February 2023

South 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, formerly DELWP
DELWP	Department of Environment, Land, Water and Planning
EA	Enterprise Agreement
ESC	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 South 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 South Gippsland Water's forecasts of controllable operating expenditure and capital expenditure over the regulatory period can be reasonably assessed to be prudent and efficient.

Forecast operating expenditure

South Gippsland Water's baseline 2021-22 controllable operating expenditure is \$22.44 million. This is \$1.9 million (or 9.3 per cent) above the benchmark allowance approved by the Commission in the last price review. It has proposed a step change increase to its operating expenditure baseline of \$1.3 million across the PS5 regulatory period.

South Gippsland Water has forecast an average growth factor for operating expenditure of 1.6 per cent per year and an efficiency factor of 1.4 per cent per year over the PS5 regulatory period.

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

- the key drivers of the overspend against 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.

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



Forecast capital expenditure

South Gippsland Water has forecast capital expenditure of \$136.27 million for the PS5 regulatory period. This is:

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

South Gippsland Water's PS5 submission provides a detailed breakdown of its forecast capital expenditure for the PS5 regulatory period. The capital forecast submission is well developed and provides, along with the additional information reviewed, a high level of confidence that the proposed capital expenditure program is appropriate, prudent and robust, and can be delivered.

The further information provided to us by South Gippsland Water in relation to the key issues of further investigation provides a reasonable level of confidence that the proposed capital expenditure program is consistent with the actions of a prudent business operating efficiently. As a result, we do not recommend any adjustments to the 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 in 1 July 2023 through to 30 June 2028 (referred to in this report as the PS5 regulatory period). Each of the Victorian water businesses, including South 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 prudency and efficiency of South 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 business 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 enjoyed 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) as part of 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 <u>do not</u> 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.



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 prudency 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

Peformance	Have the performance outcomes to which the business committed in its last price submission been met or exceeded?	
Risk	Has the business sought to allocate risk to the party best positioned to manage that risk?	
Engagement	How effective was the business' customer engagement?	
Management	Is there a strong focus on efficiency? Are controllable costs increasing, staying the same, or decreasing?	
Outcomes	Do proposed service outcomes represent an improvement, the status quo, or a withdrawal of service standards?	

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 operating and capital 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 businesses' 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 business's 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 South Gippsland Water's operating and capital 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 operating and capital 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 online 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 South Gippsland Water's expenditure proposal
- Chapter 3 sets out our assessment of South Gippsland Water's operating expenditure proposals
- Chapter 4 sets out our assessment of South Gippsland Water's capital expenditure proposals.

Consistent with the Commission's guidance paper and the price review model completed by businesses, all forecasts and actuals 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 South Gippsland Water of \$105.30 million (in \$ 1 January 2023)⁶. For the first four years of the PS4 regulatory period, South Gippsland Water's actual operating expenditure was \$91.75 million (8.1 per cent) above the benchmark allowance approved by the Commission for those four years.

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

Source: South Gippsland Water, 2023 Price Review Model - 5 October 2022; Essential Services Commission 2018, South Gippsland Water Determination Price Review Model: 1 July 2018 – 30 June 2023, 29 May.

South Gippsland Water's baseline 2021-22 controllable operating expenditure is \$22.44 million. This is \$1.9 million (or 9.3 per cent) above the benchmark allowance approved by the Commission in the last price review.



⁶ The commission became aware of an error in the financial template provided to South Gippsland Water during this review. The error incorrectly overstated the controllable operating cost allowance for the PS4 regulatory period. The commission provided an updated financial template to South Gippsland Water, who provided additional information to the commission on 31 January 2023 that explained the overspend in controllable operating costs in the 2021-22 baseline year.

South Gippsland Water has proposed step changes increasing the baseline by \$1.35 million across the PS5 regulatory period, as outlined in Table 2.1.

Table 2.1: South Gippsland Water proposed step changes in forecast operating expenditure baseline (\$ 1 January 2023, millions)

Proposed step change	Forecast expenditure
Cyber security costs	1.00
Carbon Management Strategy	0.32
Urban water strategy consultancy	0.25
Victorian Public Sector Executive Reforms and Executive Remuneration	0.25
Consultancy PS2028 Submission costs	0.12
Consultancy PS2023 Submission costs	-0.60
Total	1.35

Source: South Gippsland Water, South Gippsland Water, 2023 Price Review Model - 5 October 2022.

South Gippsland Water has forecast an average growth factor for operating expenditure of 1.6 per cent per year and an efficiency factor of 1.4 per cent per year over the PS5 regulatory period.

2.2 Forecast capital expenditure

South Gippsland Water is currently forecasting that it will deliver its planned capital program in the current PS4 regulatory period for \$92.5 million. This represents a \$3.3 million (or 4 per cent) increase compared to the Commission's approved capital expenditure benchmark allowance.

South Gippsland Water has forecast capital expenditure of \$136.27 million for the PS5 regulatory period. This is 47 per cent more than actual and forecast PS4 period capital expenditure of \$92.47 million. Approximately 20 per cent of South Gippsland Water's forecast project capital expenditure for the PS5 regulatory period relates to projects to be provided to three major customers. The largest capital project, Venus Bay Outfall Upgrade and Renewal (\$18.9 million), supports two large customers that are significant regional employers.



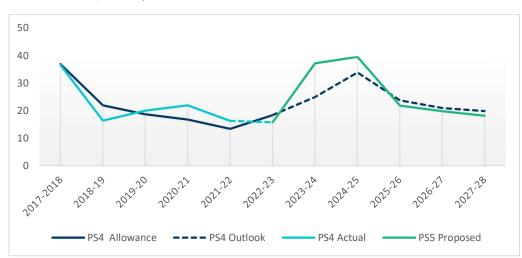


Figure 2.2: South Gippsland Water's actual and forecast capital expenditure by year (\$ 1 January 2023, millions)

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

Source: South Gippsland Water, 2023 Price Review Model - 5 October 2022; Essential Services Commission 2018, South Gippsland Water Determination Price Review Model: 1 July 2018 – 30 June 2023, 29 May.

The key drivers, projects and programs are well-linked to customer outcomes and engagement results as defined in the submission and supporting documentation, and include:

- renewals \$58.25 million (42.7 per cent of the total capital expenditure program)
- growth \$46.90 million (34.4 per cent of the total capital expenditure program)
- top 10 major projects (\$67.85 million)
- top 10 major programs (\$29.15 million).

South Gippsland Water's top 10 capital expenditure projects, shown in Table 2.2, account for 49.7 per cent of its proposed capital expenditure for the PS5 regulatory period.

Table 2.2: South Gippsland Water's top 10 capital expenditure projects (\$ 1 January 2023, millions)

Major capital expenditure project	Forecast expenditure
Venus Bay Outfall Upgrade and Renewal	18.59
Lance Creek Clear Water Storage Upgrade	8.66
Wonthaggi Sewerage System Capacity Upgrades	6.98
Poowong, Loch and Nyora Water Augmentation	5.90
Foster Wastewater Treatment Plant Upgrade	5.83
Wonthaggi Wastewater Treatment Plant Upgrade and Baxters Beach Outfall	5.57
Leongatha Wastewater Treatment Plant Upgrades	4.51
Toora Water Treatment Plant Upgrade	4.42
Leongatha Water Supply Augmentation	4.42
Inverloch Wastewater Treatment Plant Upgrades	4.30

Source: South Gippsland Water, 2023-28 Price Submission and associated Financial Model, 5 October 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).⁷

The Commission has asked us to provide an independent expert view on whether South 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. This has included considering 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 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.



Essential Services Commission 2021, 2023 Water Price Review: Guidance Paper, 26 October (August 2022 Amendment), p.28.

The key steps in our approach were as follows.

1

Review baseline expenditure

- Adjustments for non-recurrent expenditure: appropriate adjustments have been made for non-recurrent expenditure in the 2021-22 baseline year and/or additional recurrent expenditure incurred in the 2022-23 financial year
- Key drivers of baseline uplifts: where baseline 2021-22 expenditure is above the Commission's approved benchmark allowance, the key drivers are clear and provide sufficient justification for the increase if required. Material increases should be well support by documentation or evidence

2

Review proposed step changes

- Rationale: we applied criteria to assess whether proposed step changes:
- o comply with new, or changed, legislative or regulatory obligations
 - o achieve an outcome or implement an initiative endorsed by customers or the community
 - $\circ \qquad \text{recategorise expenditure between capital and operating expenditure, where it is necessary or appropriate to do so}\\$
 - o reflect the incremental operating expenditure associated with a new prudent and efficient capital project
 - cannot be mitigated or otherwise absorbed by an efficient business operating within its approved budget (including the growth allowance).
- Supporting evidence: key step changes have been substantiated, with further supporting evidence provided for material items

3

Review proposed treatment of growth and the proposed efficiency factor

Net increase in operating expenditure (growth less efficiency factor): if a business proposes a modest net increase, we may look more
favourably on some step changes that may otherwise be considered either immaterial or could be absorbed in a larger growth forecast

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 proposals.

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	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.
	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).
Labour	The rationale for any material growth in employee numbers. 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 of executive remuneration.
IT	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.
	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.



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.⁸

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 assessed increases for IT expenditure as proposed by each business on their own merits. 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.



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

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
- 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 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 South Gippsland Water's forecast controllable operating expenditure for the PS5 regulatory period.

3.3 Assessment of the baseline

After adjusting for non-recurring items, South Gippsland Water's adjusted controllable operating expenditure in 2021-22 was \$22.44 million. This represents an increase in actual expenditure of \$1.91 million or 9.3 per cent compared to the \$20.52 million operating expenditure benchmark allowance approved by the Commission as part of the last price review.

Our approach to assessing the reasonable of the baseline expenditure is to consider the following:

- any overspend against the allowance needs to be consistent with what is required by a prudent business operating efficiently
- the expenditure should not include any items that are non-recurring.



South Gippsland Water attributed the increase in its actual baseline operating expenditure against the benchmark allowance to the following key drivers⁹:

- Labour costs (\$1.1 million) additional FTEs were required to fulfil roles in health, safety and wellbeing, project management in IT delivery, operations and maintenance and customer service.
- Professional fees (\$0.43 million) higher expenditure on internal audits and compliance activities and the costs associated with implementing the Victorian Government Purchasing Board initiative.
- **ICT (\$0.38 million)** increased costs associated with cybersecurity, increased licences and enhanced field staff network connectivity.

After reviewing the explanation provided by South Gippsland Water, we can confirm that there is a clear rationale for the cost increases and that they are consistent with a prudent business acting efficiently. We can also confirm that these costs are recurrent.

We therefore do not propose to make any further adjustments to South Gippsland Water's proposed baseline, and it does not appear to include any items that are non-recurring.

3.4 Assessment of step changes

South Gippsland Water has proposed step changes further increasing its baseline 2021-22 operating expenditure by a total of \$1.35 million for the PS5 regulatory period, as set out in Table 3.2 below.

Table 3.2: South Gippsland Water's proposed step changes (1 January 2023, millions)

Key step changes	Forecast expenditure	Explanation
Cyber security costs	1.00	The Victorian Department of Premier and Cabinet has proposed a whole Water Sector Cybersecurity Solution with costs expected to be taken up by water corporations.
Carbon Management Strategy	0.32	South Gippsland Water is committed to implementing the Victorian water sector's pledge to source 100 per cent of energy requirements from renewable sources by 2025 and its Carbon Management Strategy commitment to achieve net zero emissions by 2035.
Development of Urban Water Strategy	0.25	South Gippsland Water will require external assistance to develop the Urban Water Strategy, which is due in 2027.

⁹ South Gippsland Water 2023, ESC RFI Response #4, Adjustment to 2021-22 (Base Year) Opex, 31 January.



Key step changes	Forecast expenditure	Explanation
Victorian Public Sector Executive Reforms and Remuneration	0.25	Baseline operating costs do not include adjustments to executive remuneration arising from the Victorian Public Sector Executive Reforms and Executive Remuneration reviews.
Consultancy costs PS2028 submission	0.12	Represents the costs of engaging external consultants to assist in developing its submission for the PS6 regulatory period.
Consultancy costs PS2023 submission	-0.59	Removes the costs of engaging external consultants to assist in developing its submission for the PS5 regulatory period.
Total	1.35	

Source: SGW_2023 Price Submission_30.9.2022 and email Strategy, Performance, Governance Manager SGW 12 December 2022.

We have focused our assessment on step change increases only on the basis that these increases are likely to be reflected in 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
- recategorise expenditure between capital and operating expenditure, where the business can demonstrate that it is necessary or appropriate to do so
- reflect the incremental operating expenditure associated with a new prudent and efficient capital project
- cannot be mitigated or otherwise absorbed by an efficient business operating within its approved budget (including the growth allowance).

We met with key South Gippsland Water staff, who provided additional information regarding the proposed step changes. Our assessment of the step changes is outlined below.

3.4.1 Cyber security costs – \$1.00 million

South Gippsland Water is required to comply with the Victorian Department of Premier and Cabinet's proposed whole Water Sector Cybersecurity Solution, with costs expected to be met by water corporations (refer Appendix A). The costs associated with compliance is included as a step change.



The information provided by South Gippsland Water regarding this step change provides sufficient justification for the increase. As a result, we are of the view that this proposed step change meets the criteria outlined above, specifically that costs comply with new, or changed, legislative or regulatory obligations.

3.4.2 Carbon management strategy – \$0.32 million

South Gippsland Water is committed to implementing the Victorian water sector's commitment to source 100 per cent of energy requirements from renewable sources by 2025 and its Carbon Management Strategy commitment to achieve net zero emissions by 2035 (refer section 3.2 and Appendix A).

South Gippsland Water has proposed this step change for the incremental costs of implementing this strategy. The information provided by South Gippsland Water regarding this step change provides sufficient justification for the increase. As a result, we are of the view that this proposed step change meets the criteria outlined above, specifically that costs comply with new, or changed, legislative or regulatory obligations.

3.4.3 Urban Water Strategy 2027-28 - \$0.25 million

To ensure a robust planning process, South Gippsland Water will require external assistance to develop the Urban Water Strategy, which is due in 2027. The scope and associated cost of the 2022 Urban Water Strategy has been used to estimate future costs.

We are of the view that this proposed step change meets our step change criteria, specifically, it represents expenditure that cannot be mitigated or otherwise absorbed by an efficient business operating within its approved budget (including the growth allowance).

3.4.4 Victorian Public Sector Executive Reforms and Remuneration – \$0.25 million

Baseline operating costs do not include adjustments to executive remuneration arising from the Victorian Public Sector Executive Reforms and Executive Remuneration reviews (refer Appendix A). The costs associated with compliance is included as a step change.

The information provided by South Gippsland Water regarding this step change provides sufficient justification for the increase. As a result, we are of the view that this proposed step change meets the criteria outlined above, specifically that costs comply with new, or changed, legislative or regulatory obligations.



3.4.5 Summary of our step change assessment

Based on South Gippsland Water's PS5 submission and the further information provided to us, and having regard to our step change criteria, we consider that the proposed step changes are reasonable.

We have also considered these within the context of South Gippsland Water's proposed net annual growth in expenditure over the PS5 regulatory period. Overall, based on the information provided by South Gippsland Water, we have been able to confirm 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.

3.5 Forecast growth and efficiency factors

South Gippsland Water is forecasting average growth in operating expenditure of 1.6 per cent per year and an efficiency factor of 1.4 per cent per year over the PS5 regulatory period. This results in a net increase in operating expenditure over the PS5 regulatory period of 0.2 per cent per year. When comparing this net result against other water businesses, South Gippsland Water is eighth out of 13 urban water businesses subject to this review (see Table 3.2).



Table 3.2: 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%
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 operating expenditure assessment

Based on South Gippsland Water's PS5 submission, discussions with the business and the further information it provided, we consider that South Gippsland Water's adjusted 2021-22 controllable operating expenditure is consistent with a prudent business operating efficiently. This reflects our view that:

- the key drivers of the overspend against 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
- it is not reasonable to expect that these step changes could be absorbed by the business given the net growth factor of 0.2 per cent per year.

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



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).¹⁰

We have assessed South Gippsland Water's proposed capital expenditure program against the criteria set out in Figure 4.1.

Figure 4.1: Criteria used to assess forecast capital expenditure

Assessment of capital program

- 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

- · 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.

We have assessed South Gippsland Water's forecast capital expenditure for the PS5 regulatory period focusing primarily on a review of how asset management, capital planning and prioritisation processes have been applied. We have also reviewed key supporting documentation for a sample on the Top 10 capital expenditure projects, which account for around 41 per cent of its forecast capital expenditure for the PS5 regulatory period.



¹⁰ Essential Services Commission 2021, 2023 Water Price Review, Guidance paper, 26 October, p.33.

Our assessment is based on a review of the information contained in South Gippsland Water's PS5 submission and responses to additional information requests we raised based on the above criteria.

Although South Gippsland Water's submission supporting its proposed capital expenditure program was strong overall, with good context and justification provided in relation to the forecast expenditure increase and associated drivers, we requested additional information to further test the justification for the capital expenditure forecasts for the PS5 regulatory period. The information requested related to the following issues.

- Wonthaggi Sewerage System: clarifying whether the growth assumptions made are driving the system capacity and if any project constraints may impact on deliverability within this period.
- Lance Creek Water Treatment Plant (WTP) CWS Upgrade: clarifying the key driver for this project and its timing. Also clarifying why demand is increasing and seeking a better understanding of the risks in this period.
- Upgrading the Venus Bay Outfall (VBO): clarifying the key driver for this project
 and gaining a better understanding of the commercial arrangements, including
 the contribution towards the project entered into with the two customers that
 this project will service.
- Foster WWTP upgrade and desludging: confirming the level of confidence in the timing of this project, how much capacity is left in the system and consideration of other options. Clarifying that recycled water provision to customers in Foster is part of long-term strategy to achieve Environmental Protection Agency (EPA) compliance.
- Inverloch and Cape Paterson WWTP Major Renewals and Upgrades: confirming the level of confidence in the timing of this project.
- **Foster WTP and Toora WTP Upgrade Works:** clarifying that the key driver for this project are the filters at the end of their design life.
- **Leongatha Water Supply Upgrade:** clarifying what the key driver for this project is, and level of confidence in its timing.

South Gippsland Water responded promptly and provided detailed responses to all the questions. They submitted additional information and documentation, including detailed documentation setting out the capital planning processes used to develop the program, relevant reports, asset renewal and management plans and strategies as well as major project and program business cases.



4.2 Assessment of overall capital program

South Gippsland Water is currently forecasting that it will deliver all of its planned capital program in the current PS4 regulatory period for a total cost of \$92.5 million. This represents a 4 per cent (\$3.3 million) increase compared to the Commission's approved capital expenditure benchmark allowance.

South Gippsland Water has forecast capital expenditure of \$136.27 million for the PS5 regulatory period, which represents an increase of 47 per cent over actual/forecast expenditure in the PS4 regulatory period.

Approximately 20 per cent of its forecast capital expenditure relates to three major customers. The largest capital project, the Venus Bay Outfall Upgrade and Renewal (\$18.9 million), supports two large customers that are significant regional employers.

The documents and information submitted by South Gippsland Water provide good support and reasonable explanations for the increased expenditure over the PS4 regulatory period.

4.2.1 Link to customer outcomes and obligations

The key drivers, projects and programs appear to be well-linked to customer outcomes and engagement results, and include:

- renewals \$58.25 million (42.7 per cent of the total capital expenditure program)
- growth \$46.90 million (34.4 per cent of the total capital expenditure program)
- top 10 major projects (\$67.9 million)
- top 10 major programs (\$52.7 million).

The supporting strategy and business case documents reviewed provide strong justification for the projects and programs that underpin the overall capital expenditure program and forecast. They also provide insight into how each element of the program supports South Gippsland Water's five key customer outcomes:

- Water Provide safe, clean drinking water
- Reliability Plan for the future, be reliable and minimise unplanned interruptions to services
- Wastewater Provide a safe wastewater service that contributes to the livability of our communities
- Environment Be environmentally sustainable and adapt to a future impacted by climate variability



Integrity – Act with honesty, respect and strive to balance affordability, value-formoney and fairness.

4.2.2 Underlying processes for developing the program

South Gippsland Water has an effective methodology for developing its overall capital projects and programs that clearly links to customer and regulatory expectations.

South Gippsland Water has a Project Management Procedures Manual that describes how it plans and delivers capital projects to meet corporate business objectives. The manual defines the approach required for South Gippsland Water to:

- identify, scope and plan, prioritise and deliver capital projects to meet South
 Gippsland Water's obligations to customers, regulators and the business's owners
- ensure South Gippsland Water delivers capital projects in a consistent and professional manner in line with industry best practice
- achieve South Gippsland Water's capital works program objectives by delivering high quality, cost competitive assets that are built in a timely and safe manner.

This document assists in identifying and prioritising the projects included in the submission and factors in assessing risk ratings, developing project business cases, considering the appropriate allocation of risk and ensuring the program of proposed projects is deliverable.

South Gippsland Water also engaged consultants Marsden Jacobs Associates to review the assessment of each stage of the capital program against the Commission's Guidance Paper for its 2023 price submission. Marsden Jacobs assessed the program against the following:

- information and documentation provided in the price submission and relied upon to support South Gippsland Water's price submission are reasonably based, complete and accurate in all material respects
- financial and demand forecasts are the business's best estimates, and supporting information is available to justify the assumptions and methodologies used
- the price submission satisfies the requirements of the Guidance Paper issued by the Commission in all material respects.

South Gippsland Water has provided good evidence showing that the associated frameworks and processes have been applied in developing the PS5 capital expenditure program, with significant executive team and Board oversight as detailed above in section 4.1.



4.2.3 Reliability of cost estimation

South Gippsland Water uses a detailed Cost Estimation Guideline to inform cost estimates to support project development.

The cost estimates for the capital projects were risk-assessed and used a Monte Carlo analysis to generate P50 values. P50 estimates were developed for most planned discrete projects (accounting for 90 per cent of the planned investment). For renewal allocations, forecast expenditure was based on current contracted rates or rates experienced during the PS4 regulatory period.

Project estimates for larger more discrete projects are developed by engineering and design consultants based on the design and where required, may undergo a peer review to ensure that:

- it accurately reflects the project's scope of work
- all identifiable items are included
- item quantities and rates are appropriate
- it uses historical data that reasonably reflects project scope and site conditions,
- it is based on assumptions that are appropriate for the project
- are reasonable having regard to benchmarks for similar work
- the project is 'constructable'
- risk registers are appropriate, and contingency allowances are within the appropriate ranges.

Project cost estimates for more standard works are derived from:

- previous designs, reports and studies for the project in question
- current market rates (tenders or quotes) for similar projects
- historical rates (actual costs) for similar projects
- historical estimates from previous tenders, designs, reports and studies for similar projects.

South Gippsland Water's approach to cost estimation appears to provide an appropriate basis for developing the budget estimates for its PS5 capital expenditure program.

4.2.4 Deliverability of capital program

We are satisfied that South Gippsland Water has the capacity to deliver the capital program for the PS5 regulatory period given the program's relatively low complexity and scope.

South Gippsland Water appears to have a good project management structure in place and internal project management resources to deliver its proposed capital expenditure



program. Due to the size and nature of the projects and programs proposed, South Gippsland Water targets and attracts small and medium-sized consultants and contractors for delivery of the projects and to undertake specialist tasks where possible.

South Gippsland Water adopts procurement approaches for each project to maximise value-for-money. All major projects and programs are competitively tendered. Projects are bundled where appropriate to deliver efficiencies. It is also developing a procurement plan for its capital works for the PS5 regulatory period to minimise the risk of delays during the planning, design and construction stages.

These factors provide a good level of confidence that robust arrangements will be ready and in place to support implementation of the proposed program.

4.3 Assessment of major projects and major programs

4.3.1 Major projects

We requested from South Gippsland Water business cases for each of the capital projects in its PS5 submission. While the quantum of each discrete project is not significant, the nature of the projects, timing and equity of large capital projects serving individual customers could pose an issue in assessing the prudency and efficiency of the expenditure. As a result, we have reviewed all South Gippsland Water's proposed capital projects and programs for the PS5 regulatory period in detail.

All projects and programs demonstrated clear linkages to obligations and customer outcomes. While we reviewed all projects, we requested more explanation for the following major projects due to their size, complexity and questions arising from a review of the business cases.

4.3.2 Venus Bay Upgrade and Renewal – \$19.26 million

South Gippsland Water is seeking \$19.26 million over four years for the prioritised replacement of sections of the Venus Bay Outfall. This seeks to address the persistent incidence of pipeline failures (and the expectations of the EPA), while providing an incremental increase in the capacity of the pipeline so it can cater for future flows from Burra Foods and Saputo.

South Gippsland Water advised that the outlet has a poor performance history and spills to the environment. The EPA has issued pollution abatement notices on the pipeline in the past and are increasing enforcement action for future spills. Approximately 18km of the outlet was renewed in the mid- to late-2000s, with the remaining 24km of pipeline dating from the late 1960s.



As this upgrade is predominately required to service two of South Gippsland Water's largest customers, we questioned South Gippsland Water in relation to the equity and broader customer support for this project.

South Gippsland Water advised that Trade Waste Agreements entered with Burra Foods and Saputo include recovery of capital and operational costs associated with this outlet and also include an Early Termination Payment clause. It provided detailed responses to all remaining questions raised, which provided sufficient confidence for us to assess the proposed expenditure.

4.3.3 Lance Creek Water Storage Upgrade - \$8.66 million

South Gippsland Water has allocated \$8.66 million to upgrade the Lance Creek water storage. The Lance Creek water system supplies over 60 per cent of South Gippsland Water's customers. In 2018, four additional towns were connected to this system, which resulted in an increased demand for water from the system. The system Peak Day Demand is currently 16 ML per day and is forecast to increase to 22 ML per day by 2028.

This project involves constructing a new 3 ML Clear Water Storage tank and interconnecting pipework at Lance Creek Water Treatment Plant. The project aims to:

- maintain supply reliability to customers under peak day and peak week demands
- cater for the influx of holiday makers across the systems, particularly at Inverloch and Cape Paterson
- avoid low or no pressure situations for customers and avoid a Boil Water Advisory.

As part of our review we have sought to understand the impact of a large abattoir closure that was originally supplied from this system and the corresponding impact on the system's supply efficiency. This major customer used up to 0.8 ML per day prior to closure. However, in 2022 the site was acquired by Kilcoy, a major international food business that owns Australia's largest abattoir. It is in the process of negotiating a future supply arrangement with South Gippsland Water to take up to 2 ML per day.

South Gippsland Water advised that the timing of the redevelopment of the site is uncertain and is not the current driver for Lance Creek CWS upgrade. Further consideration will also need to be given to increasing water storage at Lance Creek if the abattoir expands or scales up its operations.

4.3.4 Leongatha Water Supply System Upgrade – \$4.42 million

South Gippsland Water has forecast \$4.42 million in capital expenditure to upgrade the Leongatha water supply system to address the declining catchment yield threatening



supply to customers. The project will recover backwash and other residuals at Leongatha Water Treatment Plant (complying with EPA requirements), reinstate Bellview Creek and Coalition Creek dams and connect to the Ruby Creek system via a new pipeline.

The Leongatha and Koonwarra areas are serviced by the Ruby Creek water supply system. Raw water is sourced from several reservoirs and treated at the Leongatha Water Treatment Plant (its current capacity is 8.7 ML per day).

The current water demand from Leongatha and Koonwarra is 1,620 ML per year. Available yield for the system is insufficient to meet South Gippsland Water's target level of service (which is for restrictions no more often than once in 10 years) and yield is forecast to decline because of climate change.

The drivers for this project are:

- declining catchment yields
- the minimum level of service not met
- currently approximately 14 months' supply of water i.e., one dry year
- it is the least reliable water supply in the region (see the top line of Table 4.1 below, which is taken from the 2022 Urban Water Strategy).

Tarwin River - Leongatha Already exceeded Y/Y/N Y/Y/N Y/Y/N 2050 Tarwin River - Fish Creek Tanvin River - Dumbalk Y Y/N/N Y/N/N Y/N/N n/a n/a Tarwin River - Meeniyan Y/Y/N Y/Y/N n/a n/a n/a n/a Agnes River - Toora Y/Y/N Y/N/N n/a Deep Creek - Foster Y Υ n/a Already exceeded / 2037 / 2063 Y/Y/N Y/Y/N Y/N/N Y/Y/N Y/N/N Tarra River - Yarram n/a n/a n/a N

Y/N/N

Y/N/N

Table 4.1: Water Supply system reliability

Source: Extract - South Gippsland Water2022 Urban Water Strategy - SGW Presentation to ESC Consultant Nov 22 Updated.

One major customer (Saputo) uses approximately 60 per cent of the supply from the Leongatha system and we again questioned South Gippsland Water in relation to equity and any capital contributions towards upgrades. South Gippsland Water has advised that major customer cost recovery is via volumetric charges imposed under the Water Service Agreement with the customer. South Gippsland Water advised us of the charges applied to this customer.

Lance Creek – Wonthaggi, Inverloch, Cape Patterson, Korumburra, Poowong,

Loch, Nyora

2047 / 2035 / 2027

Overall, our review has provided confidence in South Gippsland Water's management of its capital expenditure and the analysis conducted prior to undertaking capital projects. The review of the information provided by South Gippsland Water has provided us with sufficient confidence that its forecast capital expenditure for this project for the PS5 regulatory period is consistent with a prudent business operating efficiently.

4.3.5 Major programs

South Gippsland Water's top 10 capital programs planned for the PS5 regulatory period are all driven by renewal. They support South Gippsland Water's customer outcomes in terms of Reliability, Water, Wastewater and the Environment and are considered prudent for a water authority of this size and asset base.

South Gippsland Water plans to continue the current rate of investment that has occurred in the PS4 regulatory period in most of the capital programs. Investment in water reticulation, along with water transfer and distribution mains, are marginally higher than for the PS4 regulatory period. Failure rates in both asset classes have increased in recent years and long-term modelling shows that an increased rate of renewal is necessary to maintain service standards. Detailed asset performance analysis and modelling has been used to forecast the renewal allocations required into the future and this work is described in the Asset Class Plans and associated supporting documents provided.

We have with sufficient confidence that South Gippsland Water's forecast capital expenditure for the PS5 regulatory period is consistent with a prudent business operating efficiently.

4.4 Summary of capital expenditure assessment

South Gippsland Water's PS5 submission provides a detailed breakdown of its forecast capital expenditure for the PS5 regulatory period. The capital submission is well developed and provides, along with the additional information reviewed, a high level of confidence that the proposed capital expenditure program is appropriate, prudent and robust, and can be delivered.

The further information provided to us by South Gippsland Water in relation to the key issues of further investigation provides a reasonable level of confidence that the proposed capital expenditure program is consistent with the actions of a prudent business operating efficiently.

As a result, we do not recommend any adjustments to South 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 also 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 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.¹¹

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.



¹¹ 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 our 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 (green power), 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.



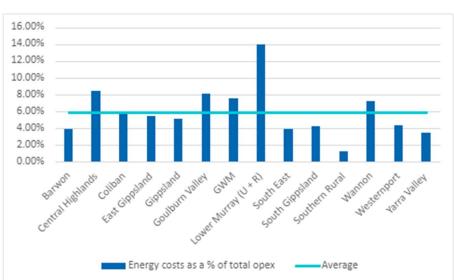


Figure A1: PS5 forecast total energy expenditure as a percentage of total controllable operating expenditure (%)

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



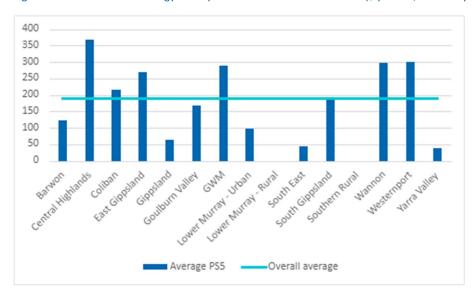


Figure A2: PS5 forecast energy costs per volume of water delivered (\$ per ML, 1 January 2023)

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 expenditure¹² and proposed PS5 energy expenditure for each business.



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

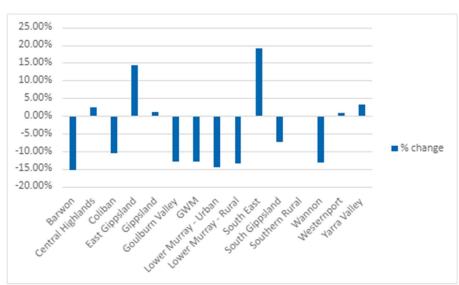


Figure A3: Total energy expenditure: total proposed for PS5 regulatory period less total actual for PS4 regulatory period (%)

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 2024.¹³

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



¹³ 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.¹⁴

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 ITarchitecture, 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 on 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.

¹⁴ Victorian Auditor-General's Office 2019, Security of Water Infrastructure Control Systems, 9 May.

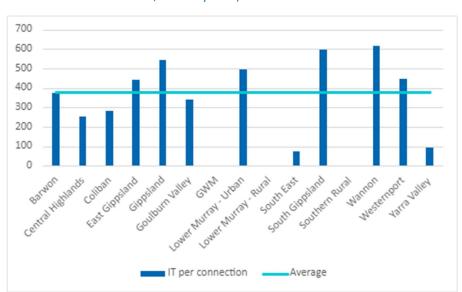


Figure A4: PS5 forecast: ICT operating expenditure per water connections (\$ per average number of water connections, 1 January 2023)

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



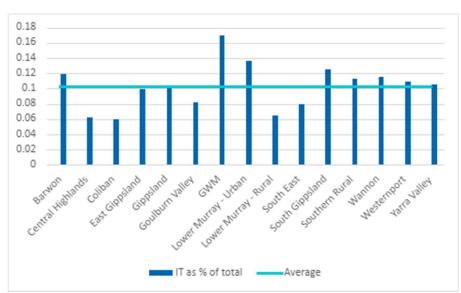


Figure A5: PS5 forecast: ICT operating expenditure as a percentage of total controllable operating expenditure (%)

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)¹⁵ 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



¹⁵ 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). 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



Refer: https://vpsc.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.¹⁷ 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 2019-20.¹⁸

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. 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. ¹⁹ 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. ²⁰

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. ²¹ 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 also highly uncertain.



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

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

¹⁹ State of Victoria 2022, Strategy and Outlook 2022-23 Budget Paper No. 2, Department of Treasury and Finance, p.32.

²⁰ Reserve Bank of Australia 2022, Statement on Monetary Policy, November.

²¹ 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.



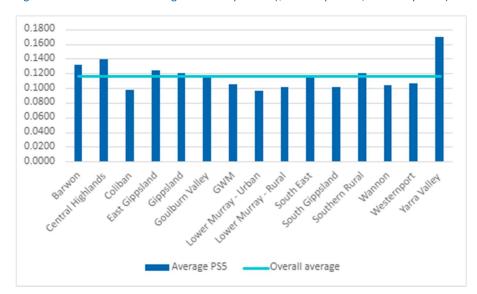


Figure A6: PS5 forecast average unit cost per FTE (\$ million per FTE, 1 January 2023)

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.



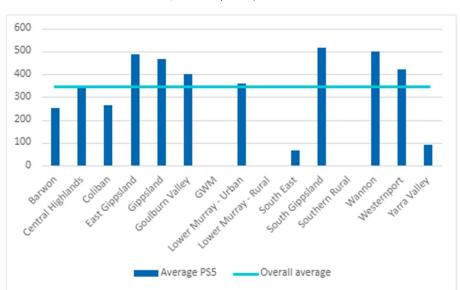


Figure A7: PS5 forecast: Average labour cost per water connection (\$ per average number of water connections, 1 January 2023)

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



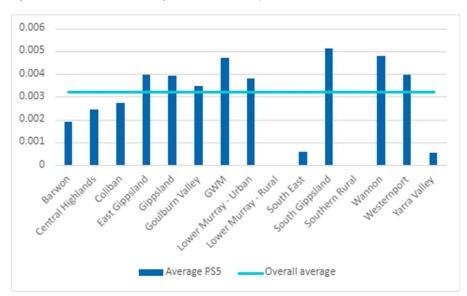


Figure A8: PS5 forecast average number of FTEs per water connection

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.



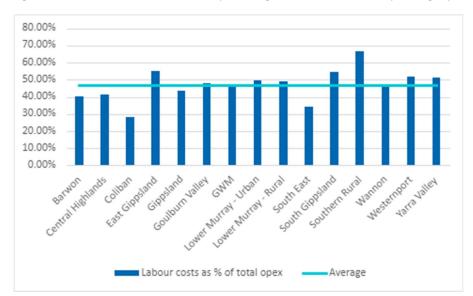


Figure A9: PS5 forecast labour costs as a percentage of total controllable operating expenditure (%)



