ESSENTIAL SERVICES COMMISSION

2018 LOWER MURRAY WATER RURAL PRICE REVIEW

Guidance paper for rural infrastructure services

February 2017

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1 INTRODUCTION

The Essential Services Commission of Victoria (the Commission) will undertake a review of the maximum prices that Lower Murray Water (LMW) may charge for their water and related services for the regulatory period from 1 July 2018 (next regulatory period).

LMW's prices are regulated under two different regulatory frameworks. LMW's urban water prices are regulated by the Commission under the Victorian Government's Water Industry Regulatory Order 2014 (WIRO). Our guidance to LMW on its price submission for urban water and related services was issued in November 2016.

Under the Murray-Darling Basin Agreement, the Commonwealth is responsible for the regulation of the prices charged by LMW for its rural water infrastructure services.[1]

The Australian Competition and Consumer Commission (ACCC) is responsible under the Water Charge Infrastructure Rules (WCIR) for approving or determining the regulated charges of water entities in the Murray-Darling Basin. Part 9 of the WCIR allows for the accreditation of arrangements whereby a state agency would be responsible for approving regulated charges under the WCIR rather than the ACCC.

The Commission successfully applied to the ACCC for accreditation to regulate LMW's (rural) charges in 2012 for ten years from 17 February 2012.[2] A condition of accreditation was that the Commission must apply the pricing principles published by the ACCC for any price approvals and determinations under the WCIR (see box 2.1).

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[1] In Victoria, the referral of pricing powers to the Commonwealth is achieved by the *Water (Commonwealth Powers) Act 2008 (Vic)*.

[2] Australian Competition and Consumer Commission, *Application by Essential Services Commission Victoria for Accreditation Final Decision*, 17 February 2012.

This paper explains the requirements of the WCIR in the context of LMW's next price review.[3] New maximum prices for LMW's rural water infrastructure services are due to be in place by 1 July 2018. Where possible, we have sought to align our information requirements for LMW's price submission covering its rural infrastructure water services, with the guidance we issued in November 2016 covering its urban water and related services.

REVIEW OF THE WATER CHARGE INFRASTRUCTURE RULES

In response to recommendation 11 of the Independent Review of the *Water Act 2007*, the Australian Competition and Consumer Commission (ACCC) has undertaken a review of the WCIR. The ACCC has provided advice to the Commonwealth Government which included a number of recommendations that seek to:[4]

- ensure a consistent approach to application of the WCIR across Basin states
- improve pricing transparency and customer engagement
- ensure ACCC charge approvals and determinations apply only where necessary
- address charging arrangements that unreasonably favour some customers over others
- facilitate the efficient functioning of water markets, and
- improve the interaction of the water charge rules with other relevant legislation.

The ACCC's recommendations include changes to the WCIR pricing principles. The ACCC has also recommended that Basin states regulate the prices of rural water infrastructure services, where a state has arrangements in place for approving the charges of monopoly operators. Under the ACCC's recommendations, responsibility for the regulation of prices for LMW's rural infrastructure services could return to Victoria.

[3] The basis of this paper is Rule 25 and Schedule 1 of the Water Charge (Infrastructure) Rules which sets out LMW's minimum information requirements.

[4] Australian Competition and Consumer Competition, *Review of the Water Charge Rules Final Advice*, September 2016.

The timing of the Commonwealth Government's response to the ACCC's recommendations is uncertain. **This guidance has been prepared under the current WCIR principles**. Depending on the outcomes of the Commonwealth Review, the Commission may need to issue further guidance to LMW.[5]

SUNRAYSIA MODERNISATION PROJECT

The $120 million Sunraysia Modernisation Project (Stage 1) was completed in late 2016. The project was funded by government contributions and delivered by LMW. The project involved the replacement of open irrigation channels with pipelines and automated pumping stations in order to improve the efficiency, reliability and quality of irrigation water supply across LMW's Mildura, Red Cliffs and Merbein irrigation districts.

LMW's price submission must reflect the impacts of the project on its proposed service outcomes and prices. Reflecting the upgrades to infrastructure, some of LMW's future operating cost requirements (in terms of the nature and magnitude of expenditure) are likely to differ from past costs. LMW will need to explain how its expenditure forecasts have taken into account the completion of the project including on cost efficiency.

Later chapters of the guidance indicate where LMW should provide the Commission with information on the impacts of the project on its proposals.

[5] The Commonwealth Government has responded to one of the ACCC's recommendations on repealing requirements relating to Network Service Plans. This does not impact on LMW.

2 ASSESSING LOWER MURRAY WATER'S PRICE SUBMISSION

2.1 INTRODUCTION

LMW's rural infrastructure services are regulated under the *Water Charge (Infrastructure) Rules 2010* (WCIR) and Australian Competition and Consumer Commission's (ACCC) pricing principles.[6] LMW's rural infrastructure services covered by the WCIR account for almost 50 per cent of LMW's total regulated costs. This guidance covers LMW's pricing proposal as it relates to the WCIR and the ACCC pricing principles.

The Commission must approve the price arrangements proposed by LMW if it is satisfied the prices comply with the WCIR and the ACCC's pricing principles. The tariff objectives of the ACCC's pricing principles are given in box 2.1.

6 Australian Competition and Consumer Commission, *Application by Essential Services Commission Victoria for Accreditation Final Decision*, 17 February 2012.

BOX 2.1 AUSTRALIAN COMPETITION AND CONSUMER COMMISSION PRICING PRINCIPLES

The ACCC requires the Commission to regulate according to the pricing principles made under the WCIR which require tariffs to be set:

- to promote the economically efficient use of water infrastructure assets
- to ensure sufficient revenue for the efficient delivery of the required services
- to give effect to the principles of user pays for water storage and delivery in irrigation systems
- to achieve pricing transparency
- to facilitate efficient water use and trade in water entitlements.

The Commission must be satisfied the expenditure forecasts contained in the price submission reflect the efficient delivery of the proposed outcomes and account for a planning horizon that extends beyond the term of the price submission.

The Commission must account for the interests of customers of the regulated entity, including low income and vulnerable customers.

Source: ACCC pricing principles.

Under Rule 3 of the WCIR, the regulatory period is defined as four years. However, LMW provides both urban and rural infrastructure services. Therefore under Rule 24 of the WCIR, LMW is able to apply to the Commission to have the regulatory period for its rural infrastructure services align with the period for its urban services.

Our guidance covering LMW’s urban services noted that we propose to set a five year regulatory period from 1 July 2018, but we remain open to alternatives proposed in a price submission. The regulatory period for LMW may need to be reviewed depending on the timing and outcomes of the Commonwealth’s review of the WCIR.

2.2 THE COMMISSION'S HIGH LEVEL REQUIREMENTS

2.2.1 FINAL PRICE SUBMISSION

LMW's price submission needs to explain, justify and document its proposed prices for its rural infrastructure services. The submission should provide sufficient and accurate information for the Commission to make a decision in accordance with the WCIR. LMW should give careful consideration to the information requirements outlined at the end of each chapter (from chapter 3).

LMW should consider the needs of different stakeholders that are likely to have an interest in its submission. In particular, we expect LMW's price submission will demonstrate that customer engagement has informed and influenced its proposals. We anticipate that LMW's existing rural customer advisory committees will form part of this engagement.

2.2.2 FINANCIAL MODEL

LMW must complete the financial model prepared by the Commission to accompany its price submission. The financial model enables LMW and the Commission to estimate prices, and provides detailed information that allows us (with the assistance of consultants where appropriate) to evaluate assumptions used to estimate prices. LMW's written price submission must be consistent with the data provided in the financial model.[7] The financial model will clearly identify the cells for which LMW must provide data. LMW must not amend any other cells in the financial model — this includes adding rows, columns, or information not requested by the Commission.

LMW's written submission and its financial model must be consistent. Further, any changes made by LMW to its proposals during the price review process must also be reflected by LMW in its financial model. All financial values in LMW's price submission

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

and financial model must be in real 2017-18 dollars (with the March quarter 2017 Consumer Price Index as the base).

2.3 ASSESSING PRICES

The Commission will continue to use the building block approach to assess LMW's prices as required by the WCIR and the ACCC's pricing principles.[8] The building block approach has three steps which are set out in figure 2.1.

Step one involves confirming the service outcomes that LMW proposes to deliver during the next regulatory period. These outcomes should reflect obligations imposed by the Minister for Water through the Statement of Obligations, and reflect the priorities of customers identified by LMW through its customer engagement process.

In the second step, the Commission assesses the revenue LMW claims that it requires to meet the service outcomes identified in step one. The Commission makes assumptions about efficient expenditure to assess whether the claimed revenue will be sufficient for LMW to deliver the identified services.

Step three is to assess the prices that LMW is seeking to apply. The Commission must ensure that prices will generate LMW's revenue requirement by considering demand forecasts.

[8] Australian Competition & Consumer Commission 2011, *Pricing Principles for Price Approvals & Determinations Under The Water Charge Infrastructure Rules*, July.

FIGURE 2.1 STEPS IN ASSESSING AND APPROVING PRICES

Confirm services and outcomes	
service standards	regulatory obligations

↓

Determine revenue requirements				
expenditure requirements	service improvement	compliance	augmentation/extension from forecast demand	renewal
other financial inputs	cost of capital	regulatory depreciation	value of past investments	

↓

Translate into prices			
structure of prices	price control	forecast connections and volumes	adjustment during period

2.4 CONSULTATION BY THE COMMISSION

The Commission will tailor its consultation to reflect stakeholder comments and work already undertaken by LMW.

As in past price reviews, the Commission will invite submissions from interested parties on the proposals contained in LMW's price submission prior to making a draft decision.

Following the release of its draft decision, the Commission will invite submissions and intends to hold public meetings before it makes a final decision and issue a price determination.

We will make our papers and LMW's submissions available on our website (www.esc.vic.gov.au). If there is information that LMW or a customer does not want disclosed publicly, because it is confidential or commercially sensitive, the matter should be discussed with Commission staff before lodging the submission.

2.5 INDICATIVE TIMELINES

An indicative timetable for the price review is set out in table 2.1.[9]

TABLE 2.1 INDICATIVE CONSULTATION TIMETABLE

Indicative Dates	*Activity*
February 2017	ESC releases Guidance
29 September 2017	Final price submission submitted to ESC
2 October 2017 to January 2018	ESC assesses the price submission and LMW responds to Commission and consultant queries
9 March 2018	ESC releases Draft Decision
March 2017 to April 2018	ESC consultation on Draft Decision
15 June 2018	ESC releases Final Decision

[9] The timetable is based on Rule 30 of the WCIR which requires that the Commission approve prices within thirteen months of receiving a business's price submission.

3 CUSTOMER ENGAGEMENT

3.1 INTRODUCTION

The Commission requires LMW to engage with its customers to inform its price submission. It is in the interests of its customers that LMW develop its proposals informed by an understanding of their customers' priorities and preferences. We anticipate that LMW's existing rural customer advisory committees will form part of its engagement.

The Commission will assess LMW's consultation process consistent with the requirements of the ACCC's pricing principles for infrastructure-related services[10] and the requirements of the WCIR (see box 3.1).

BOX 3.1 CONSULTATION REQUIREMENTS

Schedule 1 of the WCIR states that water businesses must provide the regulator with:

> *details of the extent and nature of the consultation processes including matters consulted on and customer feedback received.*

Source: Water Charge (Infrastructure) Rules 2010.

The Commission understands that LMW is engaging with its customers in a manner consistent with the principles of good customer engagement listed in the Commission's guidance released in November 2016.[11] These are:

10 Australian Competition and Consumer Commission, *Application by Essential Services Commission Victoria for Accreditation Final Decision*, 17 February 2012.

- The form of customer engagement undertaken by a water business should be tailored to suit the content on which it is seeking to engage, and to the circumstances facing the water business and its customers.
- A water business 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 as part of the process.
- A water business's customer engagement should give priority to matters that have a significant influence on the services provided and prices charged by the business.
- A water business should start customer engagement early in its planning. The engagement should be ongoing, to keep testing proposals with customers.
- A water business should demonstrate in its price submission how it has taken into account the views of its customers.

3.2 INFORMATION REQUIRED IN THE PRICE SUBMISSION

The Commission requires LMW's price submission to:

- describe how and when LMW engaged with its customers
- describe the matters covered by customer engagement
- explain how feedback was taken into account by LMW in reaching its proposals.

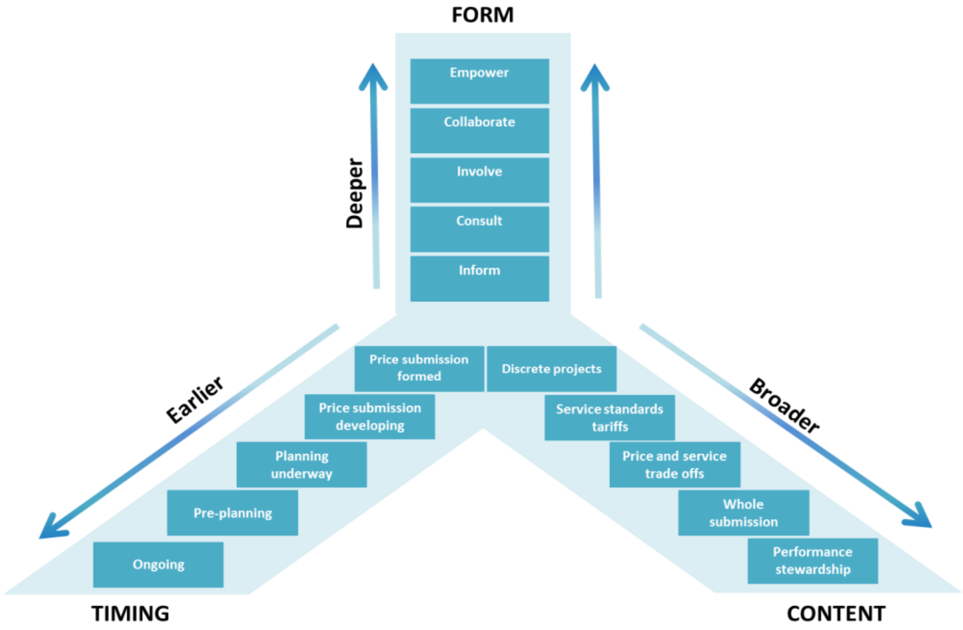
LMW may use the customer engagement diagram (figure 3.1) as a descriptive tool of its overall program, or of individual activities. It was developed by the Commission to help businesses describe the extent of their customer engagement programs across three axes of form, timing and content. It is a medium for describing the different types of customer engagement, without prescribing how that engagement is to be conducted.

An expansive engagement program leads to a large triangle overlayed across the three axes. Not all engagement activities need to be expansive, however broad rather than narrow engagement provides LMW the opportunity to test its understanding with

[11] Essential Services Commission 2016, *2018 Water Price review, Guidance paper*, November, p.23.

customers and to ensure it has properly captured expectations. It also provides stronger justification and legitimacy to the outcomes LMW propose to deliver.

FIGURE 3.1 CUSTOMER ENGAGEMENT DIAGRAM



Source: Essential Services Commission 2016, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October

4 SERVICE OUTCOMES

4.1 INTRODUCTION

The service outcomes proposed by LMW should reflect customers' priorities and expectations in relation to service delivery and should underpin LMW's expenditure plans.

The WCIR do not cover LMW's service standards which are regulated under Victoria's legal framework. Under section 4F of the Victorian *Water Industry Act 1994*, the Commission has established rural Customer Service Codes to regulate the standards and conditions of supply of declared services. Under these Codes, the Commission can:

- approve standards set out in a water business's price submission, and/or
- specify those standards in a code.

The Commission will approve LMW's proposed service outcomes if it demonstrates they relate to verified obligations or customer preferences, as revealed through LMW's customer engagement.

We understand that LMW is developing its proposed service outcomes in a manner that is consistent with the methodology outlined in the guidance the Commission issued in November 2016 (covering LMW's urban water and related services). Under this approach LMW will propose a set of outcomes for its rural customers, as well as the outputs and activities that will provide a basis to measure LMW's progress against each outcome.

4.2 INFORMATION REQUIRED IN THE PRICE SUBMISSION

The Commission requires that LMW's price submission:

- presents a set of customer outcomes, each with measurable outputs and deliverables and associated targets
- explains how the outcomes were informed by the business's customer engagement program
- specifies the key actions, activities and programs that the business will undertake to meet its targets (and consequently outcomes)
- demonstrates the connection between the outputs, key actions, activities and programs proposed and achievement of a specified outcome
- presents and explains any cost increases or cost savings for operating or capital expenditure that correspond to each outcome
- explains how the cost increases or cost savings are reflected in prices charged to customers
- specifies the improvements in service outcomes as a result of the Sunraysia Modernisation Project Stage 1.

The Commission will not mandate Guaranteed Service Levels for LMW's rural operation. However, LMW should engage with its customers to ascertain whether a Guaranteed Service Level scheme is appropriate.

5 FORECAST OPERATING EXPENDITURE

5.1 INTRODUCTION

Operating expenditure is a key input into customer prices. The completion of the Sunraysia Modernisation Project (Stage 1) and the associated modernisation of infrastructure means that LMW's future operating expenditure requirements will differ from past requirements (in terms of the nature and magnitude of expenditure).

LMW's price submission must explain how it has taken into account the impact of the Sunraysia Modernisation Project (Stage 1) on its forecast operating expenditure.

5.2 COMMISSION'S APPROACH TO ASSESSING OPERATING EXPENDITURE

The Commission regulates LMW's infrastructure-related services according to the ACCC's pricing principles for price approvals and determinations made under the Water Charge (Infrastructure) Rules 2010 (WCIR) — see box 5.1 for the pricing principles relating to the assessment of operating costs. The Commission's undertaking to apply these pricing principles was a condition of our accreditation to regulate prices for LMW's rural infrastructure services.

BOX 5.1 AUSTRALIAN COMPETITION AND CONSUMER COMMISSION'S PRICING PRINCIPLES FOR ASSESSING OPERATING EXPENDITURE

In making an assessment of the prudent and efficient operating expenditure for the next regulatory period, the regulator must assess:

- the prudency and efficiency of operating expenditure in the previous regulatory period
- the reasons and evidence supporting changes to service standards in the next regulatory period
- the reasons and evidence supporting changes to operating expenditure in the next regulatory period
- reasonable productivity improvements in providing services over the next regulatory period.

Where relevant, a regulator must compare and take into account operating expenditure of similar businesses.

Forecasts must be based on reasonable assumptions of the efficient costs likely to be incurred in this period.

Source: Australian Competition and Consumer Commission, *Application by Essential Services Commission Victoria for Accreditation Final Decision,* 17 February 2012.

Under the WCIR the Commission is required to approve prices proposed by LMW if it is satisfied they will result in the business recovering no more than the forecast efficient cost of delivering validated service outcomes.

5.3 SUPPORTING INFORMATION

LMW's price submission must include a forecast of total prudent and efficient operating expenditure for the next regulatory period, and each year until 2027-28. Forecast operating expenditure is to be presented separately for each major service category.[12]

For total and annual forecast operating expenditure and for each major service category, forecast operating expenditure must be further broken down where relevant, in the financial model for:

- operations and maintenance
- customer service and billing
- corporate costs
- external bulk water charges (excluding temporary purchases)
- external temporary water purchases
- licence fees (Essential Services Commission), and
- other operating expenditure.

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

LMW must also provide actual operating expenditure for the current regulatory period (using forecasts for 2017-18), 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 5.2), with allowance for 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.

[12] Major service categories may include irrigation, drainage, domestic and stock, surface water diversions, groundwater diversions and bulk water services.

The Commission's financial model sets out the forecast operating costs consistent with this methodology.

BOX 5.2 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 (2016-17) for those activities and services that are expected to be incurred throughout the next regulatory period.

The baseline is established from the actual controllable operating expenditure for 2016-17, adjusted as follows:

- remove any non-controllable expenditure[13]
- 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 on-going cost savings or efficiency commitments that will be realised in the final year of the current regulatory period (2017-18)
- reasonable productivity improvements in providing services over the next regulatory period.

Using the 2016-17 baseline controllable operating expenditure, LMW must propose and justify its forecast operating expenditure, identifying key assumptions that underpin productivity improvement rates.

The price submission must also:

- demonstrate how proposed cost changes relate to the proposed service outcomes, and in particular:

[13] 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.

- identify and explain operating expenditure savings or new operating expenditure arising from capital expenditure and projects
- explain any trend or major annual variations in forecast operating expenditure (including identifying cost items[14] that are having an upward or downward influence on operating expenditure) compared with historic operating expenditure, including changes due to the Sunraysia Modernisation Project (Stage 1)

- 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:
  - external bulk water charges (excluding temporary purchases)
  - external temporary water purchases
  - licence fees
  - environment contribution
  - any other proposed non-controllable costs

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

[14] 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.

6 FORECAST CAPITAL EXPENDITURE

6.1 INTRODUCTION

This chapter focuses on the Commission's requirements regarding Lower Murray Water's (LMW) proposed capital expenditure for the regulatory period commencing 1 July 2018.

Capital expenditure forecasting 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.

6.2 COMMISSION'S APPROACH TO ASSESSING CAPITAL EXPENDITURE

As required in the ACCC's decision on the accreditation of the Commission to regulate LMW, the Commission regulates LMW's infrastructure related capital expenditure according to the ACCC's pricing principles – see box 6.1.[15] Under the WCIR the Commission must approve prices that reflect no more than prudent and efficient expenditure.

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[15] The Commission's requirements in this chapter are aligned with the information requirements for capital expenditure in Schedule 1 of the *Water Charge (Infrastructure) Rules 2010*.

BOX 6.1 AUSTRALIAN COMPETITION AND CONSUMER COMMISSION'S PRINCIPLES FOR ASSESSING CAPITAL EXPENDITURE

In making an assessment of the prudent and efficient capital expenditure for the next regulatory period, the regulator must assess:

- the prudency and efficiency of capital expenditure in the previous regulatory period (where relevant to proposed capital expenditure in the next regulatory period)
- the reasons and evidence supporting the commencement of new major capital expenditure projects in the next regulatory period, including whether such projects are consistent with efficient long term expenditure on rural infrastructure services
- the reasons and evidence supporting levels of capital expenditure in the next regulatory period
- whether the timeframe for delivering the proposed capital expenditure program is reasonable, having regard to the operator's delivery of major projects in the past
- whether the asset management and planning framework of the operator reflects best practice.

Forecasts must be based on reasonable assumptions of the efficient costs likely to be incurred in this period.

Subject to confidentiality, external review of an operator's proposed capital expenditure must be made public on the regulator's website.

Source: Australian Competition and Consumer Commission, *Application by Essential Services Commission Victoria for Accreditation Final Decision*, 17 February 2012.

In preparing capital forecasts, LMW should avoid including speculative capital expenditure in their 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, LMW 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.

The Commission considers that forecast 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 LMW’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 productivity
- 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, the Commission will not roll these inefficient expenditures into the regulatory asset base. Inefficient costs will be worn by LMW and will not be recovered from customers.

6.3 SUPPORTING INFORMATION

LMW'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 by major service category 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).

The business's financial model must also specify actual capital expenditure for the current regulatory period (including a forecast for 2017-18), 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.

LMW's price submission must present the capital expenditure forecasts set out according to these three key types, as follows:

Major capital projects – Under the WCIR, major projects are defined as:

> *A major project is considered to be one for which total expenditure on the project over its life is expected to exceed $2m or 5% of the annual*

revenue to be recovered through regulated charges – whichever is the lesser amount.[16]

For each major project, LMW must 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
- objectives of the project, including how the project aligns with customer outcomes
- and have available:
  - a business case outlining the options considered for achieving the identified objectives and the approach to identifying the optimal solution[17]
  - 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 contractors[18]
  - 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 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

[16] Australian Competition and Consumer Commission, *A guide to the Water Charge (Infrastructure) Rules: Pricing application for Part 6 operators,* October 2011.

[17] 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.

[18] A business'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.

- objectives of the program, including how the program aligns with customer outcomes proposed
- 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.

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 2027-28, 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 the business'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 principles in box 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.

The Commission's financial model sets out the forecast capital expenditure consistent with the breakdowns and methodology described above.

7 REVENUE REQUIREMENT

7.1 INTRODUCTION

This chapter outlines the Commission's approach for calculating the Regulatory Asset Base (RAB) roll forward and the rate of return, as well as how regulatory depreciation is to be considered in forecasts. It also discusses how LMW should address revenue and costs relating to non-regulated services in its price submission.

LMW's price submission must include the estimated annual revenue requirement to at least 2027-28 from 1 July 2018.

Rule 5 of Schedule 1 of the WCIR outlines the requirements for the regulatory asset base (box 7.1) and Rule 6 of Schedule 1 of the WCIR outlines the details of the rate of return (box 7.2).

BOX 7.1 REGULATORY ASSET BASE

Details of the Part 6 operator's assets, and their value, that are used to provide infrastructure services:

(a) in respect of each year of the initial period or the regulatory period that is set to expire:

(i) actual contributions from customers and government;

(ii) actual proceeds from asset disposals and the nature and type of assets sold;

(iii) the regulatory depreciation of assets and the reasons for the depreciation;

(iv) from the above, the actual regulatory asset base; and

(b) in respect of each year of the following regulatory period:

(i) forecast contributions from customers and government and the assumptions underpinning those forecasts;

(ii) forecast proceeds from asset disposals and the nature and type of assets anticipated to be sold;

(iii) the regulatory depreciation of assets and the reasons for the depreciation;

(iv) from the above, the forecast regulatory asset base.

Source: Water Charge (Infrastructure) Rules 2010.

BOX 7.2 RATE OF RETURN

Details of the rate of return:

(a) in respect of each year of the initial period or the regulatory period that is set to expire; and

(b) proposed by the Part 6 operator for each year of the following regulatory period: and the basis for that rate, including the methodology used to determine the rate and the values of all inputs used in the calculation of the rate.

Source: Water Charge (Infrastructure) Rules 2010.

7.2 RAB ROLL FORWARD

The RAB represents the unrecovered cost of prudent capital expenditure. This is the value on which a business can expect to earn a return (return on capital), and the value that is returned to the business over the economic life of the assets (as regulatory depreciation). The RAB is updated each year to reflect any additional capital expenditure net of contributions (from government and customers), proceeds from asset disposals, and regulatory depreciation. It is also adjusted for inflation.

7.2.1 DETERMINING THE OPENING VALUE OF THE RAB

When assessing LMW's price submission, the Commission must establish:

- the closing value for the RAB at 30 June 2017 (using actual data)
- the opening value of the RAB at 1 July 2018
- the forecast value of the RAB for each year of the next regulatory period, and
- the forecast value of the RAB for each year after the next regulatory period until at least 2027-28.

To determine the opening RAB value at 1 July 2018, actual figures will be used for past years, while the forecast figures in the 2013 price determination will be used for incomplete years. An adjustment will be made for any difference between assumed and actual net capital expenditure when the opening RAB is calculated for the first year after the next regulatory period.

To calculate the opening RAB at 1 July 2018 the following formula will be used:

Opening RAB 1 July 2018	=	RAB at 1 July 2013
	+	Actual capital expenditure (gross)
	+	Forecast capital expenditure (gross)
	–	Actual contributions
	–	Forecast contributions
	–	Forecast regulatory depreciation
	–	Proceeds from disposal of assets
	–	Forecast proceeds from disposal of assets

The same approach is used to determine the opening value for each subsequent year in the next regulatory period, using the forecasts for capital expenditure, customer and government contributions, regulatory depreciation and disposals.[19] The RAB will also be adjusted for the difference between forecast and actual capex from the previous regulatory period.

7.2.2 DEMONSTRATING THE PRUDENCE AND EFFICIENCY OF PAST CAPITAL EXPENDITURE

Capital expenditure over the period from 1 July 2013 to 30 June 2018 (the current regulatory period) must be both prudent and efficient to be included in the roll forward

[19] The Commission's requirements in this chapter are aligned with the information requirements for the regulatory asset base in Schedule 1 of the *Water Charge (Infrastructure) Rules 2010*.

into the opening RAB for the next regulatory period. The price submission must link past (the current regulatory period) spending to verified outcomes and demonstrate that associated projects have been delivered cost-effectively. In particular, the Commission will have regard to:

- total capital expenditure compared with the benchmarks allowed in LMW's 2013 price determination
- capital expenditure compared with the forecast for each of the major capital projects identified in the 2013 price determination
- expenditure that has been redirected from the major projects which were justified as part of the 2013 price review process.

LMW's price submission must:

- explain and reconcile actual capex with forecast capex for the current regulatory period
- reconcile expenditure for major projects identified in LMW's submission to the 2013 price review
- explain and quantify capex undertaken in the current regulatory period and sought to be recovered in prices but not planned at the time of the 2013 price review.

7.2.3 CONTRIBUTIONS

For pricing purposes, capital contributions are removed from the RAB.

The price submission should provide separate data and information on:

- 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.

LMW should provide estimates of the total contributions by type and identify any contributions to major projects for both past and forecast projects.

7.2.4 DEPRECIATION

Regulatory depreciation allows for a return of LMW's investments in regulatory assets. As the components of the RAB – including depreciation – are adjusted for inflation over time, depreciation will reflect the return of the real cost of the asset.

The depreciation allowance included in the 2013 price determination will be used to adjust the RAB for each year of the current regulatory period to determine the opening RAB for 1 July 2018. This allowance will not be adjusted to reflect actual expenditure profiles across the period to avoid providing an undue incentive to increase capital expenditure spending above benchmarks during the regulatory period.

The approach taken by LMW to estimate regulatory depreciation should reflect reasonable assumptions about asset life and utilisation. The Commission recognises a return of capital expenditure (regulatory depreciation), commencing when the asset enters service. The Commission prefers a straight line depreciation profile.

LMW can propose an alternative approach to straight line depreciation having regard to the following assessment principles:

- 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.

7.2.5 DISPOSALS

LMW's price submission must include and justify estimates of revenue expected from disposal of assets for each year of the next regulatory period, to be deducted from the RAB roll forward.

The Commission must include estimates of disposals when calculating LMW's RAB. We will adjust the regulatory value of assets to reflect the proceeds of disposals, rather than some form of regulatory book or written down value.

7.2.6 ADJUSTING THE RAB FOR INFLATION

The existing tariffs were designed to deliver a real (rather than nominal) return on assets as described in section 2.2.2. The opening RAB must be adjusted to compensate investors for inflation over the current regulatory period and to reflect inflation when projecting revenue for the next regulatory period.

7.3 RATE OF RETURN

The rate of return is used to calculate a return on a business's investments in regulated assets. The Commission will decide what rate of return is used for LMW for the next regulatory period, based on the approach specified by the ACCC and consistent with our approach in the 2013 final decision.[20]

7.3.1 THE COMMISSION'S ASSESSMENT OF COST OF CAPITAL

The Commission will set the rate of return for LMW consistent with the approach required by the ACCC under the terms of the Commission's accreditation to regulate LMW. The Commission will set the Weighted Average Cost of Capital (WACC) within the following parameters as required by the ACCC's pricing principles:

- the cost of equity is to be estimated using the domestic capital asset pricing model based on the Officer model
- The formula for the WACC is:

$$WACC = Re\,(E / V) + Rd\,(D / V)$$

Where: Re = cost of equity

Rd = cost of debt

E = market value of the business's equity

[20] Essential Services Commission 2013, *Price Review 2013: Rural Water Businesses — final decision*, June.

D = market value of the business's debt

V = E + D = firm value

E/V = percentage of financing that is equity

D/V = percentage of financing that is debt.

- the cost of equity is to be calculated using a market risk premium of 6 per cent
- the risk free rate is to be based on the yield of a 10 year Commonwealth Government Security bond. The Commission proposes to use an averaging period of 40 business days commencing as close as practically possible to the start of the regulatory period
- the cost of equity is to be calculated using an equity beta of 0.7, and
- the benchmark debt risk premium is to be estimated on the basis of a benchmark gearing level of 60:40 debt to equity on the yields of BBB+ rated corporate bonds with 10 year maturity.[21]

The Commission will include a WACC estimate in the financial model that it will provide to LMW for preparing its price submission. This WACC estimate will be updated prior to the final decision to reflect a risk free rate that is calculated using an averaging period of 40 business days just prior to the final decision.

7.4 TREATMENT OF COSTS RELATING TO NON-REGULATED SERVICES

In order to calculate LMW's revenue requirement, the Commission must exclude costs related to non-regulated services. The Commission has the power to regulate only the prices of those services defined as infrastructure services in the WCIR. The WCIR defines infrastructure service as *access, or a service provided in relation to access, to*

[21] These parameters have been set out in the ACCC's *Pricing principles for price approvals and determinations under the Water Charge (Infrastructure) Rules 2010*, July 2011. Section 5.3, p. 63.

water service infrastructure and includes the storage, delivery, drainage and taking of water.[22]

While the Commission has no role in regulating prices for non-regulated services, it needs to be satisfied that these services are correctly classified and not related to regulated services, and that the costs of these services are accurately identified and excluded from the regulated cost base.

Non-regulated rural services do not fall within the definition of a regulated charge in paragraph 91(1)(a),(b) or (d) of the *Water Act 2007 (Cth).* The Commission considers that services such as property rental or leasing are non-regulated.

There are also a number of other non-regulated services undertaken by businesses which are often unique to a particular business. The price submission should clearly identify each service provided by the business that has been treated as non-regulated, and demonstrate that either the service is not a regulated service or that it is not provided in connection with a regulated service.

The price submission should also provide an overview of the expenditure and revenue forecasts (for at least 10 years from 1 July 2018) associated with non-regulated services for the regulatory period and explain how shared costs (such as corporate costs) have been allocated between regulated and non-regulated services.

The Commission's financial template will require further information on the costs and revenue of non-regulated services. The template will also allow LMW to lower customer prices by using revenue from these activities to offset its regulated revenue requirement.

[22] *Water Charge (Infrastructure) Rules 2010*, p.7.

8 DEMAND

8.1 INTRODUCTION

Changes in demand can arise from changes in consumption by existing customers, or changes in the number of customers. Demand forecasts are a key input into the determination of prices and are relevant to the assessment of past and forecast capital expenditure and operating expenditure.

8.2 COMMISSION'S ASSESSMENT OF DEMAND FORECASTS

The Commission must ensure that LMW's proposed demand forecasts meet the requirements of the WCIR and the ACCC's pricing principles for rural infrastructure related services. Rule 11 of Schedule 1 of the WCIR outlines the requirements of demand forecasts (box 8.1).

BOX 8.1 WATER CHARGE INFRASTRUCTURE RULES REQUIREMENTS OF DEMAND FORECASTS

The Commission will assess whether LMW's proposed forecasts:

- are based on an appropriate and unbiased forecasting methodology
- are based on reasonable assumptions about the key drivers of demand, including:
  - supply restrictions
  - environmental conditions, including water inflows and the availability of water
  - commodities, including the treatment of water as a derived demand
  - any elasticity assumptions
  - demographic impacts, where appropriate
- utilise the best available information, including historical data that can identify trends in demand
- take account of current demand and economic conditions.

Source: Water Charge (Infrastructure) Rules 2010.

8.3 INFORMATION REQUIRED IN THE PRICE SUBMISSION

LMW's price submission should summarise its demand forecasts. LMW should use at least a 10 year horizon for demand forecasting and scenario work, and reflect this in its price submission. LMW should also provide information that enables the Commission to assess its proposals against the WCIR requirements provided in box 8.1.

LMW will need to exercise discretion and match the level of detail contained in its demand forecasts with the materiality of the demand information (and hence revenue impacts) captured.

The Commission's financial templates will require LMW to provide detailed data on actual demand numbers and demand forecasts for every tariff and tariff category. The detail in these templates does not need to be reproduced in the price submission.

9 FORM OF PRICE CONTROL

9.1 INTRODUCTION

From the current regulatory period, LMW has a revenue cap form of price control with a rebalancing constraint of ±10 per cent. This means that LMW may alter its prices to raise the revenue allowed by the Commission at the last price review, but that it must limit individual price changes to plus or minus 10 per cent in any single year.

The form of control can be an important means of managing risk for water businesses and also has implications for how price changes will affect water customers.

We anticipate LMW will continue with a revenue cap form of price control for the next regulatory period. If LMW wishes to propose a new form of price control, we expect it to discuss this with customers and the Commission before submitting its pricing submission.

9.2 OUR ASSESSMENT FRAMEWORK

The ACCC's approval of the Commission's application for accreditation means the Commission regulates LMW's infrastructure-related services according to the pricing principles in the ACCC's Final Decision on the Commission's accreditation.

In its Final Decision, the ACCC states that a water business may apply for any form of price control subject to meeting the requirements of the *Water Charge (Infrastructure) Rules 2010*.[23] The ACCC also states that pricing principles allow for flexibility in choosing the form of price control. Water businesses are required to submit the form of price control they would like to apply and the reasons for making the proposal.[24]

LMW must also identify the charges from Goulburn-Murray Water it proposes to pass through and detail how they interact with LMW's form of price control.

9.3 INFORMATION REQUIRED IN THE PRICE SUBMISSION

If LMW proposes to continue with its current form of price control, it only needs to state this in its submission. If LMW plans to alter its form of control, the Commission requires LMW to identify and justify the changes against the WCIR requirements. Also LMW must:

- explain how the proposed form of control would operate, the formulas to be used and services affected
- demonstrate it has consulted with potentially affected customers, and explain how the feedback from customers informed its proposals
- explain how a transition to a new form of price control may impact customers and LMW's approach to minimising any adverse effects.
- identify the charges from Goulburn-Murray Water it proposes to pass through and detail how they interact with LMW's form of price control.

23 Australian Competition and Consumer Commission, *Application by Essential Service Commission of Victoria for Accreditation*, Final Decision, 17 February 2012.

24 Australian Competition and Consumer Commission, *A guide to the Water Charge (Infrastructure) Rules: Pricing application for Part 6 operators,* October 2011, p. 27.

10 TARIFF LEVELS AND STRUCTURES

10.1 INTRODUCTION

In approving or determining regulated charges the Commission must have regard to the ACCC's pricing principles under the WCIR.

10.2 TARIFF ASSESSMENT CRITERIA

The Commission will consider LMW's tariff proposals against the ACCC's pricing principles which apply to LMW's rural infrastructure services such as irrigation services (box 10.1).

BOX 10.1 ACCC'S PRICING PRINCIPLES FOR TARIFFS

The ACCC's pricing principles for tariffs say that tariff structures should:

- promote the economically efficient use of water infrastructure assets
- ensure sufficient revenue streams to allow efficient delivery of the required services
- give effect to the principles of user pays in respect of water storage and delivery in irrigation systems
- achieve pricing transparency
- facilitate efficient water use and trade in water entitlements.

Source: ACCC Pricing Principles.

The ACCC's pricing principles require that the regulator must have regard to consultation undertaken by an operator in approving or determining regulated charges.

10.3 TARIFF STRUCTURE AND DESIGN ISSUES

The Commission's view is that LMW, in consultation with its customer consultative committees and customers, is best placed to design tariffs and tariff structures that meet its customers' needs, and manage its risk and deliver its desired business outcomes. It is also best able to coordinate and integrate its tariff structures with its broader risk management policies (which include the form of control and management of service outcomes standards, among others).

10.3.1 EFFICIENCY

The ACCC's pricing principles require consideration of efficiency. This could be realised by moving towards cost reflectivity in pricing. The Commission will analyse the extent to which LMW's tariffs and charges recover the actual costs incurred in the delivery of specific services. In practice, this may be best achieved where the fixed and variable components of a charge recover the fixed and variable costs of providing services.

10.4 INFORMATION REQUIRED IN THE PRICE SUBMISSION

The price submission must contain sufficient information to justify prices and tariff proposals. LMW must articulate its tariff strategy and highlight any major changes during the regulatory period commencing 1 July 2018. It should show evidence of engagement with customers and how this has been taken into account, analysis of customer impacts of proposed changes and any strategies to address the proposed changes.

The price submission should specify and justify each tariff it proposes to apply for the next regulatory period. It should also include estimates of likely prices until at least 2027-28. Estimates beyond the next regulatory period could be a range of prices, within reasonable bounds.

- In each of the relevant areas above, the price submission should outline:
  - relevant background information about the underlying service and recent pricing history
  - include a tariff schedule listing each tariff and the price (or principles) proposed, including each element of a multi-part tariff structure. Prices must be reported in real terms (consistent with the Commission's financial template).
- Each price proposed in the price submission must directly correspond with a price in the financial template and the following information must be provided:
  - 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
  - provide data and supporting information that describes how proposed tariffs are consistent with providing signals about the efficient cost of delivering services
  - justify how the proposed change delivers better signals to customers about the efficient costs of service provision
  - describe how the business considered risk and its allocation and management

  - provide a summary of the business's approach to consultation and how the views of customers informed the price submission.
- Provide estimated tariffs for each service for each year beyond the next regulatory period up until at least 2027-28, in the financial model.

11 VARYING THE DETERMINATION

11.1 INTRODUCTION

Under Rule 40 of the WCIR, LMW may apply in writing to the Commission to vary its regulated charges resulting from unforeseen events that have a material impact on its operations.

11.2 VARYING THE DETERMINATION

If LMW would like to apply to make an adjustment to its determination during the period, it would need to do so according to Rule 40 of the WCIR set out in box 11.1.

BOX 11.1 VARY APPROVAL OR DETERMINATION

Regulator may vary approval or determination in certain circumstances

(1) A Part 6 operator may apply in writing to the Regulator for a variation of the approval or determination under Division 2 or 3 (or, if previously varied under this Division, as so varied) of its regulated charges in respect of a regulatory period if:

> (a) an event occurs during the regulatory period that materially and adversely affects the operator's water service infrastructure or otherwise materially and adversely affects the operator's business; and
>
> (b) the operator could not reasonably have foreseen the event.

(2) An application under subrule (1):

(a) must set out details of the event; and

(b) must state the Part 6 operator’s proposals for rectifying the material and adverse effects of the event; and

(c) must state—

(i) the total amount that the Part 6 operator anticipates will be required during the remainder of the regulatory period to rectify those material and adverse effects;

(ii) whether that amount is likely to exceed $15 million or 5% of the value of the operator’s regulatory asset base as at the beginning of the regulatory period whichever is the lesser amount; and

(iii) whether it is reasonably likely (in the absence of any reduction of any other expenditure) that the total expenditure during the remaining part of the regulatory period will exceed the total forecast expenditure for that remaining part; and

(d) must demonstrate that the Part 6 operator is not able to reduce its expenditure to avoid the consequences referred to in subparagraphs (c) (ii) and (iii) without materially and adversely affecting the reliability and safety of the operator’s water service infrastructure or the operator’s ability to comply with any relevant regulatory or legislative obligations; and

(e) must set out details of the variation of its regulated charges sought by the Part 6 operator.

Source: Water Charge (Infrastructure) Rules 2010.

12 FINANCIAL VIABILITY

The Commission has financial viability objectives set out in the *Essential Services Commission Act 2001*[25] and the principles in the WIRO.[26] To satisfy these objectives and principles, we undertake a financial viability test when we approve prices.

Financial viability tests consider whether a business meets an investment grade credit rating and whether the business will be able to pay its cash obligations in its next pricing period. We base these tests on outcomes for the four indicators and associated benchmarks in table 12.1.

The four quantitative indicators in table 12.1 focus mainly on cash flow, which we believe provides the best indication of a business's underlying financial position. To calculate these indicators, we will use historic and forecast actual data (as opposed to notional data). We will also rank the importance of indicators – 'FFO interest cover' ranked highest; 'gearing' ranked second highest; 'FFO / net debt', 'internal financing ratio', and 'Proportion of Discretionary Revenue' indicators ranked lowest. The financial viability ratios will be included in the financial template.

If a viability test suggests a viability adjustment to increase prices is necessary, we will make adjustments on a net present value neutral basis. This ensures that if a business gets a price increase to maintain its viability in the next price period, we will balance out the price increase with price reduction(s) in subsequent pricing periods to ensure the business recovers no more than efficient costs from customers. Although price increases for financial viability usually occur over one pricing period, we would likely smooth the commensurate price reductions to customers over a number of years to ensure a business does not re-enter a financially vulnerable position.

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[25] S8(A)(b) of the *Essential Services Commission Act 2001.*

[26] 8((b) (ii) of the Water Industry Regulatory Order 2014.

TABLE 12.1 FINANCIAL INDICATORS

Indicator	Calculation	Benchmark Range	Description
Primary indicator – used to determine size of adjustments			
FFO interest cover	(FFO + net interest) / net interest	> 1.5 times < 1.8 times[27]	Measures the extent of the cash flow buffer a business has to meet its debt obligations.
Secondary indicators – used as contextual information to determine whether an adjustment is necessary			
Net Debt / Regulatory Asset Value (%) (Gearing)	(Interest bearing liabilities – cash) / RAV	< 70 per cent	Measures the debt component of the regulatory capital structure.
FFO / Net debt (%)	FFO / (Interest bearing liabilities – cash)	> 10 per cent	Measures the extent to which the serviceability of 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: FFO refers to 'funds from operations', and RAV refers to the 'regulatory asset value'.

[27] The Commission would not consider intervention if the indicator was greater than 1.5, however, the Commission would monitor and expect caution from the business if the indicator was below 1.8.