

February 2023



East Gippsland Water: Review of expenditure forecasts

2023 Water Price Review

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Glossary

Term	Definition
DEECA	Department of Energy, Environment and Climate Action
DELWP	Department of Environment, Land, Water and Planning
EA	Enterprise Agreement
Commission	Essential Services Commission
FTE	Full time equivalent
FTI Consulting	FTI Consulting (Australia) Pty Ltd
GL	Gigalitre
IPD	Integrated Planning and Delivery
kWh	Kilowatt
ML	Megalitre
PEER	Public Entity Executive Remuneration
PREMO	Performance, Risk, Engagement, Management and Outcome
PS4	Price Submission for the fourth regulatory period (2017-18 to 2022-23)
PS5	Price Submission for the fifth regulatory period (2023-24 to 2027-28)
PV	Photovoltaic
RBA	Reserve Bank of Australia
SaaS	Software as a Service
Schneider	Schneider Electric Energy and Sustainability Services
SGC	Superannuation Guarantee Charge
WIRO	Water Industry Regulatory Order
WPI	Wage Price Index
WSAA	Water Services Association of Australia

Executive Summary

FTI Consulting has been engaged by the Essential Services Commission (the Commission) to undertake an independent expert review of 14 Victorian water businesses' forecast (controllable) operating and capital expenditure for the 1 July 2023 to 30 June 2028 (PS5) regulatory period.

The Commission is required to assess the water businesses' proposals against a legal framework set out in the *Water Industry Regulatory Order 2014* and the Commission's PREMO pricing framework. We have assessed East Gippsland Water's forecast operating and capital expenditure based on the guidelines contained in the Commission's *2023 Water Price Review: Guidance Paper*.

This report sets out our views as to whether East Gippsland Water's forecasts of controllable operating expenditure and capital expenditure over the PS5 regulatory period can be reasonably assessed to be prudent and efficient.

Forecast operating expenditure

East Gippsland Water has proposed an average net increase in controllable operating expenditure (growth less efficiency factor) of 0.7 per cent per year for the PS5 regulatory period. When comparing this net result against other water businesses, East Gippsland Water is eleventh out of 13 urban water businesses subject to this review.

East Gippsland Water's forecast operating expenditure reflects:

- baseline 2021-22 expenditure of \$21.71 million, which is \$1.8 million (or 9.1 per cent) above the benchmark allowance approved by the Commission in the last price review
- a total step change increase over the baseline of \$9.2 million across the regulatory period
- an average growth factor in operating expenditure of 1.5 per cent per year and an efficiency factor of 0.8 per cent per year.

Based on East Gippsland Water's PS5 submission, discussions with the business and the further information it provided, we have formed the view that the forecast operating expenditure is mostly consistent with a prudent business that operates efficiently. This reflects our view that:

- the key drivers of the additional expenditure above the baseline appear reasonable, and the baseline does not appear to include any items that are non-recurring
- the majority of the proposed step changes are reasonable and supported by a sound rationale.

The only adjustment we are proposing to make is to remove the step change for Professional Engineers registration costs, totaling \$24 000 over the PS5 regulatory period, as these are immaterial and should be able to be absorbed by the business given its proposed net growth rate for operating expenditure.

Table 1: Recommended adjustments - controllable operating expenditure (\$ 1 January 2023, millions)

	2023-24	2024-25	2025-26	2026-27	2027-28
Forecast controllable operating expenditure	23.61	23.71	23.89	24.00	24.05
Recommended adjustments:					
Professional Engineers registration costs	- 0.006	-0.004	-0.004	-0.006	-0.004
Adjusted total operating expenditure	23.61	23.70	23.88	24.00	24.05

Otherwise, we do not recommend any adjustments to East Gippsland Water’s forecast controllable operating expenditure for the PS5 regulatory period.

Forecast capital expenditure

East Gippsland Water has forecast capital expenditure of \$120.2 million for the PS5 regulatory period. This is:

- 79 per cent more than its actual capital expenditure (including 2022-23 forecast) over the PS4 regulatory period
- 52 per cent more than the forecast capital expenditure outlook for the PS5 regulatory period that it included in its PS4 submission.

A key contributor to East Gippsland Water’s higher levels of forecast capital expenditure for the PS5 regulatory period is the significant investment in two major projects (\$36.9 million) in response to water security shortfalls (Woodglen water storage) and environmental non-compliance (Paynesville recycled water storage).

East Gippsland Water’s PS5 submission provides a breakdown of its forecast capital expenditure for the PS5 regulatory period, and further information was provided to support this review. Together this information provides a reasonable level of confidence that:

- the proposed capital expenditure program is consistent with the actions of a prudent service provider acting efficiently
- the forecast capital expenditure is justified, robust and is capable of being delivered by East Gippsland Water in the PS5 regulatory period.

As a result, we do not recommend any adjustments to East Gippsland Water's forecast capital expenditure for the PS5 regulatory period.

1 INTRODUCTION

1.1 Purpose of this report

The Essential Services Commission (the Commission) is reviewing submissions from 14 Victorian water businesses setting out their proposed prices, revenue requirement and key service outcomes to apply to water and sewerage services commencing on 1 July 2023 through to 30 June 2028 (referred to in this report as the PS5 regulatory period).¹ Each of the Victorian water businesses, including East Gippsland Water, submitted their proposals to the Commission for assessment on 30 September 2022.

FTI Consulting has been engaged to undertake an independent expert review of the water businesses' forecast operating expenditure and capital expenditure for the PS5 regulatory period. The scope of our review of operating expenditure is limited to controllable operating expenditure.

This report sets out our independent expert view of the prudence and efficiency of East Gippsland Water's controllable operating expenditure and capital expenditure forecasts for the PS5 regulatory period, in accordance with the requirements of the regulatory framework.

1.2 Context and challenges facing Victorian water businesses

The environment faced by most Victorian water businesses over the last few years has been significantly more challenging than envisaged in 2018 when the Commission approved the expenditure forecasts used to set water prices for the 1 July 2018 to 30 June 2023 (PS4) regulatory period.

The COVID-19 pandemic has been one of the unforeseen events that has impacted the Victorian water businesses' expenditure in several ways, including:

- requiring additional water and wastewater monitoring and treatment
- increasing customer hardship due to cost-of-living pressures
- disrupting business operations, including the ability to carry out maintenance activities and higher rates of staff absenteeism

¹ This includes 13 water businesses providing urban water and sewerage services include Barwon Water, Central Highlands Water, Coliban Water, East Gippsland Water, Gippsland Water, Goulburn Valley Water, GWMWater, Lower Murray Water, South East Water, South Gippsland Water, Wannon Water, Westernport Water and Yarra Valley Water and two businesses providing rural services including Lower Murray Water and Southern Rural Water.

- changing work practices, including social distancing and hygiene requirements as well as transitioning to enable staff to work from home
- disrupting supply chains, putting pressure on the availability and cost of inputs
- increasing migration from Melbourne to regional areas.²

These impacts have affected each water business's actual and forecast expenditure in different ways. Some water businesses have faced new costs or cost pressures, while others have experienced cost savings.

The effects of the COVID-19 pandemic continue to be felt nearly three years later. Some of these impacts are moderating as Victoria (and the rest of the country) adapts to a new phase of living with the pandemic. However, there is the potential for other more permanent changes, including changes to work practices and greater migration of people from major cities to regional areas. At the time of this review, the longer-term implications remain unclear.

There are other events and changes that were unforeseen (or at least unable to be fully anticipated) during the Commission's previous water price review. These include:

- the continued impacts of climate change on the frequency and severity of major weather events, including drought, bushfires and floods
- the continued evolution in climate change and environmental policy, including emission reduction strategies and targets, and associated compliance and reporting obligations
- a continued hardening of the insurance market, which also (at least partly) reflects the impacts of major climate-related events domestically and globally
- a ramping up of the need to do more to mitigate cyber security risks, including mandated obligations.

These issues and challenges *do not* imply or support a premise that:

- water businesses should continue to increase their operating and capital expenditure, and hence water and sewerage prices
- there should be lower expectations in terms of the need to drive efficiency savings in the longer term for the benefit of customers
- businesses should avoid responsibility for managing the risk of cost increases and/or passing more of those risks on to customers.

² For example, refer: <https://population.gov.au/sites/population.gov.au/files/2021-09/the-impacts-of-covid-on-migration-between-cities-and-regions.pdf>, accessed 1 December 2022.

It further underlines the importance of scrutinising increases in expenditure, as well as proposed step changes, to ensure that they remain consistent with the actions of a prudent business operating efficiently, including in how it responds to the uncertainties and challenges in its operating environment. It also does not alter the standards that should be reasonably expected of businesses in supporting and justifying any increases in expenditure for the next regulatory period, including being able to provide adequate supporting documentation (such as Board-approved policies or strategies and business cases).

1.3 Water industry regulatory framework

The water businesses' proposals are being assessed against a legal framework set out in the *Water Industry Regulatory Order 2014* (WIRO)³ and the Commission's PREMO framework for approving prices.⁴

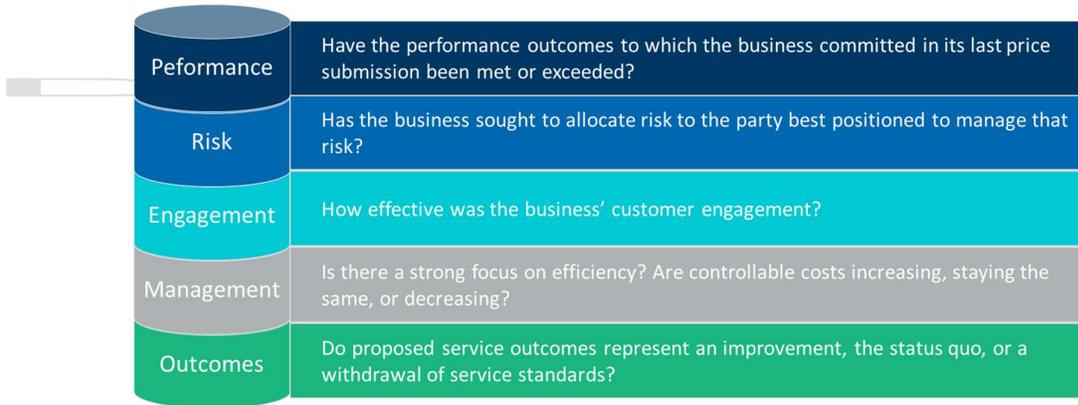
The Commission's regulatory framework places an emphasis on efficient delivery of services. Assessing the prudence and efficiency of a water business's expenditure forecasts is fundamental to achieving this objective.

In 2018, the Commission introduced a new approach called PREMO to regulate the prices charged by Victorian water businesses. As Figure 1.1 describes, the PREMO approach contains both new and conventional elements related to price, risk, engagement, management and outcomes. PREMO provides water businesses with incentives to put forward their best offer to customers and deliver the outcomes its customers value most and to deliver these as efficiently as possible.

³ The Water Industry Regulatory Order 2014 (WIRO) sits within the broader context of the *Water Industry Act 1994* (Vic) and the *Essential Services Commission Act 2001* (Vic).

⁴ Essential Services Commission 2016, *Water Pricing Framework and Approach: Implementing PREMO from 2018*, October.

Figure 1.1: The Commission’s PREMO framework



More conventional elements of PREMO include the retention of the building block approach, which provides reasonable certainty that prudent and efficient costs can be recovered. This includes an expenditure review to determine whether a water business’s proposed capital and operating expenditure forecasts are consistent with the requirements of the regulatory framework.

Under the PREMO framework, each submission is expected to reflect the water business’s best offer to its customer base. Submissions may be fast tracked through the assessment process based on several factors. Some water business proposals may require a more detailed review of their proposed expenditure while others may only require a review of some elements of their proposed expenditure (for example, specific items where expenditure is increasing).

The *2023 Water Price Review: Guidance Paper* (the Guidance Paper) explains the Commission’s methodology and approach to assessing water businesses’ price submissions and making a price determination and sets out the information each business is required to provide in its price submission.⁵ The Guidance Paper also identifies the governing criteria for each component of the building block methodology, including forecast operating and capital expenditure.

This review is the second review under PREMO for these businesses. The Commission also expects price submissions to demonstrate how water businesses are building on their previous proposals to deliver value to their customers.

⁵ Essential Services Commission 2021, 2023 Water Price Review: Guidance paper, 26 October.

1.4 Methodology and approach

The scope of our assessments is limited to examining water businesses' forecast controllable operating expenditure and capital expenditure over the PS5 regulatory period. It does not include examining decisions about whether to fast track a water business's PS5 submission, nor does it involve assessing other elements of the PREMO framework such as past performance or engagement.

Our methodology for assessing East Gippsland Water's capital and operating expenditure forecasts for the next regulatory period is consistent with the Commission's Guidance Paper. In summary, the scope of our review includes:

- for forecast operating expenditure, our assessment focuses on controllable expenditure only. We have assessed proposals using the base-step-trend approach as set out in the Commission's Guidance Paper and is consistent with the basis on which each water business has submitted information as part of their Price Review Model templates
- for forecast capital expenditure, our assessment focuses on the top 10 major projects and major capital expenditure programs that comprise a significant proportion of the water business's total capital expenditure forecast.

Further detail about our assessment framework as it has been applied is set out in Section 3 (Operating expenditure assessment) and Section 4 (Capital expenditure assessment).

Our process has involved several steps:

- an initial review of PS5 price submissions, financial model templates and associated documentation
- comparison of each of the water business's proposed capital and operating expenditure proposals, including assumptions adopted in relation to growth trends, efficiency factors, and comparison of actual and proposed expenditure
- a Stage 1 (preliminary) assessment workshop undertaken with Commission staff identifying the key issues to be explored in our more detailed review
- visits and/or discussions with each of the water businesses on key issues related to their proposal
- further review and analysis of further information or explanations provided.

1.5 Structure of this report

The structure of this report is as follows:

- Chapter 2 provides a high-level summary of the East Gippsland Water's expenditure proposal
- Chapter 3 sets out our assessment of East Gippsland Water's operating expenditure proposals
- Chapter 4 sets out our assessment of East Gippsland Water's capital expenditure proposals.

Consistent with the Commission's Guidance Paper and the Price Review Model completed by businesses, all forecasts are expressed in dollars as at 1 January 2023.

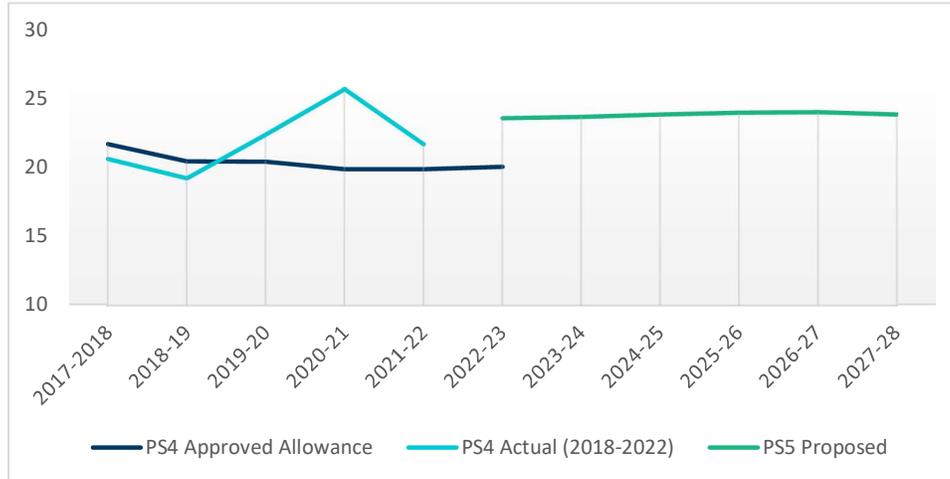
2 SUMMARY OF EXPENDITURE PROPOSAL

2.1 Forecast controllable operating expenditure

For the current PS4 regulatory period, the Commission approved a total controllable operating expenditure benchmark allowance for East Gippsland Water of \$100.8 million (in \$ 1 January 2023).

For the first four years of the PS4 regulatory period, East Gippsland Water's actual operating expenditure was \$8.35 million (10.3 per cent) above the benchmark allowance approved by the Commission for those four years.

Figure 2.1: East Gippsland Water's actual and forecast controllable operating expenditure by year (\$ 1 January 2023)



'PS4 Approved Allowance' relates to the approved operating expenditure benchmark allowance for 2017-18 to 2022-23.

Source: East Gippsland Water, EGW_2023 Price Review Model - Final Submission, 30 September 2022; Essential Services Commission 2018, East Gippsland Water Determination Price Review Model: 1 July 2018 – 30 June 2023, 29 May.

East Gippsland Water's baseline 2021-22 controllable operating expenditure is \$21.71 million, which is \$1.8 million (or 9.1 per cent) above the benchmark allowance approved by the Commission in the last price review.

East Gippsland Water has proposed a total step change increase to the baseline of \$9.2 million across the PS5 regulatory period, as outlined in Table 2.1.

Table 2.1: East Gippsland Water’s proposed step changes (in \$ 1 January 2023, millions)

Step change	Value
SaaS fees	0.88
IT security enhancements	1.79
IT foundation architecture	1.06
Additional electricity costs	1.20
Further salary increases above baseline forecast	1.09
Additional sewerage team members	0.79
Process and Performance Improvement Specialist	0.70
Emissions Offset position	0.50
Additional customer hardship support	0.45
Trade Waste Officer	0.45
Operating expenditure – Groundwater Monitoring project	0.40
Operating expenditure – new capital projects	0.19
Professional Engineers registration fees	0.02
Asset Management consultancy	(0.32)
Total	9.20

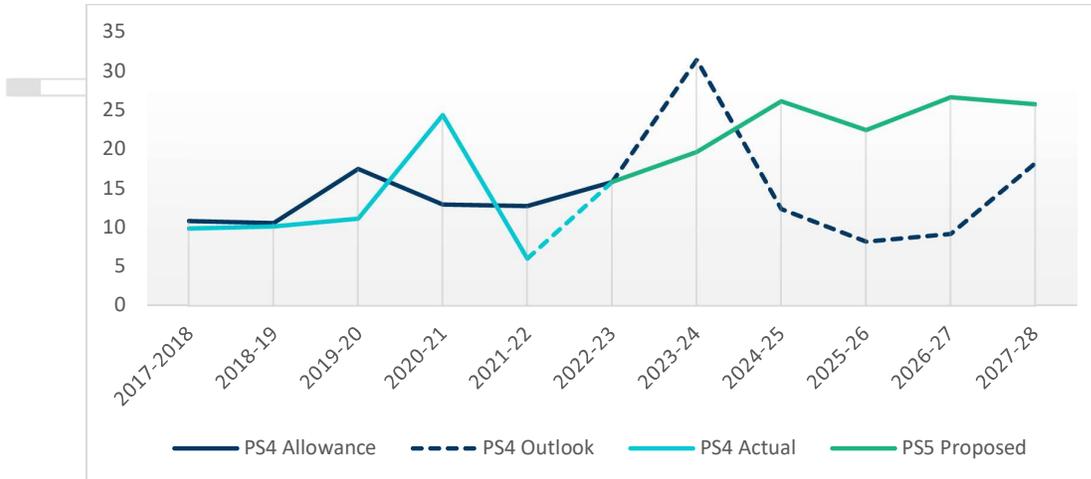
Source: East Gippsland Water 2022, 2023 Price Submission, p.50.

East Gippsland Water has forecast an average growth factor for operating expenditure of 1.5 per cent per year and an (average) efficiency factor of 0.8 per cent per year over the PS5 regulatory period.

2.2 Forecast capital expenditure

East Gippsland Water has forecast capital expenditure of \$120.2 million for the PS5 regulatory period. This is 52 per cent higher than the forecast capital expenditure outlook for the PS5 regulatory period included in its PS4 determination and is 79 per cent higher than its forecast actual capital expenditure in the PS4 regulatory period, as shown in Figure 2.2.

Figure 2.2: East Gippsland Water’s actual and forecast capital expenditure by year (\$ 1 January 2023)



'PS4 Allowance' relates to the approved capital expenditure allowance for 2017-18 to 2022-23, and the 2018 forecast for 2023-24 to 2027-28.

Source: East Gippsland Water, EGW_2023 Price Review Model - Final Submission, 30 September 2022; East Gippsland Water, FD_EGW_2018 Price Review Model; Essential Services Commission 2018, East Gippsland Water Determination Price Review Model: 1 July 2018 – 30 June 2023, 29 May.

The key, projects and programs are defined in the submission, and include:

- renewals (\$49.2 million), comprising 41 per cent of the total forecast capital expenditure
- improvements/compliance (\$63.2 million), comprising 53 per cent of the total forecast capital expenditure
- top 10 major projects (\$76 million)
- defined programs and other discrete capital expenditure (\$39 million).

East Gippsland Water’s top 10 capital expenditure projects, shown in Table 2.2, account for 66 per cent of its forecast capital expenditure for the PS5 regulatory period.

Table 2.2: East Gippsland Water’s top 10 capital expenditure projects (in \$ 1 January 2023)

Major capital expenditure project	Proposed cost
Woodglen - third raw water storage	25.8
Paynesville Wastewater Treatment Plant - Additional recycled water storage and pump station	11.1
Bairnsdale Wastewater Treatment Plant - Stage 1 Major Upgrades	10.2
Woodglen to Wy Yung main supply line upgrades	6.7
Replace liner and cover Wy Yung No.1 water storage	6.0
Lakes Entrance North Arm Water Main Replacement	4.0
Bairnsdale Wastewater Treatment Plant - Stage 2 Major Upgrades	3.8
New 1ML clear water storage tank and pump station at Marlo	3.7
Buchan - replace clear water tanks (1ML)	3.6
Upgrade Day Street Sewerage Pump Station to 25L/s and 330m of DN150 sewer main	1.1

Source: East Gippsland Water, EGW 2023 Price Submission, 30 September 2022.

3 OPERATING EXPENDITURE ASSESSMENT

3.1 Overview of assessment approach

The Commission's Guidance Paper notes the requirement that forecast operating expenditure 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).⁶

The Commission has asked us to provide an independent expert view on whether East Gippsland Water's forecast controllable operating expenditure is prudent and efficient having regard to the base-step-trend approach and assessment criteria set out in its Guidance Paper.

We have assessed whether forecast controllable operating expenditure is consistent with the actions of a prudent business acting efficiently, including if:

- the established 2021-22 controllable operating expenditure baseline has been appropriately adjusted for any one-off expenditure items and efficiency commitments
- operating costs reflect reasonable cost efficiency/productivity assumptions applied to the 2021-22 baseline operating expenditure, having regard to industry trends
- changes in operating costs are consistent with the timing of major capital projects
- operating costs can fulfil the business's obligations and meet customer service expectations as efficiently as possible
- any forecast divergence from historical trends in operating expenditure can be readily explained, for example, by changes in obligations imposed by government, including technical, regulatory and customer service expectations.

⁶ Essential Services Commission 2022, 2023 Water Price Review: Guidance Paper, August 2022 Amendment, p.28.

The key steps in our approach were as follows.



In assessing proposed increases in expenditure, including step changes, we have had regard to each business's approach to allowing for growth and efficiency, and the resulting net growth factor for the PS5 regulatory period. For example, some businesses have proposed more ambitious efficiency targets (resulting in negative net growth in expenditure over the PS5 regulatory period) and/or have sought to recognise economies of scale in allowing for growth.

This is a relevant factor in considering the business's ability to absorb cost increases, including proposed step changes, which has required us to apply judgement in assessing the reasonableness of the business's proposal.

3.2 Key operating expenditure drivers across water businesses

There are several drivers of increased operating expenditure over the current PS4 regulatory period and/or forecast for the PS5 regulatory period that are common across water businesses, as summarised in Table 3.1.

Appendix A presents more detailed analysis and cross-industry metrics for electricity, labour and IT costs, using information submitted by the businesses in their respective Price Review Models. We have not sought to directly benchmark these costs across the water businesses as the requirements of each business vary. However, such comparisons do

further assist in identifying those businesses that might be looking at more material increases in expenditure. It also provides some context to assessing these costs for each business. A summary of the key implications of this analysis for our assessment approach is provided below.

Table 3.1: Common operating expenditure issues

Expenditure category	What we have examined
Electricity	<p>The application of the Schneider Electric Energy and Sustainability Services (Schneider) electricity price forecasts. Schneider was commissioned by Intelligent Water Networks to prepare an electricity price forecast that could be consistently applied by all of the water businesses.</p> <p>The approach to meeting the Victorian water sector’s commitment to the State Government to source 100 per cent of their energy requirements from renewables by 2025, recognising that each business’s approach will reflect its own circumstances and operating environment (this can also include capital projects).</p>
IT	<p>Software as a Service (Saas), with all businesses either having transitioned, or are in the process of transitioning, to cloud-based services. This has also resulted in expenditure that would have been classified as capital expenditure now treated as operating expenditure.</p> <p>Cyber security, which is an important issue for all water businesses as well as utilities and other corporations more generally. This includes compliance with new obligations.</p>
Labour	<p>The rationale for any material growth in employee numbers.</p> <p>Remuneration increases, having regard to each organisation’s Enterprise Agreement (EA) as well as conditions in labour markets, with several regional businesses citing challenges in attracting and maintaining people with the right skills. Some businesses have also referred to the Victorian Government’s 2022 Public Entity Executive Remuneration (PEER) review.</p>

Electricity costs

The information submitted by each of the businesses indicates that most are applying the 75th percentile of Schneider’s long-term forecast of the electricity spot price. In its report, Schneider assumes that the water businesses are most likely to enter a contract rather than

remain exposed to spot prices and that contract price will be around the 75th percentile of its forecast.⁷

This conclusion reflects the likelihood that generators will require a 'premium' above their expected spot price to enter a contract because:

- A premium will be required for the generator to be willing to forgo opportunities to sell that capacity if prices rise above the expected spot price (recognising that the generator is also benefiting if prices fall).
- If it is 'caught short' in terms of its ability to deliver the contracted capacity, it may need to go into the market to procure the shortfall at the prevailing spot price and is therefore exposed to short-term price increases.

Given this, we consider that relying on the 75th percentile of the Schneider forecasts appears reasonable.

We have reviewed each business's proposed energy expenditure within the context of its total forecast controllable operating expenditure proposal. Some businesses have proposed step changes for green power costs, which we have assessed on its own merits.

IT expenditure

As with other costs, we have not sought to directly benchmark IT operating expenditure across the businesses. This is because the needs of each business are likely to vary due several factors, including its size, customer base, the nature and scope of its operations and the age and maturity of its IT architecture and systems. Some businesses may also need to undertake capital expenditure. We have therefore assessed proposed increases for IT expenditure as proposed by each business on their own merits.

We have referred to our cross-industry analysis of key metrics (refer Appendix A). We have used this context to satisfy ourselves that the level of IT expenditure for each business is reasonable and justified, particularly for those businesses that appear higher on the comparative metrics. However, it has not directly informed our decisions.

For businesses that have proposed material increases in IT expenditure that have contributed to increases in baseline expenditure and/or step changes, we have sought to assess whether:

- it appears reasonable for the business to be incurring this expenditure, having regard to necessity/risk as well as the expected benefits

⁷ Schneider Electric 2022, Electricity Price Forecast, Covering financial year 23 to 2028, Base Case, 23 March, p.17.

- it is supported by appropriate evidence, such as an IT strategy or business plan
- the evidence aligns with the forecasts proposed in the business's Price Review Model.

Labour costs

As for IT expenditure, we have used the labour cost information in Appendix A as context when assessing each business's proposed operating expenditure. For most businesses identifying increases in labour costs, this has tended to be a combination of increases in staffing as well as remuneration.

For businesses that have proposed material increases in labour-related expenditure (either as reflected in a baseline uplift and/or step change), we have reviewed the rationale for the proposed increase and sought further supporting information where relevant. This included material increases in FTE numbers and/or increases in remuneration. Where increases have also been attributed to the Superannuation Guarantee Charge (SGC), we have confirmed with the business that this reflects an increase in total remuneration payable.

The following sections summarise our assessment of East Gippsland Water's forecast controllable operating expenditure for the PS5 regulatory period.

3.3 Assessment of the baseline

After adjusting for non-recurring items, East Gippsland Water's adjusted controllable operating expenditure in 2021-22 was \$21.71 million. This represents an increase in actual expenditure of \$1.8 million or 9.1 per cent compared to the \$19.91 million benchmark allowance approved by the Commission as part of the last price review.

We have assessed the reasonableness of the proposed baseline expenditure by verifying that:

- any additional expenditure above the benchmark allowance is consistent with what is required by a prudent business operating efficiently
- the forecast operating expenditure does not include any items that are non-recurring.

East Gippsland Water itemised the drivers of its \$1.8 million increase in baseline expenditure in its PS5 submission.⁸ We further explored and verified each driver with the business, which are summarised in the following sections.

⁸ East Gippsland Water 2022, 2023 Price Submission, pp.47-48.

3.3.1 Chemicals costs

Chemical costs are estimated to contribute around \$270 000 per year to East Gippsland Water's baseline increase.⁹ Of this, approximately \$130 000 per year is attributed to the age and capacity of the Bairnsdale Wastewater Treatment Plant.¹⁰ This is driven by an increase in dosage requirements as well as input costs.

- East Gippsland Water advised that it has had to materially increase the quantity of ferric sulphate required to treat the wastewater to a standard required by its Environmental Protection Agency (EPA) licence. This has been one of the drivers of the upgrade of this plant. We confirmed that as this upgrade is not planned for completion until the end of the PS5 regulatory period, the benefits of that upgrade (via reduced chemicals costs) will therefore not be seen until the PS6 regulatory period.
- East Gippsland Water also cited a 37 per cent increase in the unit cost of ferric sulphate from 2019 levels. It advised that this is not expected to moderate back to the 2019 level for the purpose of the forecast.

East Gippsland Water's PS5 submission also noted that water quality issues from the 2019-20 Black Summer bushfires had impacted its largest treatment facility at Woodglen (increasing costs by around \$80 000 per year). We sought confirmation that these additional costs were expected to persist over the PS5 regulatory period. East Gippsland Water's response was that it expects more dirty water events in the future. It has also experienced more algal blooms at its Woodglen raw water storages, which can also be linked to the impact of the bushfires. This has necessitated additional chemical treatment.

East Gippsland Water also cited general increases in chemicals costs despite some savings achieved under new supply contracts negotiated as part of a joint procurement process with other water businesses. Other businesses have also identified this as a driver of increased costs.

3.3.2 Insurance costs

Consistent with the experience of other businesses, East Gippsland Water cited the continued hard insurance market as driving increases in insurance costs. It cites a 47 per cent increase in insurance premiums over the PS4 regulatory period.¹¹

⁹ East Gippsland Water 2022, 2023 Price Submission, p.47.

¹⁰ East Gippsland Water 2022, 2023 Price Submission, p.47.

¹¹ East Gippsland Water 2022, 2023 Price Submission, p.48.

3.3.3 Labour-related expenditure

In its PS5 submission, East Gippsland Water referred to an additional \$1.2 million per year in labour costs as contributing to its baseline increase. There are several drivers of this, which we also explored further with the business.

- **Increases in FTEs:** East Gippsland Water's PS5 submission identified additional resources employed in the PS4 regulatory period.¹² These resources covered a range of activities across the business relating to service delivery, compliance and emergency response. They also included the insourcing of asset management activities previously undertaken by consultants (with that expenditure 'removed' from the baseline as a negative step change). East Gippsland Water advised that staff have been under increased stress and pressure, citing an example of its Business Efficiency Manager being diverted to emergency response. East Gippsland Water has proposed further increases in FTEs in the PS5 regulatory period, which have been addressed as a step change (refer section 3.4).
- **Cost increases from new Enterprise Agreement:** East Gippsland Water entered into a new Enterprise Agreement (EA) in September 2021. A key change resulting from this was the introduction of a new higher salary band. This has allowed the business to move managers into this band and increase their remuneration, with all manager roles independently benchmarked against comparable roles in the market. This is also subject to the staff member meeting specified professional development conditions specified in the EA. East Gippsland Water explained that it has recently been experiencing challenges in attracting and retaining staff (as have other regional water businesses). As these labour market pressures are expected to continue, further increases are proposed as a step change (refer section 3.4).
- **Victorian Government's 2022 PEER review:** As outlined in Appendix A, a common cost driver cited by businesses is the application of the outcome of the Victorian Government's 2022 PEER review of executive remuneration. In benchmarking its executive roles against equivalent roles in the State, East Gippsland Water identified that an uplift was required for all positions. This has been applied and is reflected in the 2021-22 baseline.
- **Superannuation Guarantee Charge:** East Gippsland Water identified the increase in the Superannuation Guarantee Charge as a driver of labour-related cost increases (refer Appendix A). It confirmed that this was in circumstances where

¹² East Gippsland Water 2022, 2023 Price Submission, p.48.

the total remuneration package needs to be adjusted up for increases in the Superannuation Guarantee Charge.

We have also considered this within the context of the cross-industry data for labour costs presented in Appendix A. While sitting above the average on most metrics, East Gippsland Water is not an outlier. Given the differences between each business and its operating environment we have referred to this data in providing context only. We have not sought to use these comparisons as a basis for our assessment of the reasonableness of East Gippsland Water's labour costs.

3.3.4 Traineeships

East Gippsland Water has also added four new traineeships to its program, resulting in additional expenditure of approximately \$200 000 per year. This is an initiative to support the employment and career progression of local people and has been for field-based staff (who rotate through the business). East Gippsland Water advised that this had been discussed with customers, who supported local employment pathways.

3.3.5 Conclusion regarding baseline expenditure

East Gippsland Water has experienced several drivers of higher expenditure in the PS4 regulatory period that were not foreseeable at the start of this period. East Gippsland Water has provided reasonable explanations and information provided in support of each driver.

Based on the information and explanations provided by East Gippsland Water, we have not identified any items of expenditure that we consider should be removed or adjusted from the baseline. It also does not appear to include any items that are non-recurring.

3.4 Assessment of step changes

East Gippsland Water has proposed total step changes to the baseline of \$9.2 million across the PS5 regulatory period, comprising the items summarised in Table 3.2.

Table 3.2: East Gippsland Water's key step changes (\$ 1 January 2023, millions)

Key step changes	Value	Explanation
Technology One SaaS fees	0.88	Migration of on-premises software to the SaaS platform.
IT Security Enhancements	1.79	Cyber security enhancements implemented under the 2021 ICT Strategy, including establishment of a Security Operations Centre and resourcing.

Key step changes	Value	Explanation
IT Foundation Architecture	1.06	Improvements to IT architecture under the ICT Strategy and Roadmap.
Increases in electricity costs	1.20	Increases in forecast electricity costs and additional costs in procuring green power from 2025, in line with Victorian Government commitments.
Asset management consultancy	(0.32)	Savings in consultancy costs from bringing certain asset management activities in-house.
Sewerage team members	0.79	Additional staff to meet service standards and compliance obligations.
Process and Performance Improvement specialist	0.7	An engineering role focusing on activities in relation to treatment, including compliance and efficiency.
Trade Waste Officer	0.45	Additional position to manage trade waste obligations.
Opex from new capex	0.19	Reflects total incremental operating expenditure from six new capital projects.
Professional Engineers registration	0.02	Professional registration for practicing engineers.
Salary increases beyond baseline year	1.09	Reflects additional salary increases awarded at the end of the baseline year, reflecting changes in remuneration to retain high performing staff and attract new employees.
Emission Offset position	0.50	A new position emerging from the organisation's Climate Change Strategy.
Increase in hardship support	0.45	A recommendation from the customer Deliberative Forum to increase hardship measures for customers experiencing payment difficulties.
Opex from new capex – Groundwater Monitoring	0.40	Reflects monitoring costs at new bores to maintain compliance with environmental outcomes.
Total	9.17	

Source: East Gippsland Water 2022, 2023 Price Submission, p.50; discussions with East Gippsland Water.

We have focused our assessment on step change increases on the basis that these increases are likely to be reflected in the baseline controllable operating expenditure in the next regulatory period. We assessed the reasonableness of those step change increases by examining whether the proposed step changes meet one or more of the following criteria:

- comply with new, or changed, legislative or regulatory obligations

- achieve an outcome or implement an initiative that is endorsed by customers or broadly meets accepted changes in community expectations
- recategorisation of expenditure between capital and operating expenditure, where the business can demonstrate that it is necessary or appropriate to do so
- incremental operating expenditure associated with a new prudent and efficient capital project
- sufficiently material that the costs are not able to be met by an efficient business operating within its approved budget (including the growth allowance) or be otherwise mitigated.

Our assessment of these step changes is outlined below.

3.4.1 SaaS licence fees

East Gippsland Water is one of several businesses transitioning to the SaaS platform (refer section 3.2 and Appendix A). It has proposed a step change of \$0.18 million per year to reflect the service provider's licence fee estimate. East Gippsland Water provided correspondence from the service provider to verify this cost, which also states that fee estimates are based on the same rate for each customer.

We are satisfied that East Gippsland Water has substantiated this cost and that this reflects the licence fee quoted by the third-party service provider. It is material expenditure and satisfies the third step change criterion in relation to the appropriate recategorisation of what was previously capital expenditure as operating expenditure.

3.4.2 Other IT: Cyber security and foundation architecture

As discussed in section 3.2 and further in Appendix A, several water businesses are incurring, or plan to incur, additional expenditure to address cyber security requirements. This reflects requirements and standards that the Victorian water businesses must comply with, along with community and customer expectations in relation to the protection of customer data (which will have heightened following the recent major cyber attacks in Australia).

East Gippsland Water is proposing a step change for IT security enhancements totalling \$1.79 million over the PS5 regulatory period. This is primarily attributed to the establishment of a Security Operations Centre and additional resourcing to manage data security.

East Gippsland Water completed a major review of its Foundation Architecture in 2021, which encompassed its cyber security strategy. It provided us with its ICT Strategy, Data

Strategy and Roadmap, dated September 2021.¹³ It also provided an Attachment containing the detailed Work Packages and associated costings.¹⁴

Implementation of this strategy will occur in three tranches of work, to be completed by June 2028. In addition to the step change for IT security enhancements, East Gippsland Water has proposed a step change for an additional \$1.06 million over the PS5 regulatory period for implementation of the ICT Strategy.

The ICT Strategy and Data Strategy are intended to align with East Gippsland Water's Asset Management Improvement Plan. Certain projects identified under the Asset Management Improvement Plan are relevant to the ICT Strategy and/or Data Strategy, for example the Asset Management Information System. In detailing the three tranches of work under the ICT Strategy, benefits and KPIs are to be established for each tranche (they are currently only detailed for Tranche 1).

We reviewed the activities and costings in the Work Packages. East Gippsland Water advised that activities scheduled for 2021-22 and 2022-23 will now be undertaken in the PS5 regulatory period, along with the balance of the work scheduled for completion by the end of that period. On this basis, we can confirm that the costings provided in the Work Packages align with the forecast step changes for the PS5 regulatory period for IT Security Enhancements and Foundation Architecture in its Price Review Model.

We also considered its proposal within the context of proposed IT expenditure for the PS5 regulatory period across the water businesses (refer Appendix A). This shows that based on East Gippsland Water's proposed total IT expenditure for the PS5 regulatory period, its IT costs per connection are above the average of the businesses, but not materially. However, its total forecast IT expenditure as a percentage of total controllable operating expenditure in the PS5 regulatory period is (just) below the average of all of the businesses.

Caution needs to be exercised in drawing conclusions from these comparisons as the need for IT expenditure in the PS5 regulatory period will depend on the level of maturity of each business's IT infrastructure. We have therefore only referred to this information for context. It has not directly informed our assessment of this proposed step change.

We are satisfied that East Gippsland Water has provided adequate substantiation of these two IT step changes, which is supported by an overarching IT Strategy and detailed program of work. Both step changes are material. The step change for IT security enhancements

¹³ East Gippsland Water, ICT Strategy, DOC/21/56908; ICT and Data Strategy Detailed Roadmaps, DOC 21/56907.

¹⁴ East Gippsland Water, ICT Strategy Work Packages, DOC/21/50521.

also satisfies our first step change criterion as it relates to new or expanded regulatory obligations.

3.4.3 Electricity costs

East Gippsland Water is proposing a step change for increased electricity costs totalling \$1.2 million over the PS5 regulatory period.

To put this in context, we reviewed trends in electricity expenditure across the water businesses (refer Appendix A). As evidenced in Appendix A, East Gippsland Water is proposing the second highest increase in total forecast energy costs for the PS5 regulatory period compared to actual (and forecast, for 2022-23) energy costs in the PS4 regulatory period, at just under 15 per cent. Given the differences between each business and its operating environment we have referred to this data in providing context only. We have not sought to use these comparisons as a basis for our assessment of the reasonableness of East Gippsland Water's electricity costs.

East Gippsland Water's average annual expenditure over the PS5 regulatory period is forecast to be around \$0.238 million higher than actual 2021-22 energy costs. It has also stated that it has embedded \$0.14 million of savings from energy efficiency projects in its operating expenditure forecast for the PS5 regulatory period.¹⁵

However, energy costs still only account for around 5.5 per cent of East Gippsland Water's total controllable operating expenditure, which is slightly less than the industry average. It ranked fourth highest in terms of average energy costs per water volume (in dollars per ML) for the PS5 regulatory period. Its average costs in cents per kilowatt hour (kWh) at large sites over the PS5 regulatory period is just under the average of the businesses.

We sought further information regarding the step change from East Gippsland Water. Its responses included the following:

- It confirmed that it has applied the 75th percentile of the Schneider forecasts of long-term spot prices, which Schneider had indicated will include a premium for contract costs (refer section 3.2 and Appendix A).
- The PS5 forecast also reflects the expected commissioning of a major solar array project at the Paynesville Wastewater Treatment Plant, which is expected to be online from 2023-24. This is a key driver of a forecast reduction in consumption of 308 000 kWh per year. However, East Gippsland Water did highlight the uncertainties associated with future usage, particularly given the impact of

¹⁵ East Gippsland Water 2022, 2023 Price Submission, p.49.

climate change and major climate-related events, which is currently not captured in the historical data used to inform projections of future usage. It is seeking to actively manage this via its energy reduction program.¹⁶

In addition to its own direct investment in renewable energy sources, East Gippsland Water has also allowed a total of approximately \$600 000 for green power (accounting for half of the step change cost), to meet the Victorian water businesses' commitment to source 100 per cent for their energy from renewables by 2025 (refer section 3.2 and Appendix A).

To provide further context we also reviewed East Gippsland Water's Climate Change Strategy, dated December 2022.¹⁷ This explains the assessment and rationale for its decision to meet the Victorian Government's target via a combination of direct investment in renewables and procuring green power.

As noted above, East Gippsland Water has the second highest proposed increase in energy costs for the PS5 regulatory period (compared to actual energy costs in the current regulatory period). However, on the cross-industry metrics (refer Appendix A), it is not an outlier. In terms of unit costs, while it is the fourth highest for energy costs per water volume, it is just under the average when looking at average cents per kWh (at large sites) over the PS5 regulatory period. As noted above, we have only referred to this information for context. It has not directly informed our assessment of this proposed step change.

The main driver of the difference between it and the other businesses appears to be the additional \$0.6 million proposed over the PS5 regulatory period for green power costs. Noting that all businesses are required to meet the commitment made to the Victorian Government to source 100 per cent of energy from renewable sources by 2025 and comply with the Statement of Obligations (Emissions Reduction) under the *Water Industry Act 1994*, it is legitimate for East Gippsland Water to seek recovery of the incremental costs of this as a step change. We also note that as a percentage of total controllable operating expenditure, its total energy costs are just below the industry average.

This proposed step change is material, with the element relating to green power reflecting a new obligation that will come into effect in the PS5 regulatory period, with the first key milestone being 2025.

On that basis, we are not proposing any adjustment to East Gippsland Water's proposed step change for electricity costs.

¹⁶ East Gippsland Water 2022, 2023 Price Submission, p.50.

¹⁷ East Gippsland Water, Climate Change Strategy 2023-28, DOC/22/12403.

3.4.4 Labour costs: additional FTEs

In the PS5 regulatory period East Gippsland Water is proposing to employ the following:

- additional sewerage team members
- a Trade Waste Officer
- a Process and Performance Improvement specialist
- an emissions offset specialist.

East Gippsland Water refers to those roles as being necessary to meet service standards and compliance obligations.¹⁸

We recognise that the additional sewerage members and Trade Waste Officer are key operational roles that can be directly attributable to the provision of services and compliance obligations. We sought additional information on the other two roles (the Process and Performance Improvement specialist and emissions offset specialist) as these are new to the organisation.

In terms of the Process and Performance Improvement specialist, we had some concerns as to whether customers should fund (via water prices) a role this is focussed on identifying and implementing efficiency savings. However, East Gippsland Water explained that this role is likely to be filled by a chemical and process engineer, who (amongst other things) will focus on activities in relation to treatment, including compliance and efficiency. This person will also provide some support to existing staff in the field, as well as provide technical expertise and back-up. This will also reduce the need to source specialist external expertise in these areas.

The need for the emissions offset role is identified under the Climate Change Strategy. This role would appear to have responsibility for managing various aspects of that strategy, including the emissions reduction targets that the business has committed to achieve. This has been viewed as a more effective long-term strategy than sourcing this expertise externally. We recognise that this is an area where the workload has the potential to materially expand over time.

Together, these new positions are material. There is also a driver in terms of ensuring ongoing compliance with existing obligations, as well as new obligations (the emissions offset role).

In conclusion, we do not propose to make any adjustments to East Gippsland Water's proposed FTEs for the PS5 regulatory period.

¹⁸ East Gippsland Water 2022, 2023 Price Submission, p.50.

3.4.5 Labour costs: further salary increases

In addition to the increases in remuneration that are already reflected in the baseline for 2021-22, East Gippsland Water is proposing further salary increases in the PS5 regulatory period. We sought further information from East Gippsland Water on this proposed increase.

As with other regional water businesses, East Gippsland Water has described the challenges it has been facing in recruiting and retaining staff. It described the business as being “at the mercy” of current economic conditions and the resulting pressures on wages. It stated that it is seeing fewer applicants for roles because those roles are not meeting current market expectations in terms of remuneration. It therefore considers that the only way it can attract and retain staff with the required skills is to pay more.

East Gippsland Water’s current EA allows for a two per cent per year increase (this will expire in September 2025). It is proposing to allow a (higher) three per cent per year increase, noting that this will also be eroded by the increase in the SGC (as explained in Appendix A, how this flows through to remuneration depends on how the package is structured, which will either reduce the employee’s take-home pay or require an uplift in total remuneration paid to the employee).

As noted in section 3.3.3, East Gippsland Water does assess individual positions (including management roles) against external benchmarks.

This proposed increase is in addition to a baseline uplift that already reflects remuneration increases in the current period. Discussions with the business confirmed that the challenges it is facing in recruiting and retaining staff are real (and consistent with the experiences of other businesses). It is also clear that this water price review is coinciding with one of the tightest labour markets in recent decades. As noted in Appendix A, the questions are to what extent this will translate into real wages growth and if so, for how long that will persist.

Within this uncertain context, we are not proposing to make any adjustments to East Gippsland Water’s proposed step change for additional remuneration increases. These are material costs that cannot otherwise be absorbed by the business.

We would be more concerned by this proposal if it was evident that East Gippsland Water’s proposed labour costs were materially above the other businesses, noting that we have only referred to this information for context. As discussed in section 3.3.3, East Gippsland Water’s total forecast labour costs for the PS5 regulatory period result in it being above the average of the businesses on several metrics, however it is not an outlier.

3.4.6 Operating expenditure from new capital projects: groundwater monitoring

The most material item of additional operating expenditure resulting from a new capital project is \$400,000 across the PS5 regulatory period for groundwater monitoring. This increase is associated with new bores and is intended to ensure compliance with environmental outcomes.¹⁹ We understand that a key part of these activities is sampling and lab testing, which can be an expensive process.

East Gippsland Water provided an annual breakdown of the monitoring required at each site over the PS5 regulatory period, including the associated costs.²⁰ This included details of all unit rate assumptions for water sampling and testing, along with drilling cost assumptions.

It explained that the costs are higher in the first year of the PS5 regulatory period (by around \$67,000) as this includes the establishment of baseline data, which involves the collection of a more “comprehensive analytical suite” of data. This would be done based on a quarterly monitoring frequency. Once the baseline is completed at each site, monitoring will then revert to a six-monthly basis.

This step change meets our third criterion as additional operating expenditure resulting from a new capital project. Based on the information provided by East Gippsland Water, we are satisfied that these costs have been adequately substantiated and they appear reasonable.

3.4.7 Operating expenditure from new capital projects: other

East Gippsland Water is proposing a further \$190,000 over the PS5 regulatory period for operating expenditure associated with other new capital projects.

East Gippsland Water provided a document identifying and costing those projects that will result in it incurring additional operating expenditure (rather than absorbed within existing business as usual costs).²¹ This identifies six projects. It is noted that each project is comparatively small in terms of incremental operating expenditure.

This step change meets our third criterion as additional operating expenditure resulting from a new capital project/s. We are not proposing to make any adjustments to this step change.

¹⁹ East Gippsland Water 2022, 2023 Price Submission, p.22.

²⁰ East Gippsland Water, Opex from New Capex – Groundwater Monitoring Action Plan, DOC/22/14455.

²¹ East Gippsland Water, Opex from Capex, DOC/22/41224.

3.4.8 Increase in hardship support

East Gippsland Water is proposing a step change of \$450,000 over the PS5 regulatory period for increased hardship support. It submitted that at its deliberative forum, customers recommended the provision of an additional \$0.1 million per year in hardship support.²²

East Gippsland Water also provided us with the list of the types of initiatives that could be considered for customers experiencing hardship, ranging from options for customers with high arrears (or on long term payment arrangements), through to rebates for customers on dialysis or with a medical condition that requires increased water usage.

As customers recommended the provision of an additional \$0.1 million per year in hardship support, which approximates the total step change sought by East Gippsland Water, we consider that this meets our second step change criterion. East Gippsland Water has also detailed the types of initiatives that will be funded by this expenditure. We are therefore not proposing to make any adjustments.

3.4.9 Professional Engineers Registration

East Gippsland Water has proposed a step change totalling \$24,000 across the PS5 regulatory period for Professional Engineers registration. While we understand that this is an important and mandatory requirement for practicing engineers, this amount is immaterial.

Noting that East Gippsland Water ranks eleventh out of the thirteen businesses in terms of the ambition of its net growth target of 0.7 per cent per year (see section 3.4), we consider that this cost should be borne by the business as part of business as usual expenditure. We would therefore recommend that an adjustment should be made to remove this step change.

3.4.10 Summary of our assessment of step changes

We are satisfied that East Gippsland Water has substantiated all but one of its proposed step changes for the PS5 regulatory period and that most of the costs appear reasonable. We have also considered this within the context of East Gippsland Water's proposed net growth factor of 0.7 per cent per year, which is the third least ambitious of the water business (refer section 3.4).

²² East Gippsland Water 2022, 2023 Price Submission, p.29.

The only adjustment we are proposing to make is to remove the step change for Professional Engineers registration costs, totalling \$24,000 over the PS5 regulatory period, as these are immaterial and should be able to be absorbed by the business given its proposed net growth rate for operating expenditure.

Except for that adjustment, for the remaining step changes we have formed the view that:

- there is a clear rationale for the step changes and that they are consistent with a prudent business acting efficiently, having regard to our step change criteria
- they are sufficiently material to allow these increases to baseline operating expenditure rather than assume that they should be absorbed by the net growth factor.

We therefore consider it appropriate for East Gippsland Water’s baseline operating expenditure allowance to be increased for the forecast step changes, excluding the amount for Professional Engineers registration.

3.5 Forecast growth and efficiency factors

East Gippsland Water is forecasting average growth in operating expenditure of 1.5 per cent per year and an (average) efficiency factor of 0.8 per cent per year over the PS5 regulatory period. This results in a net increase in operating expenditure over the PS5 regulatory period of 0.7 per cent per year. When comparing this net result against other water businesses, East Gippsland Water is eleventh out of 13 urban water businesses subject to this review (see Table 3.3).

Table 3.3: Net average increase in operating expenditure per year by business

Water business	Net average annual increase
South East Water	-0.9%
GWMWater	-0.8%
Wannon Water	-0.3%
Gippsland Water	-0.2%
Yarra Valley Water	-0.2%
Lower Murray Water (Urban)	0.0%
Barwon Water	0.1%
South Gippsland Water	0.2%
Westernport Water	0.5%
Coliban Water	0.5%

Water business	Net average annual increase
East Gippsland Water	0.7%
Goulburn Valley Water	1.1%
Central Highlands Water	1.2%

Source: Calculated from pricing models submitted by water businesses.

3.6 Summary of controllable operating expenditure assessment

Based on East Gippsland Water's PS5 submission, discussions with the business and the further information it provided, most of its forecast operating expenditure is consistent with a prudent business that operates efficiently and does not require any further adjustments. This reflects our view that:

- the key drivers of the additional expenditure above the baseline appear reasonable, and the baseline does not appear to include any items that are non-recurring
- the proposed step changes are reasonable and supported by a sound rationale.

However, we propose to make one adjustment to remove the step change attributable to Professional Engineers registration costs, totaling \$24 000 over the PS5 regulatory period, as these are immaterial and should be able to be absorbed by the business given its proposed net growth rate for operating expenditure.

Table 3.4: Recommended adjustments - controllable operating expenditure (\$ 1 January 2023, millions)

	2023-24	2024-25	2025-26	2026-27	2027-28
Forecast controllable operating expenditure	23.61	23.71	23.89	24.00	24.05
Recommended adjustments:					
Professional Engineers registration costs	-0.006	-0.004	-0.004	-0.006	-0.004
Adjusted total operating expenditure	23.61	23.70	23.88	24.00	24.05

4 CAPITAL EXPENDITURE ASSESSMENT

4.1 Overview of assessment approach

The Commission's Guidance Paper states that forecast capital expenditure 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).²³

We have assessed East Gippsland Water's forecast capital expenditure for the PS5 regulatory period focusing on the significant top 10 major project expenditure and increases in key capital expenditure programs.

The assessment considered the details provided in the submission and any additional information requested, against the criteria set out in Figure 4.1.

Figure 4.1: Criteria used to assess forecast capital expenditure

Assessment of capital program
<ul style="list-style-type: none">• Link to customer service outcomes, regulatory obligations and risk management• Comparison of forecast and actual capital expenditure• Reliability of cost estimation• Deliverability of capital program
Assessment of major capital projects and programs
<ul style="list-style-type: none">• Major capital projects and programs are clearly justified• Proposed delivery solution is reasonable

Having regard to these criteria, we have also considered whether any adjustments to the proposed expenditure forecast would be considered appropriate, material and justified.

The assessment of East Gippsland Water's major project capital expenditure is based on the information provided in the PS5 submission, additional information supporting the significant project expenditure and East Gippsland Water's overall approach to the

²³ Essential Services Commission 2021, 2023 Water Price Review, Guidance paper, 26 October, p.33.

development of the program, the cost estimation and the delivery within the PS5 regulatory period.

Where East Gippsland Water identified significant increases in program expenditure compared to the PS4 regulatory period, we sought further supporting information around the program and the proposed increases.

4.2 Assessment of overall capital program

4.2.1 Link to customer outcomes and obligations

East Gippsland Water's PS5 submission includes major project summaries that clearly link the projects to customer outcomes, risk and/or regulatory obligations. The proposed capital program seeks to achieve the following broad outcomes:

- additional water storage to secure water supplies
- upgrades to wastewater treatment and recycled water assets to ensure compliance with environmental obligations and minimise community and environmental impacts
- renewal of critical water distribution assets to provide reliable services
- upgrades to ensure water supply service levels can be met with increasing growth.

East Gippsland Water's customer engagement has highlighted the importance of having enough water and a greater focus on environmental sustainability. Considering this feedback, reliable services, water security and an improved environment are key outcomes of the capital program.

East Gippsland Water's PS5 submission also lists the individual programs, which appear well linked to customer outcomes.

4.2.2 Comparison of forecast and actual capital expenditure – PS4

East Gippsland Water expects to deliver a capital expenditure program of \$65.7²⁴ million within the PS4 regulatory period. This is 5 per cent lower than the capital expenditure allowance approved by the Commission for the PS4 regulatory period.

East Gippsland Water has completed six of the top 10 major projects for the PS4 regulatory period. The remaining four projects are in progress and will have carryover expenditure into the PS5 regulatory period. The submission outlines the reasons for the variations, including

²⁴ East Gippsland Water 2022, 2023 Price Submission, p.11.

significant events (drought, bushfires, pandemic) that have combined to impact the capacity to deliver the PS4 capital program.

4.2.3 Forecast capital expenditure – PS5

East Gippsland Water’s capital expenditure forecast for the PS5 regulatory period is \$120.2 million. This is \$52.9 million more than the actual/forecast for the PS4 regulatory period and is \$41.1 million (52 per cent) higher than the forecast capital expenditure outlook for the PS5 regulatory period included in its PS4 determination.

The forecast capital expenditure increase in the PS5 regulatory period responds largely to recent significant climatic events that have driven increased investment in water security and environmental compliance. East Gippsland Water’s two largest proposed capital projects – the Woodglen raw water storage (water security) and the Paynesville recycled water storage (environmental compliance) – total \$36.9 million.

The key drivers for the PS5 capital expenditure program are:

- improvement/compliance – \$63.2 million, which is 53 per cent of the total capital expenditure program
- renewals – \$49.2 million, which is 41 per cent of the total capital expenditure program.

East Gippsland Water’s top 10 major projects together account for \$76 million and remaining programs account for \$44.2 million. The major areas of expenditure are:

- additional water storage to secure water supplies (\$25.8 million)
- upgrades to wastewater treatment and recycled water assets to ensure compliance with environmental obligations and minimise community and environmental impacts (\$25.1 million)
- renewal of critical water distribution assets (\$20.3 million)
- water and sewer asset renewals (\$16 million)
- other minor discrete water and sewer projects covering growth and improvement/compliance (\$12.9 million).

Based on the information contained in East Gippsland Water’s PS5 submission project summaries, we consider that there is sufficient justification for the proposed capital projects. Further, East Gippsland Water’s major projects are well linked to regulatory and customer service outcomes.

Given the significant capital expenditure for the two largest projects (\$36.9 million), we undertook a further detailed review of key supporting documents for those projects.

We considered that the additional information provided by East Gippsland Water around the selected program expenditure increases was sufficient to support the expenditure in the PS5 regulatory period.

East Gippsland Water has highlighted a risk that the capital expenditure will increase materially beyond the PS5 forecast, particularly due to the high cost risks identified for the top two major projects (see section 4.2.5). These risks arise because these projects are at the functional design phase and it is possible that as additional information is obtained some costs may increase.

If this cost risk is realised, East Gippsland Water has advised that it will seek to reprioritise its capital program to enable the inclusion of the increased costs. Should the overall cost of the program exceed the total PS5 capital expenditure forecast of \$120 million, East Gippsland Water would seek recovery of the increased capital costs via the regulatory asset base in the PS6 submission. Removing uncertain cost risks from the forecast at this stage of the project is considered a reasonable approach for customer pricing within the PS5 regulatory period.

In consideration of current deficiencies with wastewater treatment, we sought information from East Gippsland Water around the overall level of investment directed at improving compliance and performance of wastewater facilities.

East Gippsland Water confirmed that there is significant capital investment within the PS5 regulatory period, largely at Paynesville and Bairnsdale, which is directed at reducing the highest risks of non-compliance at those sites, as far as reasonably practicable during the PS5 regulatory period.

The investment in wastewater treatment is underpinned and guided by the development of Facility Master Plans. East Gippsland Water has a 5-year Facility Master Plan program, detailed in its Asset Management Strategy, which at its conclusion will provide a very good understanding of the performance of each wastewater treatment plant (WWTP) and associated infrastructure, e.g. reuse facilities. Five of a total of 11 WWTPs have Facility Master Plans completed. As these are further completed, the recommended projects are risk assessed and prioritised within the overall capital program and depending on the risk and priority, the projects are scheduled into the 20-year Capital Program.

A total of \$14 million of forecast capital expenditure has been included in the PS5 regulatory period for upgrade works at the Bairnsdale facility in two of the ten major projects, with \$11.1 million included for upgrade works at the Paynesville facility as part of another major project (as set out in Table 2.1). As outlined in its May 2022 Wastewater Compliance and Reuse Strategy, East Gippsland Water has also completed works at a

number of its WWTPs during the PS4 regulatory period that have led to improvements in plant performance, efficiency or effluent quality.

This strategy also identifies additional works required for WWTP facilities, other than Bairnsdale and Paynesville, that will be progressed within and beyond the PS5 period. This is underpinned by recent work commissioned by East Gippsland Water (undertaken by consultants RMCG) to review the adequacy of its current infrastructure, both now and over the next 50 years, to meet EPA Victoria's requirements for WWTPs and associated recycled water storages to be sized for containment of a 90th percentile rainfall event. This work has identified that augmentation works at the following facilities will be required into the PS6 regulatory period:

- Bruce's Track Irrigation
- Orbost/Newmerella Irrigation
- Dinner Plain Winter Storage
- Omeo Winter Storage.

Provision to progress design work for the Bruce's Track, Orbost/Newmerella and Dinner Plain facilities has been included in the capital expenditure forecast for the PS5 regulatory period, with construction forecast in the PS6 period. Design and construction for the Omeo facility has been included in the capital forecast outlook for the PS6 regulatory period.

4.2.4 Underlying processes for developing the program

East Gippsland Water's PS5 capital program has been subjected to a robust and rigorous review and prioritisation process, detailed justification and risk-based workshops. Further information was provided around the risk reviews and project prioritisation undertaken that demonstrates that a robust process is in place to prioritise investment.

The development of strategies and masterplans are key documents underpinning the capital expenditure. We have reviewed a sample of strategies and masterplans including East Gippsland Water's Wastewater Compliance and Reuse strategy, the Paynesville WWTP and Reuse Facility Masterplan and Urban Water Strategy. The renewals forecasting uses output from models that are subject to annual verification and prioritisation based on operator input and new asset data.

Projects that are inherently uncertain have been deferred in favour of undertaking further planning and design within the PS5 regulatory period. A list of ten uncertain projects was provided for which design work is included in the PS5 forecast.

The approach outlined in the submission and the additional information provided indicates that there is well-developed supporting information and process around the development

of the capital expenditure program, which is considered consistent with a prudent service provider acting efficiently.

4.2.5 Reliability of cost estimation

East Gippsland Water's submission states that P50 cost estimates have been prepared for each of the top 10 capital projects. However, East Gippsland Water has noted that, due to the level of market and cost estimation uncertainty and to reduce price risks to customers, it has included only base costs for the top two major projects (Woodglen water storage and Paynesville recycled water storage). The cost risk component of the P50 cost estimate, which was identified but not included in the forecast for the PS5 regulatory period for these two projects, is in the order of \$11 million.

While removing the significant cost risks will minimise the customer price impacts from these projects within the PS5 regulatory period, as a result, East Gippsland Water has highlighted a high risk that the capital expenditure will increase materially beyond the forecast for the PS5 regulatory period.

East Gippsland Water advised that cost estimates for other projects are typically developed by external consultants for masterplans, options assessment or from the project's design stage. Where consultant estimates are not available, estimates are based on comparable projects.

The renewals program uses asset replacement costs developed from the 2021 Victorian Auditor-General's Office Asset Valuation and benchmarked against recent comparable projects.

Notwithstanding the cost risks discussed above, East Gippsland Water's approach to cost estimation appears to provide an appropriate basis for developing the budget estimates for its PS5 capital expenditure program.

4.2.6 Deliverability of capital program

East Gippsland Water's submission and additional information provided around the deliverability of the program includes a range of actions and enhancements to ensure successful delivery of the capital program including:

- projects have been phased to ensure deliverability and to enable ramping up of the program and resourcing
- access to significant engineering design, project management and superintendent resources through its engineering services panels has increased the capacity to deliver

- an increase in the in-house project management team from four (in 2018) to nine (in 2022) with capacity to add additional resources if required
- use of the Buying for Victoria website to access an expanded pool of contractors
- delivering the renewals programs as groups of like projects – this has proved to significantly reduce the cost of the renewals program through economies of scale and reduced project management and approval costs
- setting up multi-year panel contracts for constructors (in addition to the existing minor works panel) to improve procurement efficiency and deliverability, to be in place in readiness for the renewals program in 2023-24
- tendering like projects together to be more attractive to potential bidders and gain efficiency savings.

In addition to the above, East Gippsland Water has recently commissioned an independent expert review of project management capability in preparation for the delivery of the larger capital program in the PS5 regulatory period. In response to the review, East Gippsland Water is seeking specialist project management services to develop and implement a project management framework improvement program. The objectives outlined for the project indicate that once delivered, East Gippsland Water will be in an improved position to deliver the capital program in the PS5 regulatory period.

East Gippsland Water has also delivered the capital program for the current PS4 regulatory period within five per cent of the forecast for this period and several major projects are already well advanced in the design stage.

Notwithstanding the project management capability improvements being implemented, based on the information provided and the progress of the two major projects (progressing to Board approval in 2022/23), we have a reasonable level of confidence that East Gippsland Water's capital program is deliverable in the PS5 regulatory period.

4.3 Assessment of major projects and major programs

4.3.1 Major projects

East Gippsland Water's major project capital expenditure totals \$76 million, which accounts for 63 per cent of its forecast capital expenditure for the PS5 regulatory period. East Gippsland Water's PS5 submission includes major project summaries, which provide sufficient justification and links to customer outcomes, risk and/or regulatory obligations. The top 10 major projects achieve the following broader outcomes:

- additional water storage to secure water supplies

- upgrades to wastewater treatment and recycled water assets to ensure compliance with environmental obligations and minimise community and environmental impacts
- renewal of critical water distribution assets to provide reliable services
- upgrades to ensure water supply service levels can be met with increasing growth.

A range of supporting strategies and masterplans were referenced for the major projects.

We focused our detailed assessment of East Gippsland Water's major projects on the two largest projects totalling \$39.6 million of forecast capital expenditure and representing 73 per cent of the increase in capital expenditure compared to the PS4 regulatory period.

- **Woodglen water storage project** – the additional storage is consistent with the strategic option identified in the Urban Water Strategy to address identified water resource deficiencies in the Mitchell River supply system. The water resource deficiencies have been confirmed by a recent drought event. East Gippsland Water's supporting documents outline scenarios, assumptions, sensitivity testing, infrastructure options and concept level estimates for the base, P50 and P90. It has included the base cost only in its forecasts for the PS5 regulatory period. There is a large degree of cost uncertainty of between \$9 million and \$16 million, which has not been included in the forecasts for the PS5 regulatory period and to minimise the pricing impacts of cost uncertainty. The project is in the functional design stage and the current detailed cost estimates will be refined further before the project is subject to a Department of Treasury and Finance 'Gateway' review and a final business case to East Gippsland Water's Board for approval in February 2023.
- **Paynesville recycled water storage project** – this project is well justified by evidence of non-compliance and associated environmental and reputational consequences. While the business case was not available at the time of the review, there is comprehensive supporting documentation including a Wastewater Compliance and Reuse strategy, a masterplan for the Paynesville wastewater facility including options evaluated and an updated water balance modelling report to scope the project. A detailed cost estimate has been developed that has identified the potential for additional costs of between \$2 million and \$4.5 million. These potential costs have not been included in the forecasts for the PS5 regulatory period. This approach minimises the pricing impacts that would be associated with the uncertain costs.

East Gippsland Water's decision to include the base costs only for these projects is considered reasonable given the cost and market uncertainty. Despite this uncertainty,

given the current stage of the projects and the nature of the expenditure (predominantly earthworks), it is expected that the forecast level of expenditure for the two projects can be delivered within the PS5 regulatory period.

The major project summaries and associated information in the submission, along with the approaches to developing the program, cost estimation and delivery, provide sufficient confidence that the major project expenditure is consistent with a prudent service provider acting efficiently.

4.3.2 Major programs

The balance of the capital expenditure program comprises nine listed programs totaling \$39.2 million. East Gippsland Water has identified a significant increase for some of these programs compared to PS4 actual expenditure:

- **Other water and sewerage capital expenditure (total program cost \$12.9 million)** – East Gippsland Water advised that the increased expenditure responds to an overall increase in the number of projects in the program resulting from strategy development, master planning, updated renewals forecasting and the prioritisation process. Climate impacts, aging assets and previous deferrals to minimise price impacts require an increased level of investment in the PS5 regulatory period. This program includes discrete renewals projects, which has resulted in a reduction of the corresponding renewals program allocations.
- **Motor vehicles fleet (total program cost \$2.6 million)** – East Gippsland Water advised the increase is only marginal compared to actual/forecast expenditure in the PS4 regulatory period, however the increased cost is associated with a change in vehicle type to meet operational and safety needs. A Fleet Management Strategy and Vehicle Policy (SOP 134) underpins the expenditure.
- **Plant and equipment (total program cost \$3.8 million)** – East Gippsland Water provided a further breakdown of the plant and equipment and costs.
- **SCADA upgrades (total program cost \$1.4 million)** – East Gippsland Water outlined the reasons for the increased expenditure, which is underpinned by a SCADA strategy.
- **Desludging (total program cost \$5 million not included in the \$39 million for the nine listed programs)** – previously operating expenditure but now included as a 10-year program and capitalised in accordance with the Commission’s regulatory accounting guidance. Supporting information was provided that satisfies the Commission’s guidance.

The information provided around the program expenditure was considered sufficient to support the increase in the expenditure.

4.4 Summary of capital expenditure assessment

Based on the information provided around the major projects, the increases in the individual program expenditure along with the approaches to developing the program, the cost estimation and the delivery of the program we consider that:

- the proposed capital expenditure program is consistent with a prudent service provider acting efficiently
- the forecast capital expenditure is justified, robust and is capable of being delivered by East Gippsland Water in the PS5 regulatory period.

As such, we do not recommend any adjustments to East Gippsland Water's forecast capital expenditure for the PS5 regulatory period.

APPENDIX A: CROSS-INDUSTRY OPERATING EXPENDITURE ISSUES

Overview

There are several drivers of increased operating expenditure over the current PS4 regulatory period and/or forecast for the PS5 regulatory period that are common across water businesses. While the base-step-trend methodology does not involve a 'bottom up' or category-by-category assessment of expenditure, we consider it important to ensure that we have regard to the key drivers and trends in baseline increases and/or proposed step changes in assessing each business's proposal.

This appendix reviews some of those expenditure drivers in more detail, being:

- energy
- IT
- labour.

It presents some comparative data submitted to the Commission by each of the water businesses as part of their respective Price Review Models. Section 3.2 of this report outlines the implications of this analysis for our approach.

Energy expenditure

Background

Energy costs have been increasing in recent years. This has been driven by several factors, including increases in the wholesale price of electricity, the impact of the Ukraine war on global energy prices, increasing network costs and the costs associated with the transition to renewable energy. This has impacted actual energy costs for the water businesses over the current PS4 regulatory period. The uncertainty and volatility in the electricity market has also made it more challenging for water businesses to forecast electricity costs for the PS5 regulatory period. The Victorian water businesses have also all committed to sourcing their energy requirements from 100 per cent renewable sources by 2025.

The Schneider report

The Intelligent Water Network is a collaboration between the Victorian water businesses, VicWater and the Department of Energy, Environment and Climate Action (DEECA, formerly the Department of Environment, Land, Planning and Water (DELWP)). The Intelligent Water Network engaged Schneider Electric Energy and Sustainability Services (Schneider) to provide forecast electricity prices for the PS5 regulatory period.

Victorian Government Purchasing Board reforms have mandated use of the State Purchase Contracts for electricity (large and small market) managed by the Department of Treasury and Finance and Schneider. We understand that some water businesses are already using these contracts while others are in the process of transitioning to these new contracts.

The Schneider report, finalised in March 2022, addressed the following key assumptions:

- energy commodity rates (peak and off-peak)
- Large-scale Generation Certificates
- Small-scale Technology Certificates
- Victorian Energy Efficiency Certificates
- network forecast charges
- market operator charges.

It appears that all the water businesses have used the Schneider report as the basis for their forecast electricity costs for the PS5 regulatory period. We have undertaken a high level review of the Schneider report and the methodology and assumptions used (including data sources) appear reasonable. We have also examined how it has been applied by each business.

Industry emissions reduction target

Under the Water for Victoria Plan, the Victorian water sector has committed to achieving net zero emissions by 2035. The sector has also committed to sourcing 100 per cent of its electricity needs from renewables by 2025. The Statement of Obligations (Emission Reduction) made pursuant to the *Water Industry Act 1994* requires all Victorian water businesses to:

- prioritise the implementation of actions that avoid or reduce emissions resulting from its operations
- achieve emission reductions efficiently, making full use of the time available to do so.²⁵

In pursuing these reductions, Section 3.2 of the Statement of Obligations (Emission Reduction) encourages water businesses to:

- pursue actions and targets at the lowest possible cost, seeking to minimise any impact on water customer bills
- have regard to any price impacts on their vulnerable customers.

²⁵ Statement of Obligations (Emission Reduction), Section 3.1.

Five yearly targets have been set under the Statement of Obligations on the transition to net zero by 2035. This means that a business that has committed to achieving an annual emissions target in a target year (for example, by 1 July 2030) must ensure that it keeps its emissions at or below that level in all subsequent years leading up to their next five-yearly emissions target (for example, 1 July 2035). The requirement to source 100 per cent of their electricity from renewable sources applies from 2025 onwards.

Table A1 shows the baseline level of emissions for each water business and the reductions required by the 2024-25 financial year. It shows that the reductions required by each business vary materially depending on their current baseline.

Table A1: Victorian water businesses emission reduction targets

Business	Emissions baseline	Annual reportable emissions 2024-25 (tonnes CO2 e)	% reduction from baseline
Barwon Water	42,986	15,926	-63
Central Highlands Water	18,351	14,738	-19.6
Coliban Water	33,604	29,304	-12.8
East Gippsland Water	8,272	6,496	-21.5
Gippsland Water	42,021	32,080	-23.7
Goulburn Valley Water	49,575	37,416	-24.5
Grampians Wimmera Mallee Water	20,017	16,244	-18.8
Lower Murray Water	44,188	24,708	-44.1
South East Water	41,744	23,016	-44.9
South Gippsland Water	7,663	6,480	-15.4
Southern Rural Water	1,559	0	
Wannon Water	31,626	18,976	-40
Westernport Water	6,062	5,598	-7.7
Yarra Valley Water	32,004	11,664	-63.6

Source: <https://www.water.vic.gov.au/climate-change/reduced-emissions-in-the-water-sector/net-zero-emissions-by-2050>

The businesses must then transition over the following five years to their next target (for the 2029-30 financial year). All businesses are required to achieve net zero by 2034-35, although some businesses are forecasting to achieve net zero by 2029-30.

It is evident from water businesses' PS5 submissions and discussions with them that different initiatives are being employed to achieve the 2025 target including one or more of the following:

- direct capital investment in 'behind the meter' renewable capacity (for example, installing solar photovoltaic (PV) at water treatment plants)
- purchasing energy generated from renewable sources (greenpower), which can involve an additional cost compared to conventional sources
- purchasing offsets, such as Large Generation Certificates.

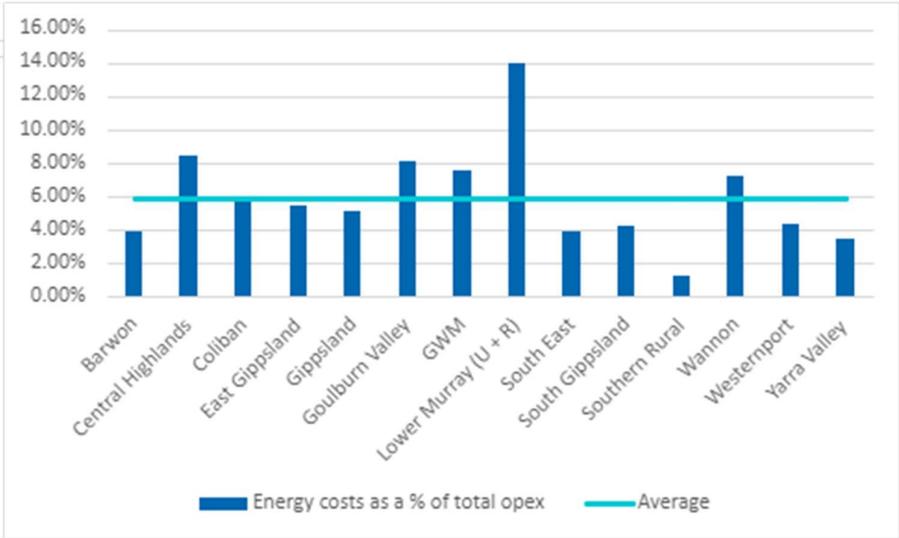
The most appropriate strategy depends on the needs and circumstances of the business, including the feasibility (and cost) of direct action measures such as solar PV.

Some businesses have proposed step changes in operating expenditure for additional costs associated with the above initiatives.

Cross-sector expenditure trends

Overall, proposed electricity expenditure for the PS5 regulatory period accounts for a relatively small proportion of controllable operating expenditure, averaging around 6 per cent, as shown below.

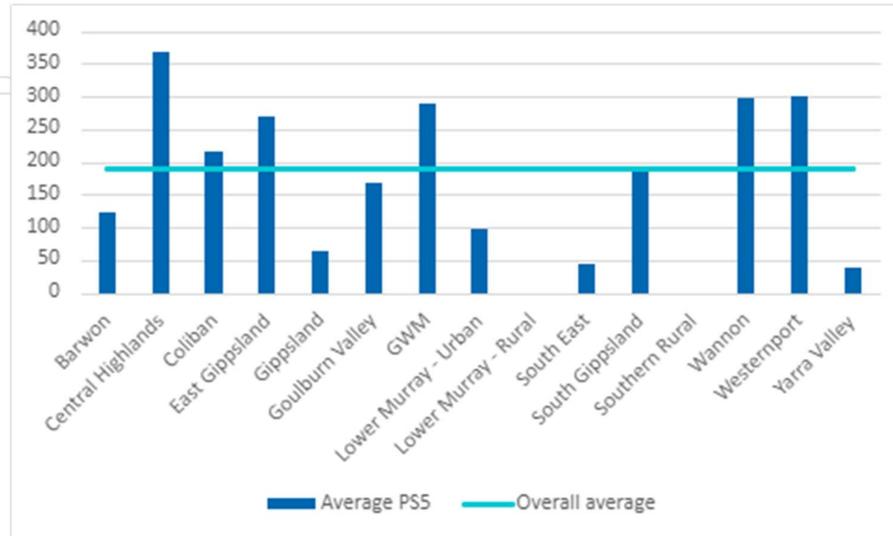
Figure A1: PS5 forecast total energy expenditure as a percentage of total controllable operating expenditure (%)



Source: Victorian water businesses, 2023 Price Review Models.

For the urban businesses, Figure A2 shows electricity expenditure per volume of water delivered (in ML).

Figure A2: PS5 forecast energy costs per volume of water delivered (\$ per ML, 1 January 2023)

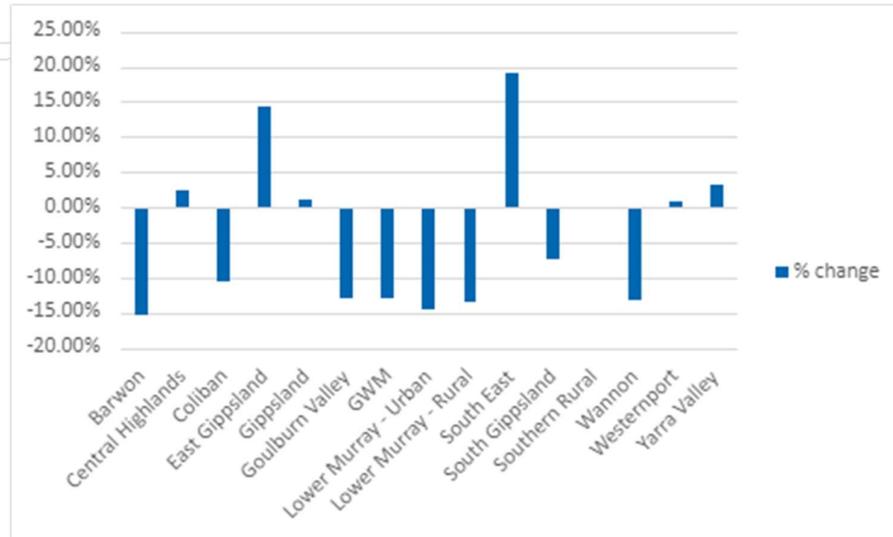


Source: Victorian water businesses, 2023 Price Review Models.

As noted above, energy costs have been increasing over the current PS4 regulatory period. However, most businesses are forecasting a decline in energy costs in the PS5 regulatory period for several reasons, including efficiency initiatives and targets. Figure A3 shows the change between total actual PS4 energy expenditure²⁶ and proposed PS5 energy expenditure for each business.

²⁶ Note that the water businesses' Price Review Models submitted to the Commission for this PS5 review include updated forecasts for financial year 2022-23.

Figure A3: Total energy expenditure: total proposed for PS5 regulatory period less total actual for PS4 regulatory period (%)



Source: Victorian water businesses, 2023 Price Review Models. Note PS4 actuals include an updated forecast for the 2022-23 financial year.

IT expenditure

Background

Several businesses have experienced increases in IT-related operating expenditure in the PS4 regulatory period, which have impacted the 2021-22 baseline, and/or are proposing step changes for IT expenditure in the PS5 regulatory period. This is reflected in three main categories:

- Cloud-based services
- cyber security
- other IT expenditure.

Cloud-based services

Consistent with trends in other businesses and industries, most of the water businesses are either in the process of transitioning, or have transitioned, to Cloud-based services (also referred to as Software as a Service (SaaS)). Rather than each business having all its own hardware and software infrastructure on-site, this is a software distribution model where key applications are centrally hosted via a third-party provider. Services are then delivered via the Cloud and the third-party provider manages all hardware and software

requirements. Users then contract and pay for services based on a licence or subscription fee model.

Several water businesses source key applications from Technology One. In 2021 Technology One announced that it will commence transitioning all on-premises customers to its SaaS platform. Based on its timetable, it will cease providing on-premises support services to customers on 1 October 2024.²⁷

A key implication of the change to this different service delivery model is that expenditure formerly categorised as capital expenditure will now be characterised as operating expenditure (i.e. relevant licence and subscription fees). Holding all else constant, this will be reflected in a reduction in capital expenditure and an uplift in operating expenditure (noting that this is not a 'dollar for dollar' substitution and that the profile for capital expenditure will have depended on the investment needs of the business). In terms of the impact on operating expenditure, this is evidenced by several businesses either attributing SaaS costs as a driver of the baseline uplift or proposing as a step change.

Additional costs may be incurred in the process of transitioning to Cloud-based services. In this regard, we understand that the Commission has advised the water businesses that it will consider capitalising transition-related expenditure where appropriate. Where proposed, this is considered as part of the review of each business's capital expenditure.

Cyber security

The need to upgrade cyber security has accelerated over the PS4 regulatory period and is also now receiving increased scrutiny from government agencies, customers and the wider community. Activities range from ensuring that water assets and operations remain resilient to cyber attacks through to protecting customer data.

Victorian water businesses are required to comply with several requirements and standards including:

- the Victorian Protective Data Security Framework established pursuant to the *Privacy and Data Protection Act 2014*, which sets out mandatory standards for Victorian public sector agencies and bodies
- Victoria's Cyber Security Strategy 2021
- the Victorian Critical Infrastructure Resilience Framework, with water one of the eight critical infrastructure sectors. This has driven the requirement for a Water Sector Resilience Plan. Cyber security is one of several risks identified under that

²⁷ <https://technologyonecorp.com/saas/pathway-to-saas#> {Accessed 13 December 2022}.

framework, which also extends to climate-related risks, pandemics and key supply chain disruptions. DEECA now leads the Water Sector Resilience Network, which aims to collaborate on matters relating to resilience by sharing information and experiences

- implementation of the recommendations of the Victorian Auditor-General's Office's performance audit of Security of Water Infrastructure Control Systems.²⁸

Cyber security initiatives can be expected to continue to develop and evolve over the PS5 regulatory period.

Other IT-related expenditure

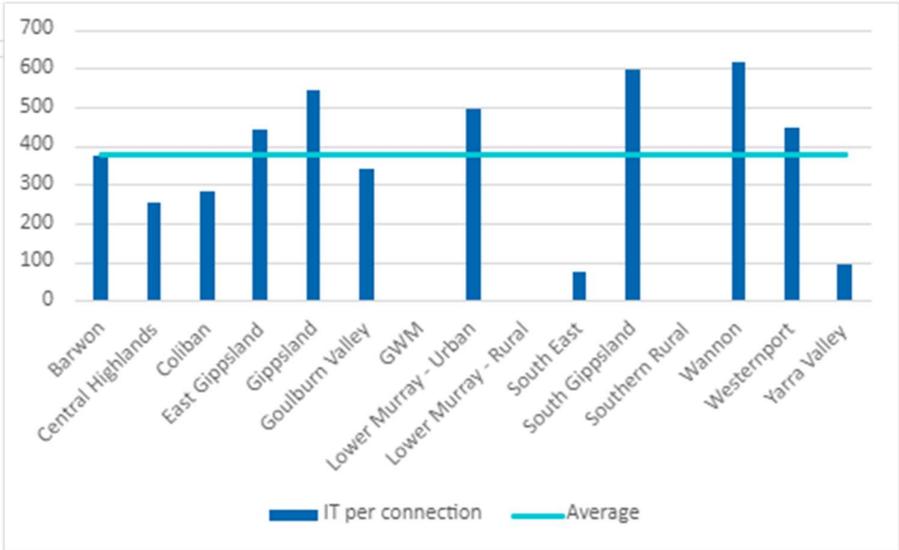
Depending on the functionality and maturity of each water business's current IT-architecture, other business-specific expenditure may be incurred in reviewing and upgrading this capability.

Cross-sector expenditure trends

As part of the Commission's Price Review Model, water businesses are required to report total IT expenditure. For urban networks, this includes metrics such as IT expenditure per average water connection. Figure A4 shows that most of the water businesses with a higher average expenditure per water connection are smaller organisations, suggesting the presence of economies of scale.

²⁸ Victorian Auditor-General's Office 2019, *Security of Water Infrastructure Control Systems*, 9 May.

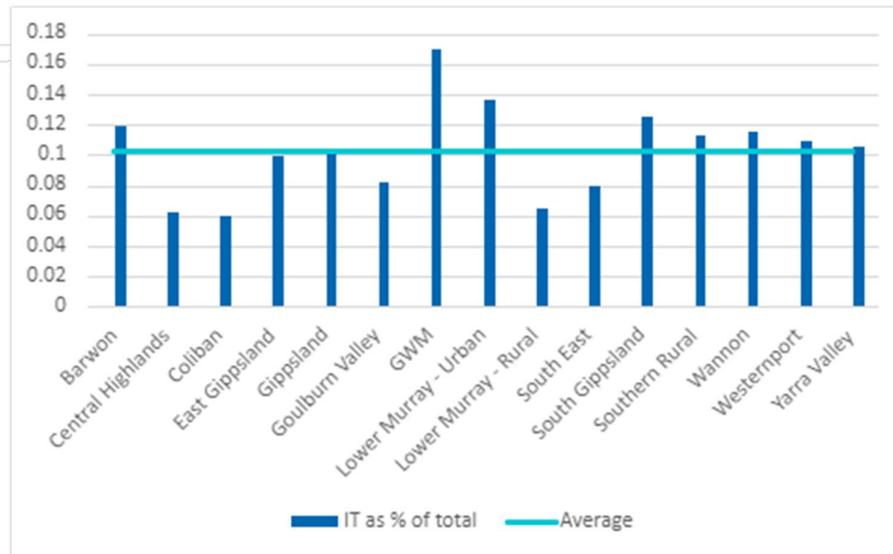
Figure A4: PS5 forecast: ICT operating expenditure per water connections (\$ per average number of water connections, 1 January 2023)



Source: Victorian water businesses, 2023 Price Review Models.

Figure A5 shows total forecast PS5 IT operating expenditure as a percentage of total controllable operating expenditure. This includes the rural businesses.

Figure A5: PS5 forecast: ICT operating expenditure as a percentage of total controllable operating expenditure (%)



Source: Victorian water businesses, 2023 Price Review Models.

Labour costs

Background

Labour costs tend to account for the largest proportion of operating expenditure for the water businesses. On average across the businesses, labour costs account for just under 50 per cent of total forecast controllable operating expenditure for the PS5 regulatory period (see Figure A9 below).

Labour costs are a function of employee numbers (measured in terms of FTEs)²⁹ and the costs of remuneration (including salaries, wages and other employee-related expenses).

Labour force

The size of each organisation's labour force varies according to their business and operating environment, including their geographical location and service area (which, amongst other things, will influence the size and dispersion of field staff).

Some businesses supplement internal labour resources with external contractors – this can be a temporary response to labour shortages, a need for specialist expertise that does not

²⁹ Full-time equivalent employees.

reside in-house and/or decisions to outsource certain activities. The optimal balance between internal and external labour will be a management decision for the business.

Remuneration

A key driver of remuneration is the water business's Enterprise Agreement (EA), which typically have four-year terms. Each water business is likely to have an EA expiring and a new EA commencing during the PS5 regulatory period. As a result, each water business needs to forecast the impact of any anticipated change in EA terms.

Some common themes have emerged for labour costs over the PS4 regulatory period.

- First, Victorian public sector entities must ensure that executive remuneration complies with any determinations and guidelines issued by the Victorian Independent Remuneration Tribunal. They must also continue to comply with the requirements of the Public Entity Executive Remuneration Policy (PEER).³⁰ The Premier typically announces an annual adjustment guideline rate for adjustments to executive remuneration. For 2021-22 and 2022-23, that rate was 1.5 per cent. Several businesses refer to the application of this rate in their PS5 submissions.
- Second, several of the regional water businesses have commented on challenges in attracting and retaining staff. This appears to have become a more significant problem for some businesses as the labour market tightens following the economic recovery from the COVID-19 pandemic. Some businesses have cited the need to offer higher salaries (including above the EA rate) to attract and retain staff. This appears to have underpinned increases in baseline expenditure as well as step changes for the PS5 regulatory period. Changes have also occurred in terms of employee expectations and practices around flexible working.

These challenges appear to be consistent with overall labour market trends in recent years, as well as the outlook. This reflects a material shift relative to the subdued outlook for wages that prevailed at the time of the last price review, as summarised below.

Labour market conditions and wage growth pressures

When the Commission made its determinations for the water businesses in 2018, Victoria had been experiencing a period of subdued wages growth, consistent with the experience

³⁰ Refer: <https://vpssc.vic.gov.au/executive-employment/victorian-public-entity-executive-employment/public-entity-executive-handbook/4-remuneration/> {accessed 14 December 2022}.

of most other advanced economies.³¹ The forecasts underpinning the 2018-19 State Budget was for wages to grow by 2.5 per cent in 2018-19 and 2.75 per cent in 2019-20.³²

Actual growth in the Victorian Wage Price Index (WPI) was 2.6 per cent to 30 June 2019. It then contracted as COVID-19 impacted the economy, falling to 1.5 per cent for the year ended 30 June 2021 and then recovering to 2.3 per cent to 30 June 2022.⁹ In terms of industry trends, for Australia, the annual change in total hourly rates of pay for the Electricity, Gas, Water and Waste Services sector was 2.9 per cent to 30 June 2022, compared to 3.2 per cent for all industries.

The most recent 2022-23 Victorian State Budget forecast was for an increase in the WPI of 2.75 per cent in 2022-23. It is then expected to increase further to 3.00 per cent per year to 2025-26 as the economy expands and labour market conditions remain tight.³³ The Reserve Bank of Australia (RBA) is forecasting stronger growth in the WPI for Australia, increasing to 3.7 per cent by 30 June 2023 and then rising to 3.9 per cent by December 2024.³⁴

This presents a mixed picture of wages growth over the current PS4 regulatory period, which was significantly impacted by the COVID-19 pandemic. The current outlook is more bullish, driven largely by the tight labour market and high inflation, with spare labour market capacity at record lows.³⁵ In its November 2022 Statement on Monetary Policy, the RBA also observed that job mobility is higher than the years preceding the pandemic and is now around the levels observed prior to the Global Financial Crisis. It also noted the considerable uncertainty associated with the current economic outlook.

Overall, this highlights the current wage growth pressures that many of the water businesses has observed. The data doesn't enable any insights into the trends in regional labour markets in Victoria or specific pressures that might emerge for the skillsets required by the water businesses. However, the duration and extent of these wage growth pressures is highly uncertain.

³¹ State of Victoria 2018, Strategy and Outlook 2018-19 Budget Paper No. 2, Department of Treasury and Finance, p.23.

³² State of Victoria 2018, Strategy and Outlook 2018-19 Budget Paper No. 2, Department of Treasury and Finance, p.22.

³³ State of Victoria 2022, Strategy and Outlook 2022-23 Budget Paper No. 2, Department of Treasury and Finance, p.32.

³⁴ Reserve Bank of Australia 2022, Statement on Monetary Policy, November.

³⁵ Reserve Bank of Australia 2022, Statement on Monetary Policy, November.

Superannuation Guarantee Charge

The compulsory Superannuation Guarantee Charge (SGC) has been progressively increasing to a rate of 12 per cent by 1 July 2025. This has been identified by some businesses as contributing to increases in labour costs.

The extent to which this will result in an increase in labour costs for employers depends on the nature of the employment arrangement. For example, for salaried workers whose salary package is inclusive of superannuation, the increase in the SGC may be offset by a reduction in take-home pay, which would result in no net change in costs to the employer. In other cases, where employees are on a 'salary plus superannuation' arrangement, it will result in an increase in total remuneration for the employee, which will increase the cost to the employer.

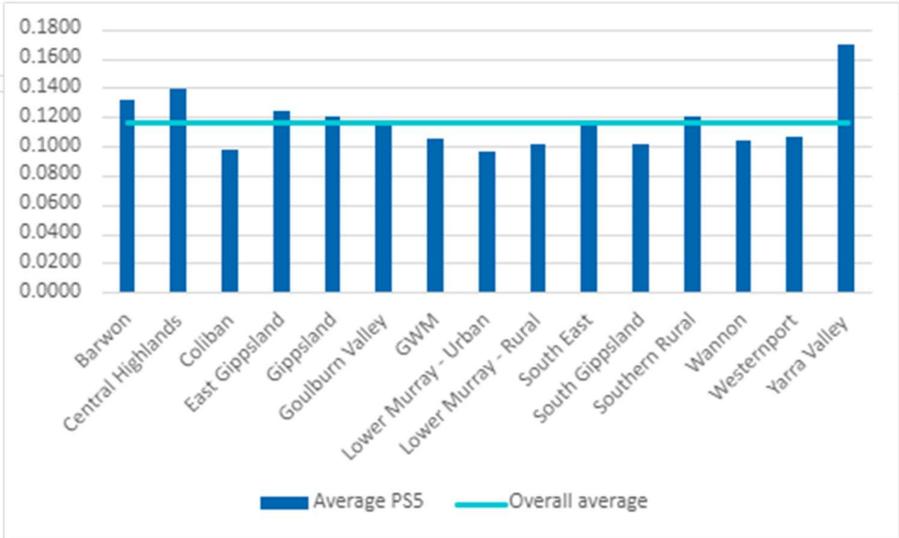
The impact of this will therefore vary between businesses and potentially within businesses given employees may be subject to different types of arrangements.

Cross-sector expenditure trends

Businesses are required to report several metrics on labour costs in the Commission's Price Review Model, including FTEs and unit labour costs. Key metrics are summarised below.

Figure A6 shows average unit cost per FTE as forecast for the PS5 regulatory period, as reported by the businesses.

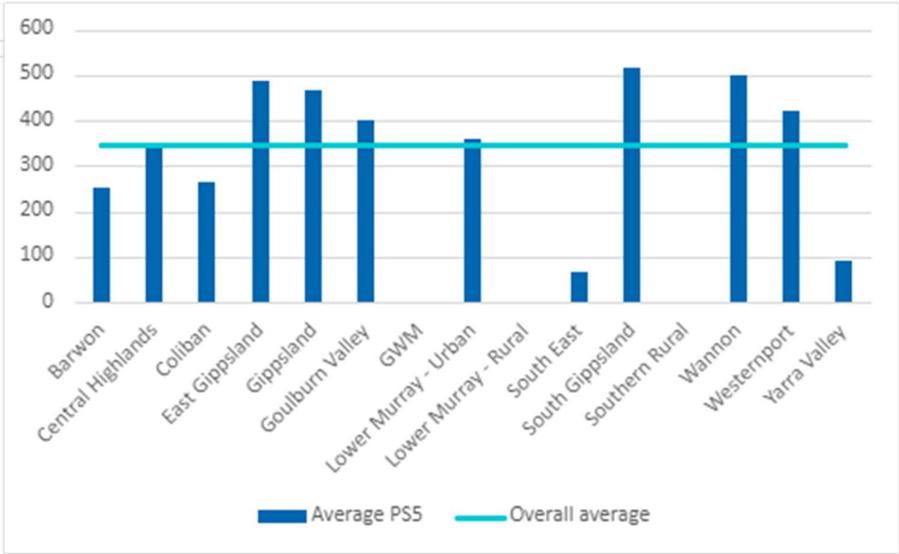
Figure A6: PS5 forecast average unit cost per FTE (\$ million per FTE, 1 January 2023)



Source: Victorian water businesses, 2023 Price Review Models.

Based on forecast labour costs for the water businesses for the PS5 regulatory period, Figure A7 shows the average labour cost per water connection (based on the average of the forecast number of connections over the period). It shows that most of the water businesses with a higher average expenditure per water connection are smaller organisations, suggesting the presence of economies of scale.

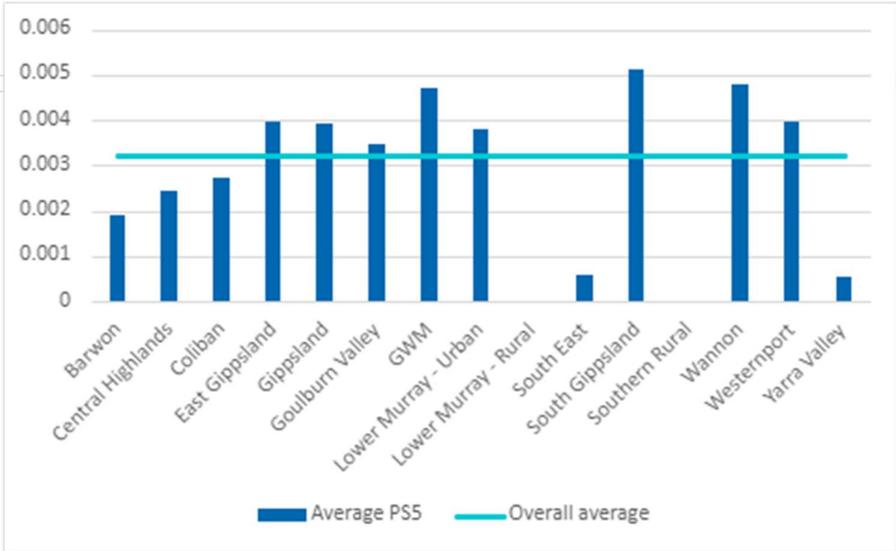
Figure A7: PS5 forecast: Average labour cost per water connection (\$ per average number of water connections, 1 January 2023)



Source: Victorian water businesses, 2023 Price Review Models.

These scale economies are similarly evidenced based on the average number of FTEs per water connection (see Figure A8).

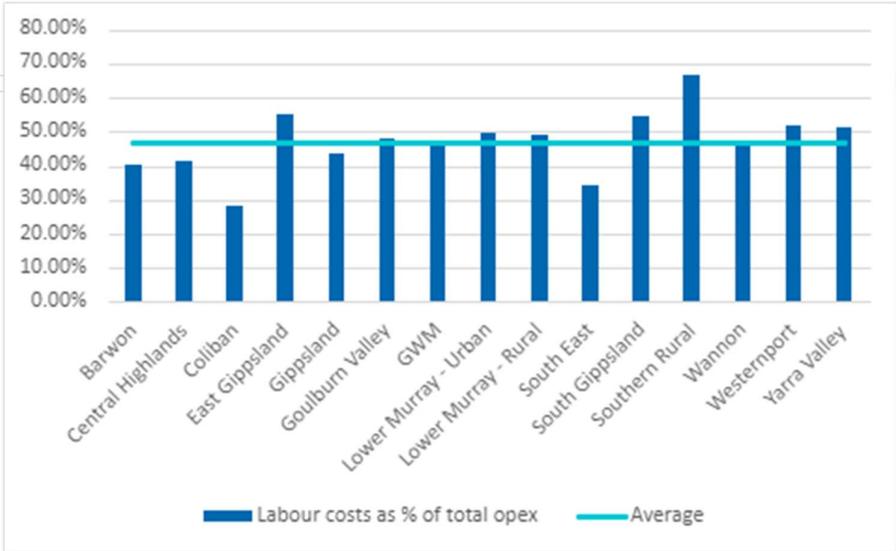
Figure A8: PS5 forecast average number of FTEs per water connection



Source: Victorian water businesses, 2023 Price Review Models.

Figure A9 shows forecast labour costs as a percentage of total controllable operating expenditure for each of the water businesses over the PS5 regulatory period.

Figure A9: PS5 forecast labour costs as a percentage of total controllable operating expenditure (%)



Source: Victorian water businesses, 2023 Price Review Models.

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