and uncertain and unforeseen events mechanisms where appropriate for projects with uncertain timing or costs.		Melbourne Water cannot demonstrate that its aggregate capital expenditure forecasts are consistent with a P50 estimate (noting this is likely not to be appropriate where a business's capital program is dominated by one or two projects).

Guiding questions	Examples for a Standard submission	Examples for an Advanced submission	Examples for a Leading submission	Examples for a Basic submission
	forecasts are consistent with a P50 estimate (noting this is likely to be inappropriate where a program is dominated by one or two projects). The estimate must be based on the latest credible information on costs.	Melbourne Water has evaluated whether major projects should be funded via capital or operating expenditure for pricing purposes.	In its price submission, Melbourne Water proposes correction mechanisms to adjust the return on equity where its performance does not meet the outcomes established at the price review.	
	The unit rates used to evaluate projects and options reflect recent historical trends, and/or independently verified market forecasts.			Melbourne Water adopts assumptions that seek to maximise unit rates proposed.
	Melbourne Water can support its assessment of financial viability by reference to cash flow projections and independent benchmarks (e.g. credit rating metrics).	If Melbourne Water has had its financial position reviewed by an independent credit ratings agency, the independent credit rating report supports its financial position.		Melbourne Water cannot support its assessment of financial viability by reference to cash flow projections and independent benchmarks (e.g. credit rating metrics).
	Through the form of price control and tariffs proposed, the submission appropriately balances revenue and cost risk between Melbourne Water and its end-us and retail customers, without materially impacting on price stability.			The form of price control and/or tariffs over allocates risk to Melbourne Water's end-use and retail customers.

An approach to establishing a PREMO rating

We have developed a scoring methodology to assist Melbourne Water rate its price submission against the four elements of PREMO and to rate its overall price submission. We provide the following scoring methodology as a guide to accompany the PREMO assessment tool — in other words, it is not mandatory that Melbourne Water uses the scoring methodology below to rate its price submission.⁴⁶

Weighting

The four elements — Risk, Engagement, Management and Outcomes — will be weighted evenly to establish a PREMO price submission rating.

Scoring and the assessment tool

It is not an expectation that Melbourne Water rate or allocate a score against all the matters listed in the PREMO assessment tool, as these are provided as examples of the matters that should be taken into account. Rather, these examples should be used to guide the rating or score for each of the four PREMO elements.

The scoring methodology is predicated on the level of confidence with which Melbourne Water consider an element of PREMO meets a particular ambition rating.

Table A summarises possible scores for each element of PREMO graded by confidence level. The component scores for each element of PREMO should be aggregated to inform an overall price submission rating.

⁴⁶ We do not allocate a score against all the matters listed in the PREMO assessment tool when we assess Melbourne Water's price submission.

Table A An approach to scoring for an overall PREMO rating

Rating	Possible scores for each element of PREMO		Aggregate score for overall PREMO rating
Leading	4	Very confident the element is 'Leading'	15.5 to 16
	3.75	Confident the element is 'Leading'	
Advanced	3.5	Very confident the element is 'Advanced'	11.5 to 15.25
	3.25	Confident the element is 'Advanced'	
	3	Satisfied the element is 'Advanced'	
	2.75	Reasonably confident the element is 'Advanced'	
Standard	2.5	Very confident the element is 'Standard'	7.5 to 11.25
	2.25	Confident the element is 'Standard'	
	2	Satisfied the element is 'Standard'	
	1.75	Reasonably confident the element is 'Standard'	
Basic	1.5	Very confident the element is 'Basic'	4 to 7.25
	1.25	Confident the element is 'Basic'	
	1	Satisfied the element is 'Basic'	

To reiterate, the scoring methodology outlined here is only a guide to assist Melbourne Water with its overall PREMO rating. We will not use this scoring system in our assessment, rather we will assess Melbourne Water's reasoning for its price submission PREMO rating. In other words, the score on its own is not justification for a particular price submission rating.

Attachment 6

Pricing principles for non-scheduled charges

There are some regulated services provided by Melbourne Water that by their nature are not amenable to having a scheduled uniform charge. In these circumstances we have established pricing principles that apply when establishing or negotiating a price for these services. These services and principles are set out below.

Recycled water prices should be set so as to:

- have regard to the price of any substitutes and customers' willingness to pay
- cover the full cost of providing the service (with the exception of services related to specified obligations or maintaining balance of supply and demand), and
- include a variable component.

Where Melbourne Water does not propose to fully recover the costs associated with recycled water, it must demonstrate to us that:

- it has assessed the costs and benefits of pursuing the recycled water project
- it has clearly identified the basis on which any revenue shortfall is to be recovered, and
- if the revenue shortfall is to be recovered from non-recycled water customers, either
- the project is required under the Statement of Obligations which applies to Melbourne Water or pursuant to other Government policies that apply to Melbourne Water, or there has been consultation with the affected customers about their willingness to pay for the benefits of increased recycling.

Pricing principles for unique services (including trade waste)

Where the nature of the service provided to a particular customer or customer group (including, in the case of trade waste customers, the volume or load of waste treated) is unique, prices must be set as follows:

- variable prices (including, in the case of trade waste customers, load based charges) should reflect the long run marginal cost (LRMC) of providing services (including, in the case of trade waste customers, trade waste transfer, treatment and disposal)
- the total revenue received from each customer should be greater than the cost that would be avoided from ceasing to serve that customer, and (subject to meeting avoidable cost) less than the stand alone cost of providing the service to the customer in the most efficient manner
- the methodology used to allocate common and fixed costs to that customer should be clearly articulated and be consistent with any guidance provided by us

- prices should reflect reasonable assumptions regarding the customer's demand for services (including, in the case of trade waste customers, the volume and strength of trade waste anticipated to be produced by that customer)
- depreciation rates and rates of return used to determine prices should be consistent with those adopted by us for the purposes of making a price determination
- customers should be provided with full details of the manner in which prices have been calculated and any new, renewed or renegotiated contractual agreements with customers should indicate that the prices to apply are subject to any determination made by us
- where applying these principles results in significant changes to prices or tariff structures, arrangements for phasing in the changes may be considered and any transitional arrangements should be clearly articulated.

Pricing principles for miscellaneous services

Prices for miscellaneous services must be set according to actual cost calculated on the basis of the aggregate of:

- direct third party or contractor invoice cost
- direct marginal internal costs, including labour, materials and transport costs, and
- a fair contribution to overheads.

For bank dishonour, debt collection and legal fees, the third party costs must be charged directly to the customer with no contribution for internal costs or a contribution to overheads