

# Combined Proposal 2024-2029

## Overview



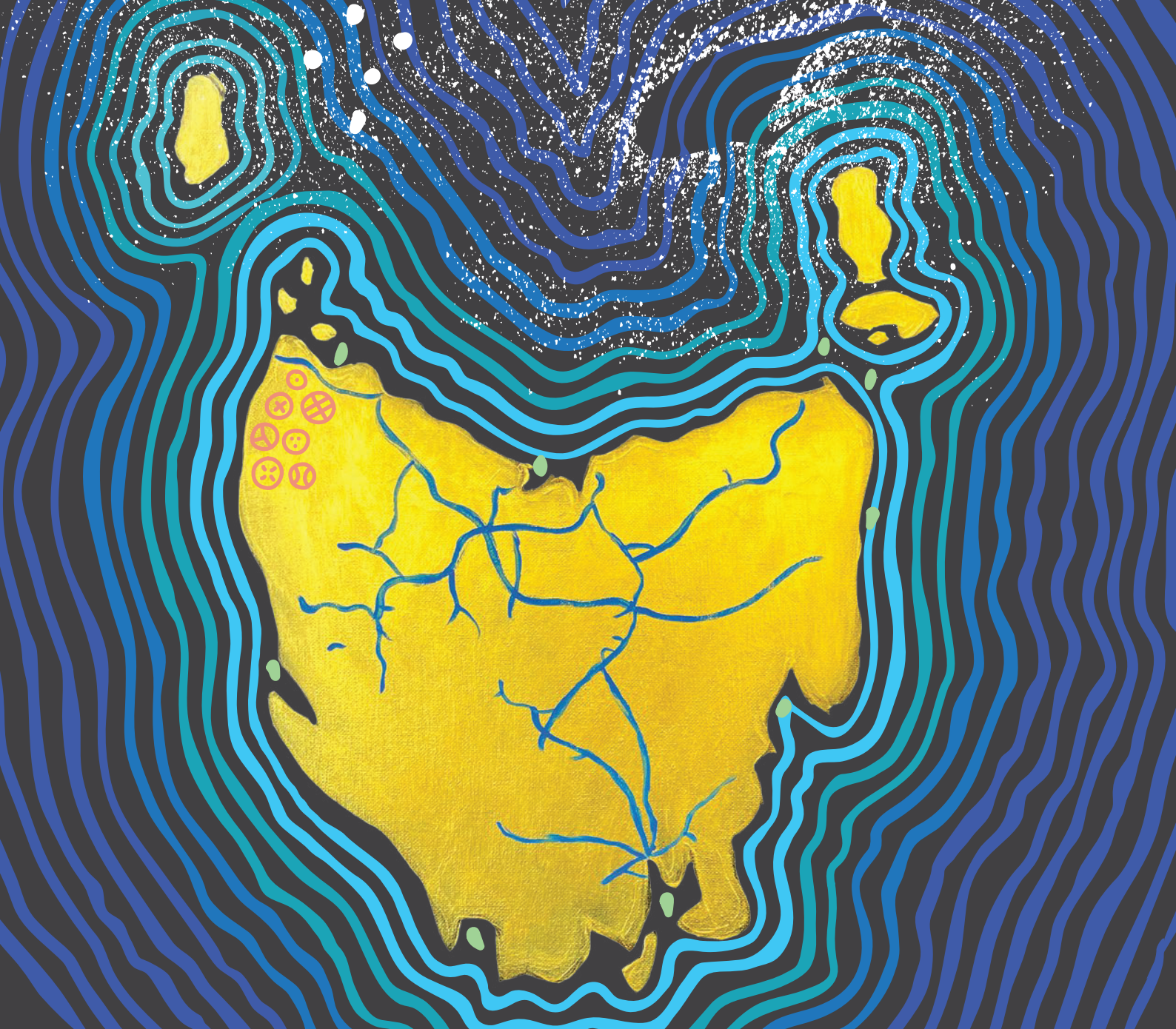
**Outline:** This document forms part of TasNetworks' Combined Proposal to the Australian Energy Regulator for the 2024-2029 regulatory control period, along with Attachments 1-24 and other supporting information. It provides a summary of TasNetworks' Combined Proposal for both the transmission and distribution networks in Tasmania for our customers and stakeholders.

## Note

The Combined Proposal overview (**Overview**) forms part of TasNetworks' Combined Proposal for the 2024-2029 regulatory control period. It should be read with all other parts of the Combined Proposal, including the attachments listed below and supporting documents listed in Attachment 23.

| Document      | Description                                 |
|---------------|---|
|               | <b>Combined Proposal overview</b>           |
| Attachment 1  | Customer and stakeholder engagement summary |
| Attachment 2  | Annual revenue requirement                  |
| Attachment 3  | Regulatory asset base                       |
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Figures and tables in the Overview and other parts of the Combined Proposal may not add due to rounding



# Welcome

TasNetworks acknowledges the palawa (Tasmanian Aboriginal community) as the original owners and custodians of lutruwita (Tasmania). TasNetworks acknowledges the palawa have maintained their spiritual and cultural connection to the land and water. We pay respect to Elders past and present and all Aboriginal and Torres Strait Islander peoples.

# CEO's foreword

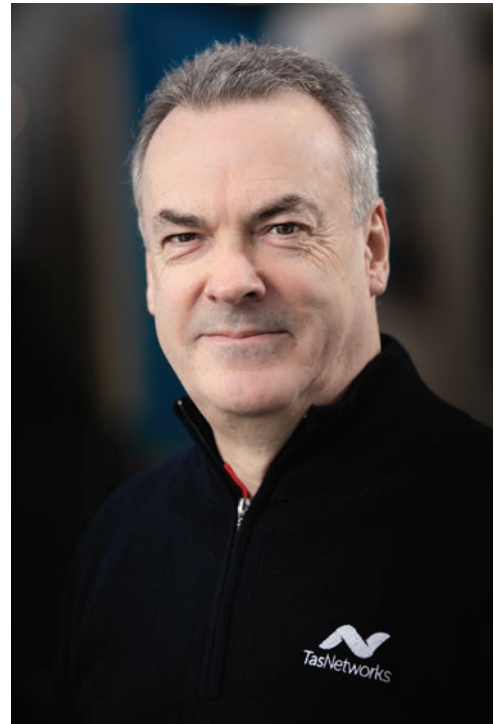
We are pleased to lodge our Combined Proposal for consideration by the Australian Energy Regulator, detailing the funding we need to deliver safe, reliable and affordable electricity to Tasmanians for the 2024-2029 regulatory control period.

Shaped by customer and stakeholder insights gathered during our most comprehensive and diverse engagement program to-date, our Combined Proposal seeks to deliver the outcomes our customers value and enable Tasmania's transition to a clean energy future.

We know that our customers are under increasing pressure due to the ongoing rise in cost-of-living, so we've focused on keeping our prices as low as possible by reducing business costs where we can. This has resulted in our total forecast expenditure being less than our total expenditure allowance for the 2019-2024 regulatory control period.

It's important to acknowledge that while investment needed to connect new, low-cost renewable generation and support customer-driven solar and storage will mean price increases in the medium term, we know it will ultimately help deliver more reliable services and lower prices in the future.

While affordability remains the number one concern for our customers and stakeholders, it's closely followed by proactive investment in renewables, a desire for statewide reliability, and a transparent approach to sustainability. Developing a Combined Proposal that balances these preferences in the current economic environment is both more complex and important than ever before. Therefore, we've included trade-offs in the Combined Proposal that exert downward pressure on costs without sacrificing reliability and safety, or undermining the delivery of other priorities.



Highlights of our Combined Proposal include:

- total expenditure for transmission and distribution networks lower than the allowance for the 2019-2024 regulatory control period, the result of capital and operating cost efficiencies that offset higher costs associated with cyber security and insurance
- targeted improvements in the reliability of parts of our distribution network
- a suite of measures to improve the resilience of our networks to the effects of climate change, including improved bushfire resilience
- a new customer service incentive scheme, including a more meaningful measure of customer service.

In addition to developing a Combined Proposal that reflects the needs of our customers, we've also sought to deliver a Combined Proposal that is capable of acceptance by the Australian Energy Regulator. We are confident we have achieved both of these goals, while also taking the steps required to support Tasmania's transition to a cleaner future.

I personally thank all of the customers and stakeholders who have contributed to the development of our Combined Proposal, and look forward to their ongoing engagement.

A handwritten signature in black ink, which reads 'Seán Mc Goldrick'. The signature is written in a cursive, slightly slanted style.

**Dr Seán Mc Goldrick**  
Chief Executive Officer

# Executive summary

TasNetworks owns, maintains and operates the electricity transmission and distribution networks in Tasmania, as well as a telecommunications network that supports the operation of our electricity networks and about 50,000 public lights on behalf of councils and other government road authorities.

Electricity networks are natural monopolies, and the Australian Energy Regulator (**AER**) regulates TasNetworks under the National Electricity Law and National Electricity Rules (**NER**). This regulation includes the setting of the maximum revenue that TasNetworks is allowed to recover from customers, as well as the prices that TasNetworks can charge to provide a range of network ancillary services and public lighting. Under the NER, the AER must set separate revenue allowances for our transmission and distribution networks.

This Combined Proposal proposes the revenue TasNetworks needs to recover from its customers in the 2024-2029 regulatory control period to build, operate and maintain both its transmission and distribution networks, as well as the prices that will apply to network ancillary services and public lighting. It also sets out the network charges (tariffs) that will be used to recover TasNetworks' revenue allowances.

TasNetworks undertook a comprehensive and diverse engagement program over 18 months to understand what is important to our customers and stakeholders and to build their knowledge and understanding of the energy sector and TasNetworks. During the delivery of our engagement program, four key themes clearly emerged as priorities for our customers and their advocates:

- affordable network services and electricity for all customers
- reliable networks now and resilient networks in the future for the entire State
- long-term investment in the networks that increases Tasmania's renewable energy capability and unlocks associated community benefits
- a transparent, socially responsible approach to the provision of network services that ensures a sustainable solution for Tasmania.

We have used these insights to prepare a Combined Proposal that is reflective of customer preferences, in their long-term interests and capable of acceptance by the AER. To this end, our Combined Proposal includes:

- combined capital and operating expenditure requirements for our transmission and distribution networks that is lower than the 2019-2024 regulatory control period, reflecting capital and operating cost efficiencies achieved across the business that offset higher costs associated with cyber security and insurance
- targeted improvements in the reliability of parts of our distribution network that are not performing as well as we, or our affected customers, would like them to be
- a range of measures intended to improve the resilience of our networks to climate change, including by transitioning to assets with increased bushfire resilience, such as fibreglass reinforced composite concrete poles instead of wooden poles, and using fire-retardant coatings on wood poles.

TasNetworks is proposing maximum revenue of \$784 million for the transmission network for the 2024-2029 regulatory control period. This is 4.8 per cent or \$39 million lower (in real terms) than our total revenue requirement for the 2019-2024 regulatory control period.

For the distribution network, TasNetworks is proposing maximum revenue of \$1,549 million in the 2024-2029 regulatory control period, which is 8.3 per cent or \$118 million higher (in real terms) compared to the 2019-2024 regulatory control period. The increase is being driven by the recent rises in interest rates and inflation. These are combining to increase both the value of TasNetworks' network assets (the regulatory asset base) and the regulated rate of return applied to that asset base, which is the largest determinant of network revenues.

Our proposed capital expenditure (**capex**) for both networks is around 3.0 per cent or \$35 million lower than that allowed in the 2019-2024 regulatory control period. The Combined Proposal also identifies efficiencies in relation to operating expenditure (**opex**), which help to offset increases in opex related to rising insurance and cyber security costs.

As of July 2022, TasNetworks' network charges make up approximately 38 per cent of electricity rates for typical residential customers and small business customers. We estimate in real terms that the annual network charges recovered from a typical residential customer will increase by \$45 (5.9 per cent) in 2024-25, the first year of the 2024-2029 regulatory control period. For small business customers, network charges will increase by an estimated \$62 (2.2 per cent) per annum in 2024-25.

For customers directly connected to our transmission network, network charges are forecast to decrease by 1.0 per cent in 2024-25. Small increases (approximately 1.5 per cent) in the remaining years of the 2024-2029 regulatory control period are forecast in real terms for all customer types.

Final revenue and pricing outcomes will depend on movements in interest rates and inflation estimates between now and the time of the AER's final determination in April 2024.

TasNetworks has also identified seven contingent projects as potentially being required for the transmission network in the 2024-2029 regulatory control period, with all projects relating to either the additional renewable generation required to deliver the legislated Tasmanian Renewable Energy Target<sup>1</sup> (TRET) and / or the new load associated with the production of green hydrogen in Tasmania.<sup>2</sup> TasNetworks can only recover revenue for these projects when specific trigger events occur and after another determination process by the AER.

TasNetworks recognises our customers' concerns about future increases in their total electricity bills and will continue to do our part to ensure electricity is affordable for all while maintaining a safe and reliable network. With that in mind, we believe that our Combined Proposal strikes the right balance between the price and investment priorities identified by our customers and stakeholders for the next five years and beyond.

1 In November 2020, the Tasmanian Parliament legislated the Tasmania Renewable Energy Target which is to increase Tasmania's renewable energy output equivalent to 150 per cent of 2022's renewable energy figures by 2030 and 200 per cent by 2040

2 [https://recfit.tas.gov.au/\\_\\_data/assets/pdf\\_file/0013/313042/Tasmanian\\_Renewable\\_Hydrogen\\_Action\\_Plan\\_web\\_27\\_March\\_2020.pdf](https://recfit.tas.gov.au/__data/assets/pdf_file/0013/313042/Tasmanian_Renewable_Hydrogen_Action_Plan_web_27_March_2020.pdf)

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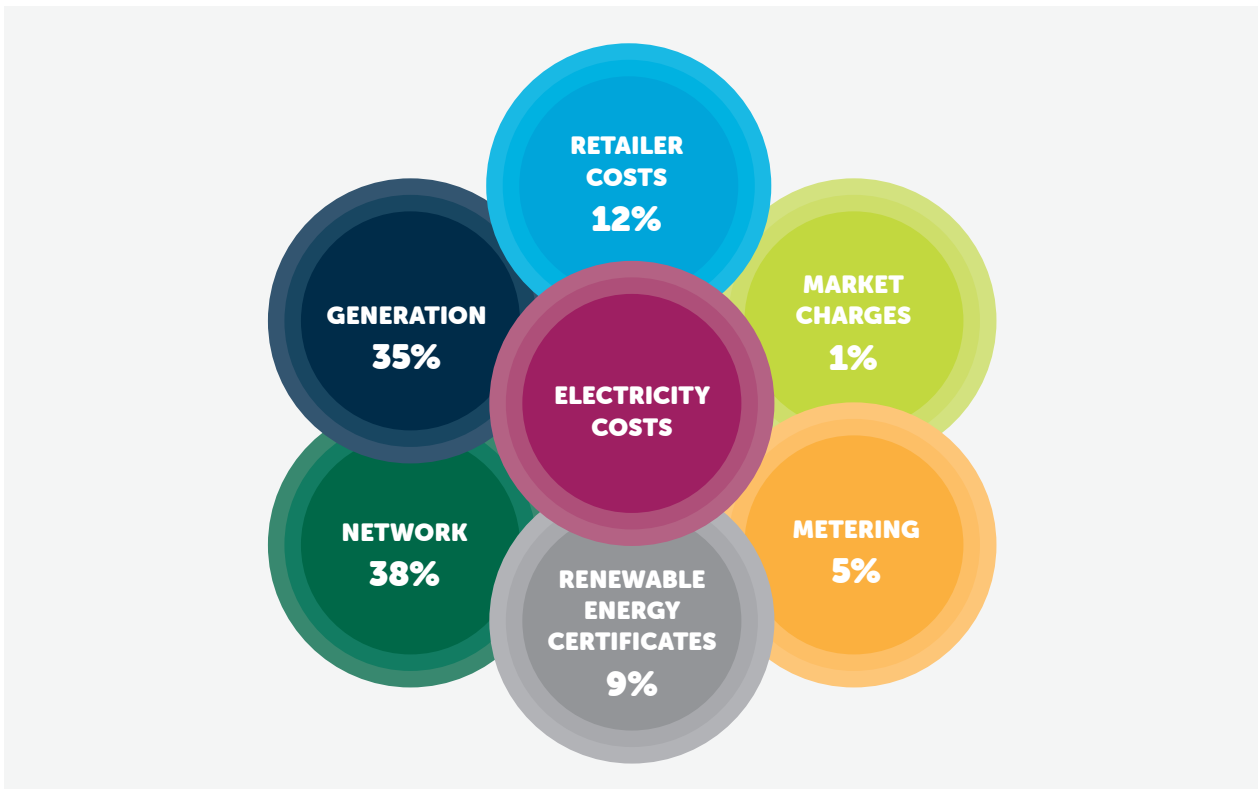


# 1 Introduction

TasNetworks owns, operates and maintains the Tasmanian electricity transmission and distribution networks delivering safe, cost-effective and reliable electricity to over 295,000 residential, commercial and industrial customers. We are owned by the State of Tasmania and operate as a commercial business with regulated assets of over \$4 billion. Our networks comprise 3,350 circuit kilometres of transmission lines and underground cables, 49 transmission substations, 22,910 kilometres of distribution powerlines and underground cables, over 232,735 power poles, 18 large distribution substations and 33,000 small distribution substations.

TasNetworks' transmission network delivers electricity from generators to directly connected transmission customers and its distribution network. TasNetworks' distribution network delivers electricity to Tasmanians at some of the lowest network charges in the National Electricity Market (NEM). Rather than charge residential and small business customers directly for use of the network, TasNetworks charges retailers who pass the cost of the network on to customers via retail tariffs. The 'network' component of the typical residential electricity bills has reduced from 60 per cent in 2015-16 to 38.1 per cent in 2022-23.<sup>3</sup> Cost component of a typical residential electricity bill in 2022-23 is shown in Figure 1.

Figure 1. Cost components of a typical electricity bill, 2022-23



Source: Aurora Energy, *Bill breakdown graph*, Aurora Energy website, accessed Dec 2022

<sup>3</sup> Australian Energy Market Commission, Final Report Residential Electricity Price Trends 2021, Nov 2021



In accordance with the NER, TasNetworks must periodically apply to the AER for a determination of the maximum revenue that can be recovered from customers over a five-year period (**regulatory control period**). Separate determinations apply to TasNetworks' transmission and distribution networks.

This Overview sets out TasNetworks' transmission revenue proposal and distribution regulatory proposal (**Combined Proposal**) for the regulatory control period beginning on 1 July 2024 and ending 30 June 2029 (**2024-2029 regulatory control period**). Key components of the Combined Proposal are how customer feedback has shaped our Combined Proposal (section 4), the total revenue proposed to be recovered from customers over the 2024-2029 regulatory control period (section 7) and the expected impacts on customer bills (section 8).

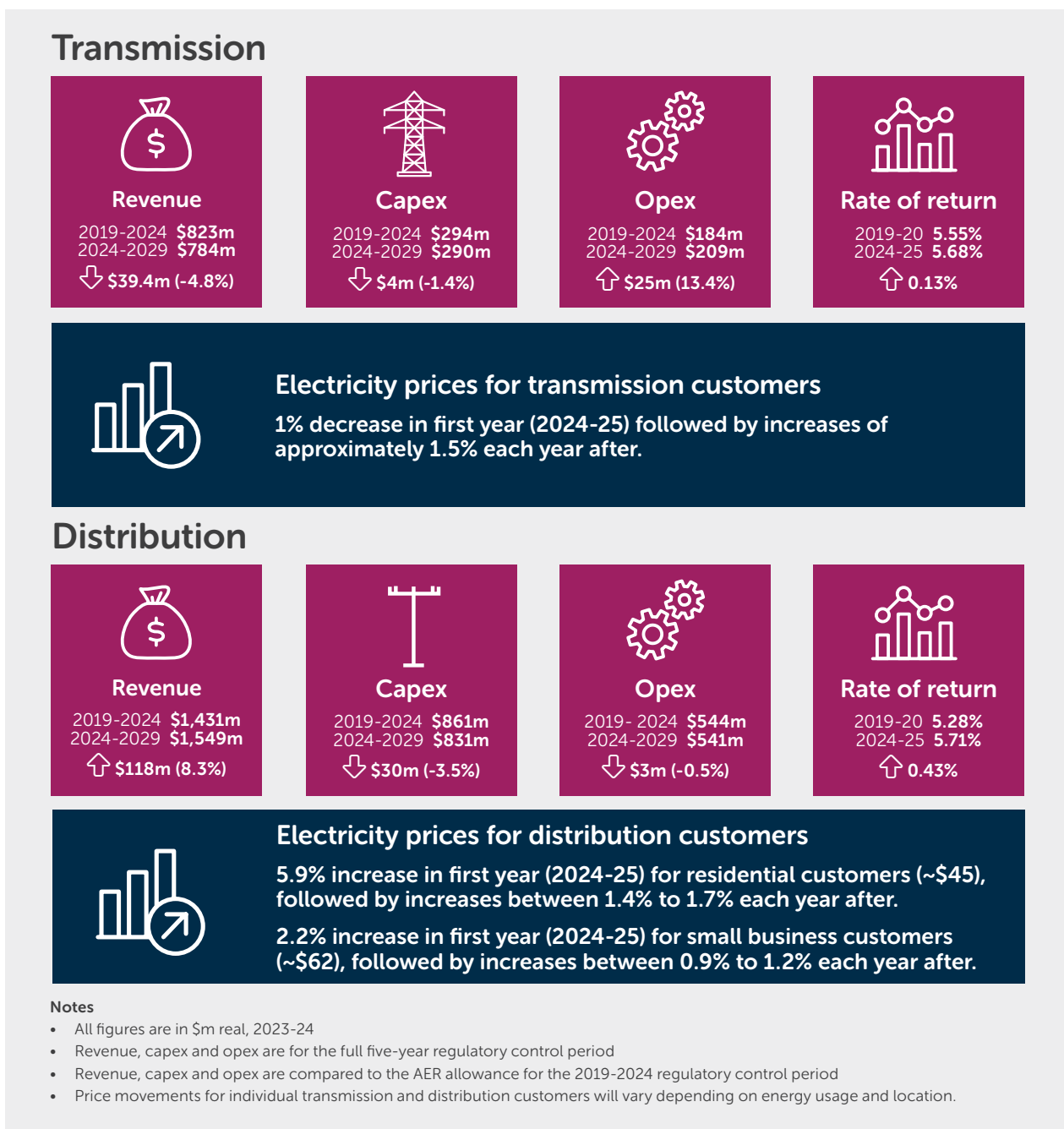
Following initial consideration of the Combined Proposal, the AER will publish an Issues Paper and seek customer and stakeholder submissions. The AER will then release a draft decision to which TasNetworks may respond with a revised revenue and / or regulatory proposal (**Revised Proposal**). Any changes between the Combined Proposal and the Revised Proposal will be subject to further engagement by TasNetworks with customers and stakeholders. The AER will then release a final determination for the 2024-2029 regulatory control period in April 2024.

In addition to the formal AER consultation process, TasNetworks encourages customers and other stakeholders to contact us directly with any questions and to provide input and feedback at [revenue.reset@tasnetworks.com.au](mailto:revenue.reset@tasnetworks.com.au).

# 2 Key Combined Proposal outcomes

Our total revenue requirements for our transmission and distribution networks are based on the AER's building block approach and comply with clauses 6.4.3 and 6A.5.4 of the NER, the post-tax revenue model (PTRM) and the roll forward model (RFM). Figure 2 presents key elements of our Combined Proposal for the 2024-2029 regulatory control period and compares them with the 2019-2024 regulatory control period.

Figure 2. Key Combined Proposal outcomes



# 3 A changing energy landscape

TasNetworks manages our network by balancing cost, risk and performance to deliver affordable levels of supply reliability and quality to our customers. We have expanded and augmented our networks over the years to meet customers' peak demand for electricity and, more recently, to facilitate their changing patterns of use. Unique challenges of our network are:

- our load characteristics – Tasmania has a relatively small load compared to other NEM regions and the maximum demand on the network occurs during winter, driven by heating load
- the dispersed and high number of generation sites across the state – power generation in Tasmania is dominated by many small hydro-electric power stations, resulting in more transmission infrastructure required per megawatt generated compared to other NEM regions
- the age of our network – many of TasNetworks' assets were constructed in the 1970s and 1980s, others in the 1950s and 1960s and some date back to the 1930s. We manage the risk of ageing and potentially unreliable assets using asset condition information and risk assessment to ensure a holistic approach to asset augmentations, replacements and decommissioning to drive the most affordable and sustainable outcome for our customers
- our customer load base – a high proportion of the energy flow through the network is supplied to a small number of large customers directly connected to the transmission network (57 per cent in 2021)
- our customer density – Tasmania has a total area of 68,000 square kilometres with a population of approximately 570,000 people concentrated in three main areas, resulting in our distribution network having to supply relatively low loads over long rural distances and few customers to share network costs.

Fundamental changes in energy markets are underway as Australia transitions to clean energy sources. As a key link between electricity generators and electricity consumers, TasNetworks' challenge is to continue delivering reliable and affordable electricity safely and efficiently while navigating the opportunities and challenges of the changing energy landscape and

enabling the clean energy transition. Some of the key drivers behind the changing energy landscape are outlined below.

## 3.1 Transmission network

Tasmania is the first Australian State to achieve 100 per cent renewable electricity generation. As the NEM transitions away from fossil fuel generation, several initiatives are underway to facilitate the clean energy transition on the mainland and transform Tasmania into a world leader of clean, reliable and affordable energy.

The breadth of initiatives underway include:

- **the Tasmanian Renewable Energy Action Plan** to transform Tasmania into a global renewable energy powerhouse
- a legislated **Tasmanian Renewable Energy Target** to double Tasmania's renewable energy production by 2040
- a **Tasmanian Renewable Hydrogen Action Plan** to make Tasmania a producer and exporter of renewable hydrogen by 2030
- a new 1,500 MW undersea **Marinus Link** interconnector between Victoria and Tasmania funded through an agreement between the Tasmanian, Victorian and Commonwealth governments
- an initiative to become the **Battery of the Nation** by unlocking existing dispatchable hydropower capacity and new low-cost, long duration pumped hydro energy storage to support the renewable energy transition.
- the development of **Renewable Energy Zones** to deliver the Tasmanian Government's renewable energy objectives in a coordinated and cost-effective way.

As the jurisdictional transmission network planner for Tasmania, TasNetworks is working closely with the appropriate organisations and groups to further understand the interactions between these initiatives and associated required network investments to maximise the benefits to the Tasmania while

maintaining affordability of our electricity network services.

Given a degree of uncertainty around the timing and costs of network upgrades required to support these initiatives, we have proposed them as contingent projects in our Combined Proposal (refer to Attachment 7 Contingent projects).

## 3.2 Distribution network

The push for clean energy, electrification and data accessibility is enabling community-led change within our distribution system. New technologies are becoming an important enabler of efficient and sustainable distribution integration and customer services. As the cost of energy technologies declines, more customers are adopting technologies that interact with the distribution network such as consumer energy resources (**CER**), which includes rooftop solar photovoltaics (**PV**), battery storage and electric vehicles (**EV**). These technologies allow customers to generate and store electricity and export this back into the grid.

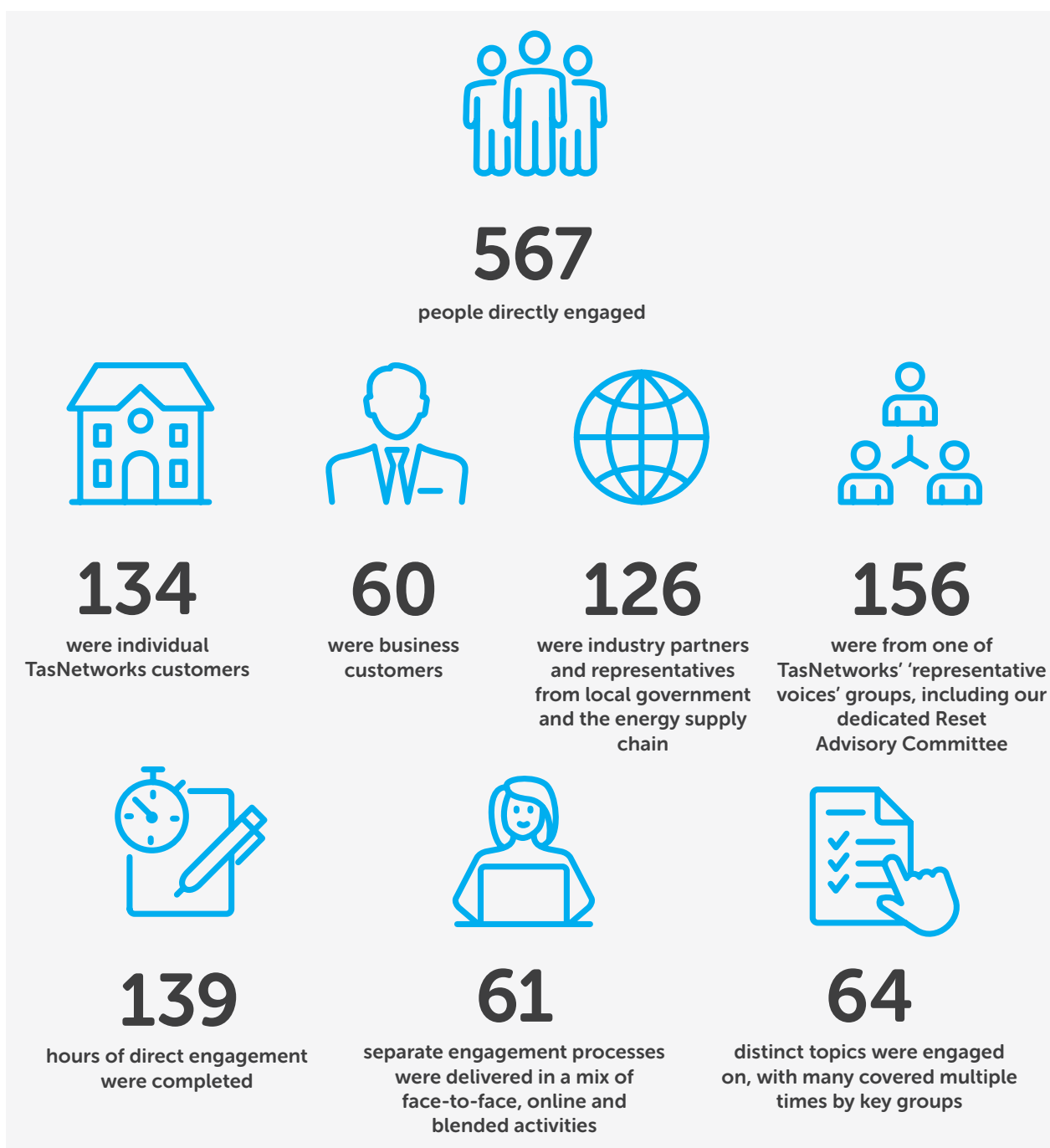
The distribution network was not designed for bi-directional power flows, high penetration of CER and active energy management by consumers. As CER uptake continues to grow, understanding and managing power flows and voltage regulation becomes more challenging. Sections of the network can become overloaded and congested, resulting in consumers being unable to connect new CER or use their existing CER to full capacity. Uptake of EVs may also result in increased overall consumption, maximum demand on the network and network complexity due to vehicle charging.

In Tasmania, it is projected that the implementation of solar PV and household batteries will continue to grow and the uptake of EVs will accelerate towards the end of this decade. Current modelling suggests there is insufficient uptake to cause widespread network constraints in the 2024-2029 regulatory control period for TasNetworks and our customers. Therefore, TasNetworks proposes a steady and modest investment in enabling ongoing connection of CER and improving our visibility of the low voltage network. More information regarding how we are preparing our distribution network to enable CER and meet our customer expectations in the 2024-2029 regulatory control period can be found in Attachment 6 Capital expenditure.

# 4 Customer and stakeholder engagement

Spanning 18 months of effort between July 2021 and January 2023, our engagement program was the most comprehensive and diverse suite of engagement activities we have ever completed in relation to preparing a revenue or regulatory proposal.

Figure 3. Customer and stakeholder engagement statistics





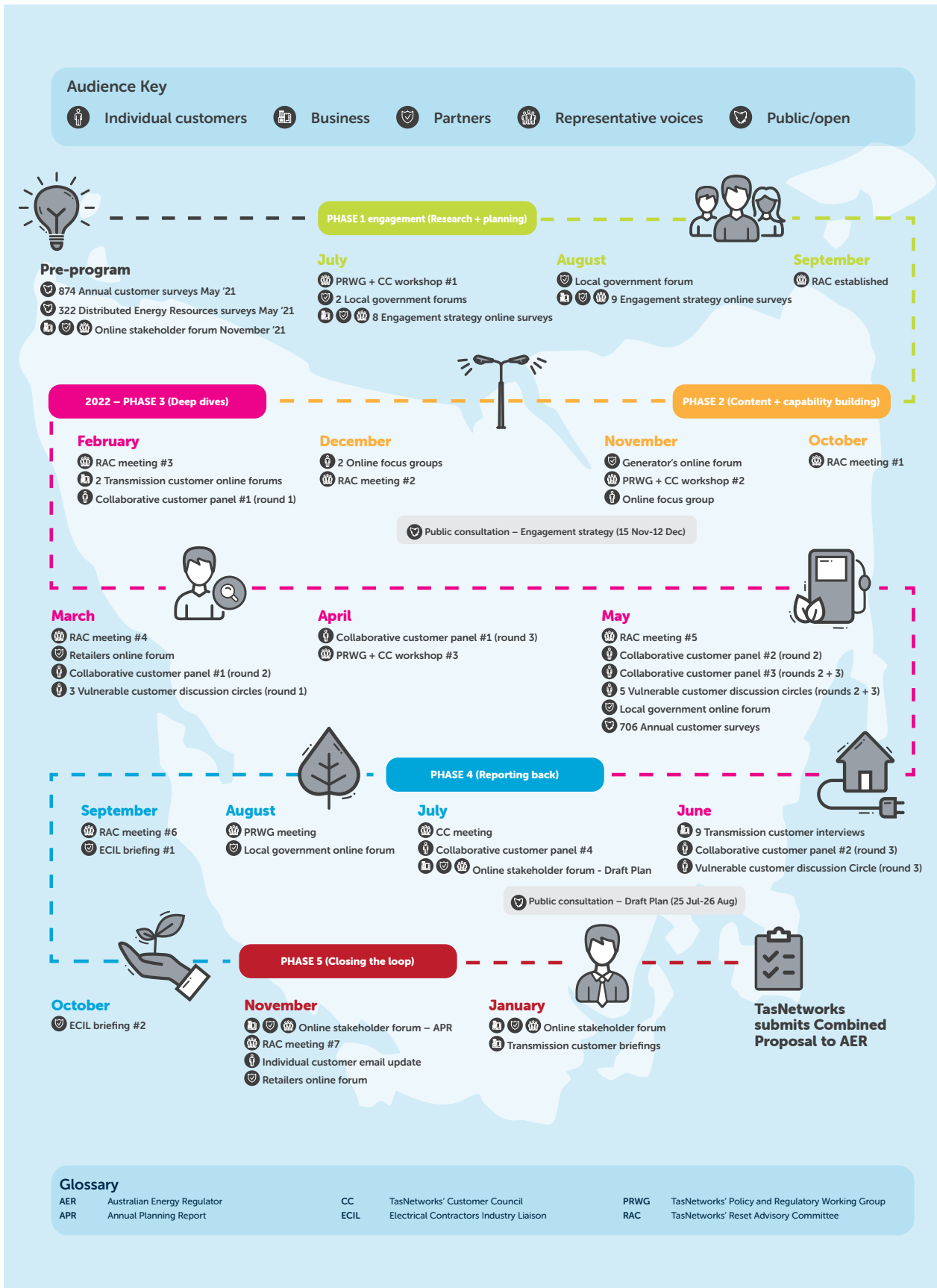
The engagement program has sought to identify and understand what is important to our customers and stakeholders, and to build their knowledge and understanding of the energy sector and our business, so they could better participate in the program. We have used their insights to help shape a Combined Proposal that is reflective of their preferences and in their long-term interests.

Additionally, we have also endeavoured to develop a Combined Proposal that is capable of acceptance by the AER. This work has been guided by the AER's **Better Resets Handbook**, published in December 2021. Evidence of how our program satisfies the AER's engagement expectations can be found in Attachment 1 Customer and stakeholder engagement summary.

Each of these steps has helped create a more accessible, customer-focused engagement program, evidenced by the fact that participant trust in TasNetworks to act in the best interests of customers has risen from a benchmark of 66 per cent in Phase 2 to 89 per cent in Phase 4 of the engagement program.

Figure 4 provides a visual snapshot of the engagement journey to date, inclusive of key audiences, activities, and the phases in which they occurred.

Figure 4. Engagement pathway





We have also worked with TasNetworks' Reset Advisory Committee (**RAC**) and the AER's Consumer Challenge Panel to ensure we are:

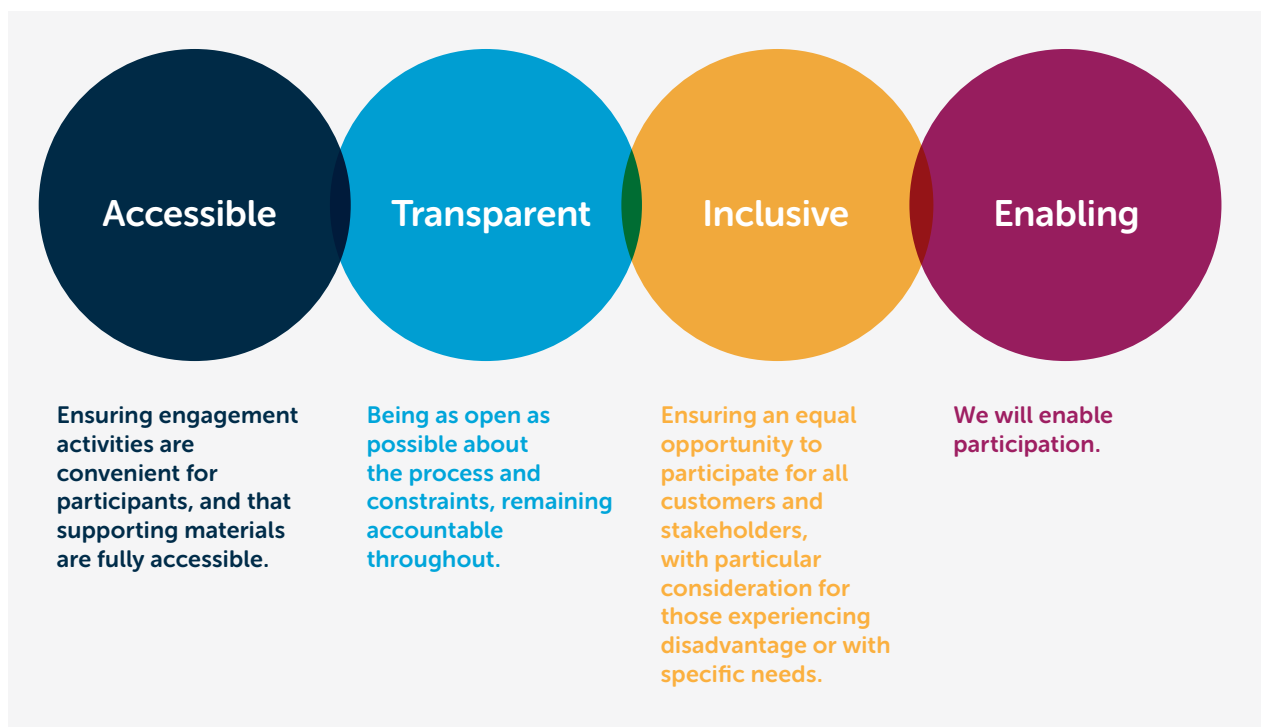
- honestly and accurately appraising our efforts
- conducting best-practice engagement
- refining our approach, activities and materials when necessary.

Full details of our interactions with these groups, inclusive of the RAC's evaluation outcomes, can be found in Attachment 1 Customer and stakeholder engagement summary.

## 4.1 Engagement principles

Our engagement principles were shaped directly from feedback received from customers and stakeholders during the workshops and forums we hosted in the co-design stage in July 2021. The principles were subsequently endorsed for inclusion in the Customer and Stakeholder Engagement Strategy by those who participated in the consultation stage. Figure 5 sets out the principles that have guided our engagement with customers and stakeholders during the development of our Combined Proposal for the 2024-2029 regulatory control period.

Figure 5. Customer and stakeholder engagement principles



## 4.2 How engagement has shaped our proposal

During the delivery of our engagement program, four key themes clearly emerged as priorities for our customers and stakeholders, as shown in Figure 6.

Figure 6. Customer and stakeholder priorities



Given our customers' top concern was affordability, we have sought to make trade-offs and introduce changes to our Combined Proposal that exert downward pressure on our costs, without sacrificing reliability and safety or undermining the delivery of the other priorities of our customers and stakeholders. Table 1 summarises what we heard through our engagement and our proposed responses, including where changes have been made to our Combined Proposal as a direct result of customer and stakeholder feedback on key themes. Attachment 1 Customer and stakeholder engagement summary provides feedback on topics that fell outside the four main themes but still helped shape our Combined Proposal.

Table 1. How engagement has shaped our proposal

| Key theme                 | What we've heard   | How we've responded  |
|---------------------------|--|--|
| <b>Affordable for all</b> | <ul style="list-style-type: none"> <li>Affordability is the most important factor for customers and stakeholders.</li> <li>Bill shock is a real concern for many due to rising cost-of-living pressures, unemployment levels and low incomes.</li> <li>TasNetworks could be more transparent about tariff and cost-saving options for individual customers.</li> <li>Providing incentives for large industrial customers to save energy and lower power prices for all is also regarded as important.</li> </ul> | <ul style="list-style-type: none"> <li>We are constraining our capex, resulting in forecasts that are below the AER's approved allowances for the current regulatory control period.</li> <li>We have selected 2020-21 as our base year for opex. This base year has been deemed as efficient for a network service provider (NSP) by the AER's economic benchmarking standards.</li> <li>We are aiming to achieve opex productivity improvements of 3% in 2024-25, and 0.5% for each subsequent year.</li> <li>We are developing initiatives that address cost-of-living pressures.</li> <li>We are continuing to develop cost-reflective network tariffs to encourage less energy consumption during times of peak demand, placing long-term downward pressure on price for all customers while maintaining protections for vulnerable customers.</li> </ul> |

| Key theme  | What we've heard  | How we've responded   |
|--|---|---|
| <p><b>Proactive, long-term investment in renewable energy that increases Tasmania's capability and unlocks associated community benefits</b></p> | <ul style="list-style-type: none"> <li>• It is critical to have government support to progress this priority due to the scope of the investment required.</li> <li>• Customers and stakeholders want to be informed about revenue and price outcomes for proposed contingent projects, particularly those linked to Renewable Energy Zones. TasNetworks needs to clearly communicate the benefits of future investments (who will access them and when they will be realised).</li> <li>• Customers and stakeholders feel that being open to embracing new technologies as alternatives to network augmentation (such as community batteries) could help reduce costs for customers and the network.</li> <li>• Customers and stakeholders are keen to understand how renewable energy investments will be planned and coordinated, including the planning assumptions used in forecasts.</li> <li>• System strength services are important, and customers want transparent information about the need, opportunities and costs of providing these services.</li> </ul> | <ul style="list-style-type: none"> <li>• We have revised our proposed investments to clearly state the anticipated customer benefits and associated timing, such as the Zeehan reliability improvement project.</li> <li>• We are proposing seven transmission contingent projects, outlining major augmentation to the transmission network to build Tasmania's renewable energy capabilities (Attachment 7 Contingent projects).</li> <li>• We have committed to continuing to engage on contingent projects in 2023, using the knowledge and capability of our representative voices to ensure customers' interests are represented.</li> <li>• TasNetworks' Annual Planning Report outlines the planning assumptions and forecasted investments on the transmission and distribution network for the next decade.</li> <li>• We have proposed steady and modest investment in enabling CER through initiatives such as community battery trials and improving our visibility of the low voltage network.</li> </ul> |
| <p><b>Reliable now, resilient for the future for the entire State</b></p>  | <ul style="list-style-type: none"> <li>• Reliability of supply is considered very important to the wellbeing of Tasmanians, particularly beyond the greater Hobart area due to our climate and reliance on electric heating. Customers acknowledged there are barriers to achieving reliability in remote areas.</li> <li>• Customers expect TasNetworks to maintain current levels of reliability and improve poor performing areas without increasing prices.</li> <li>• Customers want the benefits offered by improved resilience but acknowledge the potential price increases to achieve these are challenging.</li> <li>• TasNetworks needs to demonstrate how investments will improve reliability and resilience in the longer term and optimise for investments that deliver both.</li> </ul>   | <ul style="list-style-type: none"> <li>• We have rebalanced our reliability and resilience expenditure on our distribution network, resulting in an estimated cost reduction from \$121.8 million to \$115.3 million. This maximises value for our customers at the lowest sustainable cost, and mitigates, hardens and adapts our networks for the future.</li> <li>• We have rebalanced our forecasts to address reliability in ten poor-performing communities instead of the four previously proposed, increasing funds from \$7.37 million to \$10.8 million.</li> <li>• We are taking specific actions via our Network Resilience Strategy to build a more resilient network in a sustainable and affordable way for customers. Our climate change response can be found on our <b>website</b>.</li> </ul>  |

| Key theme   | What we've heard  | How we've responded  |
|---|---|--|
| <p><b>A transparent, socially responsible approach that ensures a sustainable solution for Tasmania</b></p> | <ul style="list-style-type: none"> <li>• Long-term, sustainable solutions are critical. Transparency in our approach is key to ensuring our plans and investments are aligned with future customer expectations and needs.</li> <li>• Clearly communicating when, how and why investments are made will help customers have greater understanding and trust in our business decisions.</li> <li>• Environmental impacts, the interests of Tasmanian communities and the benefits to customers should always be taken into consideration regarding price rises.</li> <li>• The need to invest in Tasmanian communities, increase training opportunities, invest in future skills, and drive jobs growth are all important, particularly for young people.</li> <li>• TasNetworks should consider innovative alternatives to network augmentation, such as community batteries to improve reliability in remote areas.</li> </ul> | <ul style="list-style-type: none"> <li>• As a signatory to the Energy Charter since November 2021, we are embedding the Charter's frameworks and principles into our business to ensure customers are at the centre of our planning and decision-making. See how we are tracking in our <b>2021-22 Energy Charter Disclosure Report</b>.</li> <li>• In November 2022, TasNetworks committed to analysis of a Net Zero target, including a high level emissions reductions plan and assessment.</li> <li>• TasNetworks has adopted a Task Force on Climate-related Financial Disclosures (TCFD) recommendation to increase the transparency around our management of climate-related risk and opportunity.</li> <li>• Our priority areas for action against the United Nations Sustainable Development Goals are affordability, reliability, climate change and the transition to renewable energy. These were identified in 2021-22 as the most important issues to communities and our business, and we have attempted to balance our investments to reflect these preferences.</li> <li>• We are planning to conduct community battery pilots with stakeholders in the 2024-2029 regulatory control period as part of our Future Distribution System Vision and Roadmap project, with the aim of identifying non-network solutions to network challenges.</li> </ul> |

# 5 Key revenue drivers

This section lists the major factors driving forecast revenue in the 2024-2029 regulatory control period:

- economic conditions driving increases in TasNetworks' rate of return
- rising inflation
- maintaining safe, reliable and secure services
- increasing insurance and cyber security costs.

## 5.1 Rate of return

A key component of TasNetworks' revenue allowances set by the AER is the return on capital. The return on capital is intended to provide network businesses with the revenue they need to service the interest on the borrowings they use to finance network assets, as well as earn a fair return on equity for the investors in those businesses. This return on capital is set by applying a rate of return – calculated using the AER's Rate of Return Instrument (**RoR Instrument**) – to the value of each network's regulatory asset base (**RAB**).

The RoR Instrument prescribes the methodologies and parameters used to estimate the rate of return. At the same time, it needs to reflect the impact of changing financial market conditions, which will drive the returns required by lenders (the return on debt) and equity investors (the return on equity). The rate of return that is set by the AER needs to have appropriate regard to the prevailing financial market conditions and outlook at the time of the revenue determination.

A key parameter in the AER's RoR Instrument is estimated using the Australian Government bond yield. This is reset close to the commencement of each regulatory control period based on prevailing market rates. At the start of TasNetworks' 2019-2024 regulatory control period, Australian Government bond yields were at historical lows. Based on Australian Government bond yields in September 2022, TasNetworks is forecasting an increase in the allowed rate of return for the 2024-2029 regulatory control period, compared to the 2019-2024 regulatory control period.

Table 2 shows the rates of return in the 2019-2024 regulatory control period.

**Table 2. Rate of return, 2019-20 – 2022-23**

| <b>Regulatory year</b>           | <b>2019-20</b> | <b>2020-21</b> | <b>2021-22</b> | <b>2022-23</b> |
|----------------------------------|----------------|----------------|----------------|----------------|
| Prescribed Transmission Services | 5.55%          | 5.33%          | 5.11%          | 4.99%          |
| Standard Control Services        | 5.28%          | 5.13%          | 4.97%          | 4.90%          |

TasNetworks' Combined Proposal estimates rates of return of 5.68 per cent for the transmission network and 5.71 per cent for the distribution network for 2024-25, the first year of the 2024-2029 regulatory control period. The AER's Draft Decision and Final Determination will utilise updated financial market data and an updated RoR Instrument, which is due to be published in February 2023.

Further information about the derivation of TasNetworks' indicative rate of return can be found in Attachment 4 Rate of return.

## 5.2 Rising inflation

In setting TasNetworks' total revenue allowances at the start of each regulatory control period, the AER must apply a forecast of expected inflation. This forecast is used for a number of purposes, including indexation of TasNetworks' transmission and distribution RABs. Inflation has both positive and negative impacts on our revenue allowance, and changes in forecast inflation will lead to volatility in our revenue allowance forecasts.

In its November 2022 Statement on Monetary Policy, the Reserve Bank of Australia (RBA) forecast headline inflation peaking at 8.0 per cent in December 2022, before gradually reducing to 3.2 per cent (just above the top end of the RBA's target band) in December 2024.<sup>4</sup> Consistent with the interest rate outlook, the future direction for inflation is highly uncertain.

Applying the AER's methodology for forecasting inflation, TasNetworks has applied a placeholder estimate of expected inflation during the 2024-2029 regulatory control period of 3.35 per cent. This will be updated by the AER in its Draft Decision and Final Determination to factor in the most recent RBA inflation forecasts available at that time.

An annual inflation rate of 3.35 per cent is higher than the inflation forecast of 2.42 per cent in the AER's regulatory determination for TasNetworks' 2019-2024 regulatory control period.<sup>5</sup>

Further information about the derivation of forecast inflation can be found in Attachment 4 Rate of return.

## 5.3 Maintaining safe, reliable and secure services

One of TasNetworks' key objectives is to ensure safe, reliable services for our customers by maintaining and replacing our network infrastructure and investing in the network to support growth in consumption and demand. A measure of the reliability of our service is network service performance. TasNetworks has adopted the following network service performance objective as noted in our Annual Planning Report:

**"Network service performance will be maintained at current overall network service levels, while service to poor-performing reliability areas will be improved to meet regulatory requirements."**

TasNetworks continually measures and monitors reliability at various levels of granularity, including statewide, community, feeder/transmission line, and individual asset. This analysis proactively identifies communities or assets that are trending towards unacceptable reliability levels for consideration for targeted investments – typically asset refurbishment or replacement activities – to reverse the trend and maintain acceptable reliability levels.

The network service performance of the transmission network is currently meeting the targets prescribed by the AER in the transmission Service Target Performance Incentive Scheme (STPIS), and TasNetworks is not proposing any specific, targeted capital investments for transmission reliability improvement. We will maintain existing levels of reliability at the lowest sustainable cost for our customers through the continuation of our risk-based approach to asset management that will constrain the transmission capital expenditure required to replace assets approaching end of life.

The reliability of the overall distribution network is broadly considered to be meeting TasNetworks' network service performance objective, and significant increases in capital investment for reliability improvement across Tasmania are not warranted. Similar to the transmission network, we will maintain existing levels of reliability at the lowest sustainable cost for our customers through the continuation of our risk-based approach to asset management.

4 *Statement on Monetary Policy August 2022*, Reserve Bank of Australia, <https://www.rba.gov.au/publications/smp/2022/aug/forecasts.html>

5 Overview | Final decision – TasNetworks transmission and distribution determination 2019–24, Australian Energy Regulator, 30 April 2019

Reliability in a small number of areas has consistently not met the targets prescribed by the AER in the distribution STPIS and/or the Office of the Tasmanian Economic Regulator in the Tasmanian Electricity Code (**TEC**). As part of its stakeholder consultation process, TasNetworks received strong and consistent feedback from customers regarding the importance of community reliability and has identified modest capital expenditure in the 2024-2029 regulatory control period to bring reliability back within acceptable bounds for these areas.

More information regarding our proposed capital expenditure to maintain safe, reliable services for the 2024-2029 regulatory control period can be found in Attachment 6 Capital expenditure.

## 5.4 Increasing insurance and cyber security costs

Like other network service providers (**NSPs**), TasNetworks has experienced significant increases in insurance premiums in recent years due to an increase in extreme fire and flooding events around Australia and the emergence of heightened cyber security threats. TasNetworks' independent expert, Lockton Companies Australia Pty Ltd, expects this trend to continue in the 2024-2029 regulatory control period given the prevailing insurance market conditions.

TasNetworks is also forecasting increased cyber security costs to:

- appropriately respond to and prevent the new emerging and ever evolving cyber security threats
- maximise the current investment made to date to continue its cyber security maturity journey
- support the increasing reliance on technology and services by instilling "security by design" principles
- continue to meet our compliance obligations, including the *Security of Critical Infrastructure Act 2018* (Commonwealth) and the *Privacy Act 1988* (Commonwealth)
- reduce the overall risk and impact of cyber-attack to our business, customers and community.

Consequently, the Combined Proposal seeks increased opex allowances for rising insurance premiums and increased opex and capex allowances for cyber security costs. More information on these costs can be found in Attachment 8 Operating expenditure.

# 6 Forecast capex

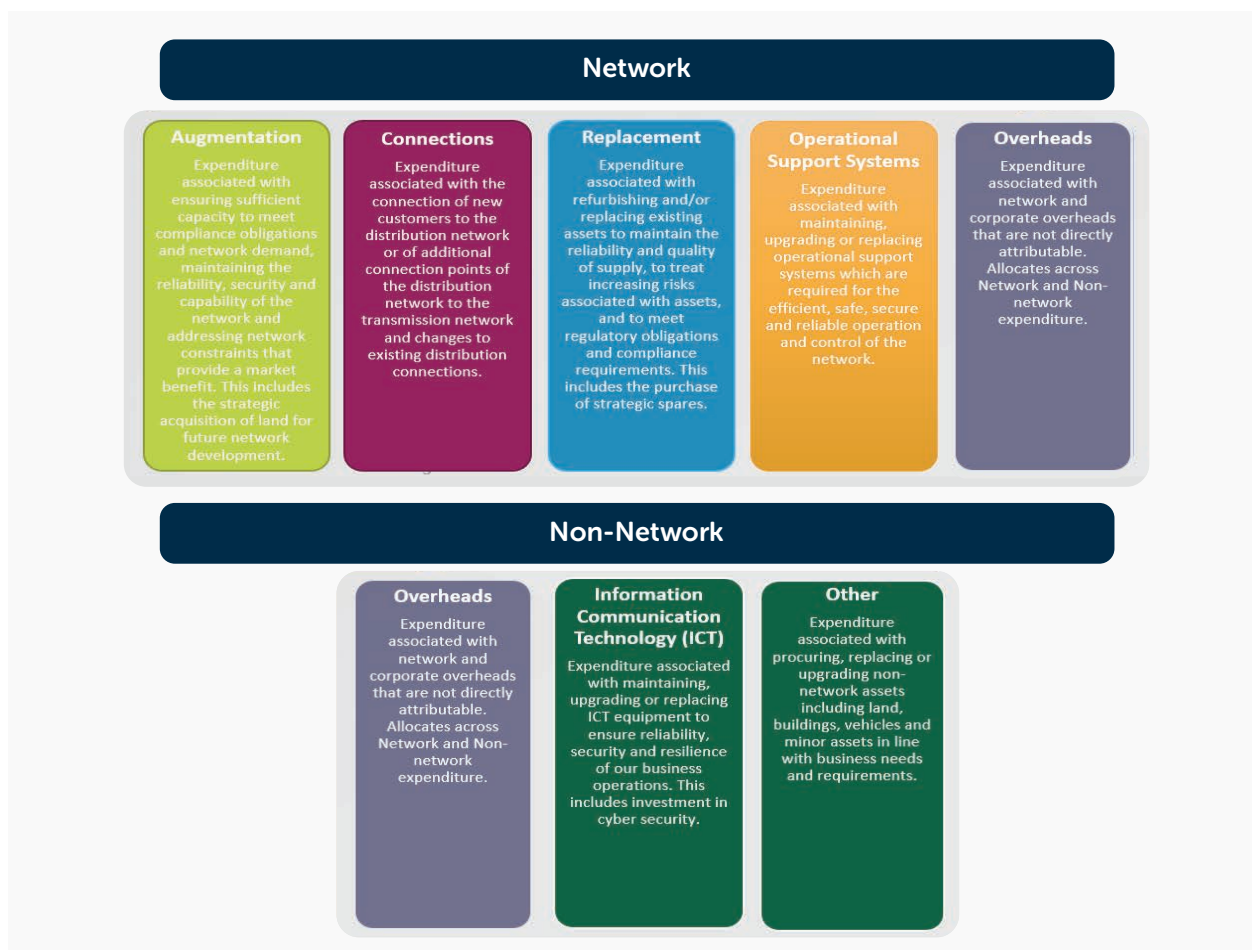
Our capex forecasts are developed with the overarching objective of maintaining a safe, reliable and secure network at a sustainable cost. Based on this objective, we have developed our transmission and distribution network forecasts for the 2024-2029 regulatory control period with three key considerations in mind:

- minimising upward pressure on customer pricing by keeping the level of forecast capex as low as sustainably possible – delivering affordability for our customers
- maintaining reliability for customers – delivering services that our customers value
- managing safety and risks associated with our operations – keeping our people and our customers safe.

Further information on TasNetworks’ capex forecast can be found in Attachment 7 Capital expenditure

We categorise our capital investments based on the classifications shown in Figure 7.

Figure 7. Capital expenditure forecast categories



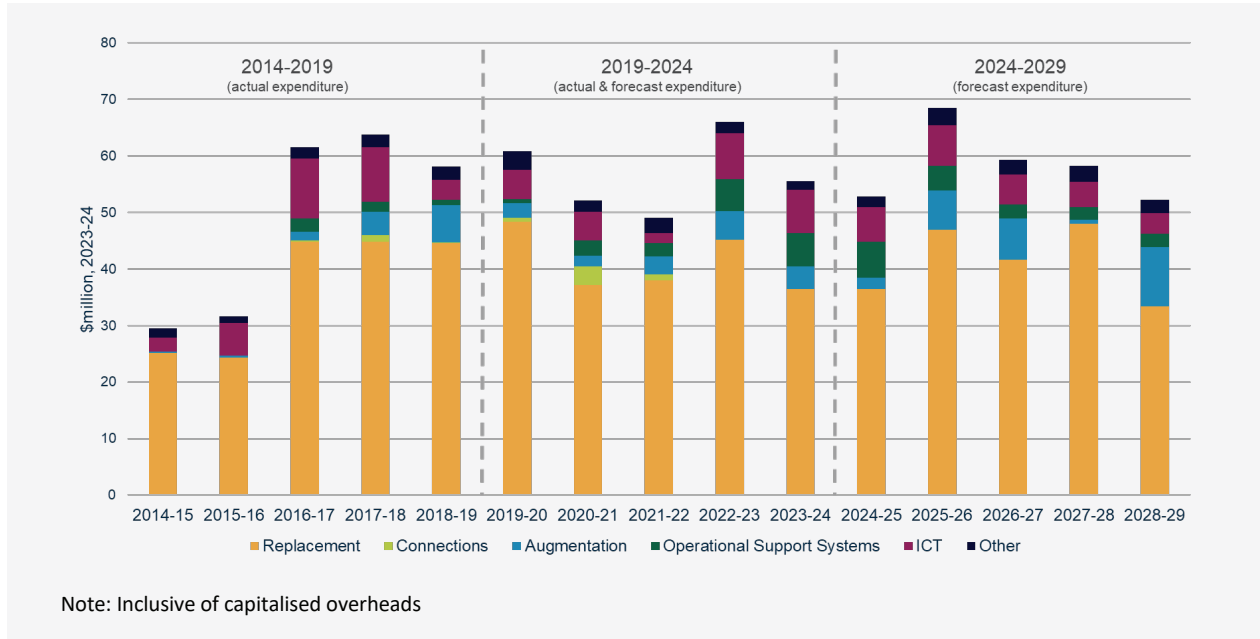
TasNetworks’ 2024-2029 expenditure forecasting methodology (EFM) outlines the forecasting methodology for each of the capex sub-categories.



## 6.1 Transmission capex forecast

Figure 8 presents TasNetworks' forecast transmission capex, showing how it compares against historical expenditure.

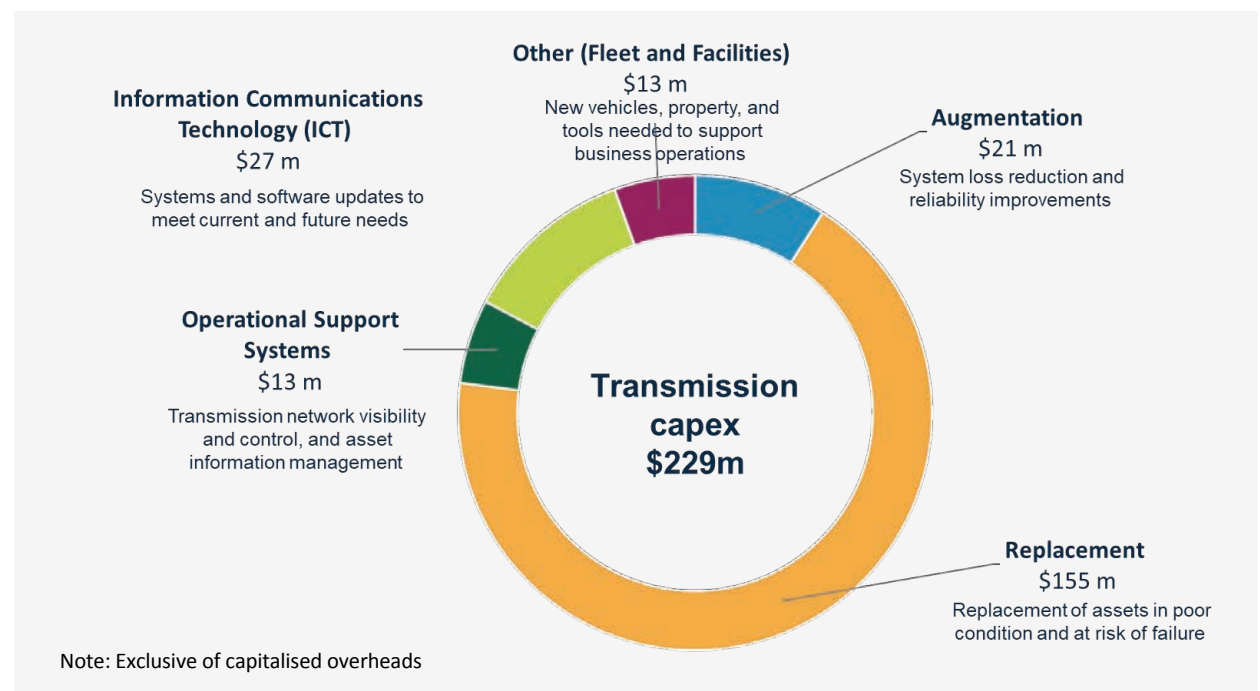
Figure 8. Transmission network capex – historical and forecast



Supporting affordability for our customers, and reflecting the reliability of the transmission network, TasNetworks' total transmission capex forecast for the 2024-2029 regulatory control period is \$290 million, representing a \$4 million reduction in capex compared with the AER's allowance for the 2019-2024 regulatory control period.

Figure 9 shows the mix of transmission network capital investments proposed in the 2024-2029 regulatory control period, excluding network overheads, together with a summary of the underlying drivers of that investment.

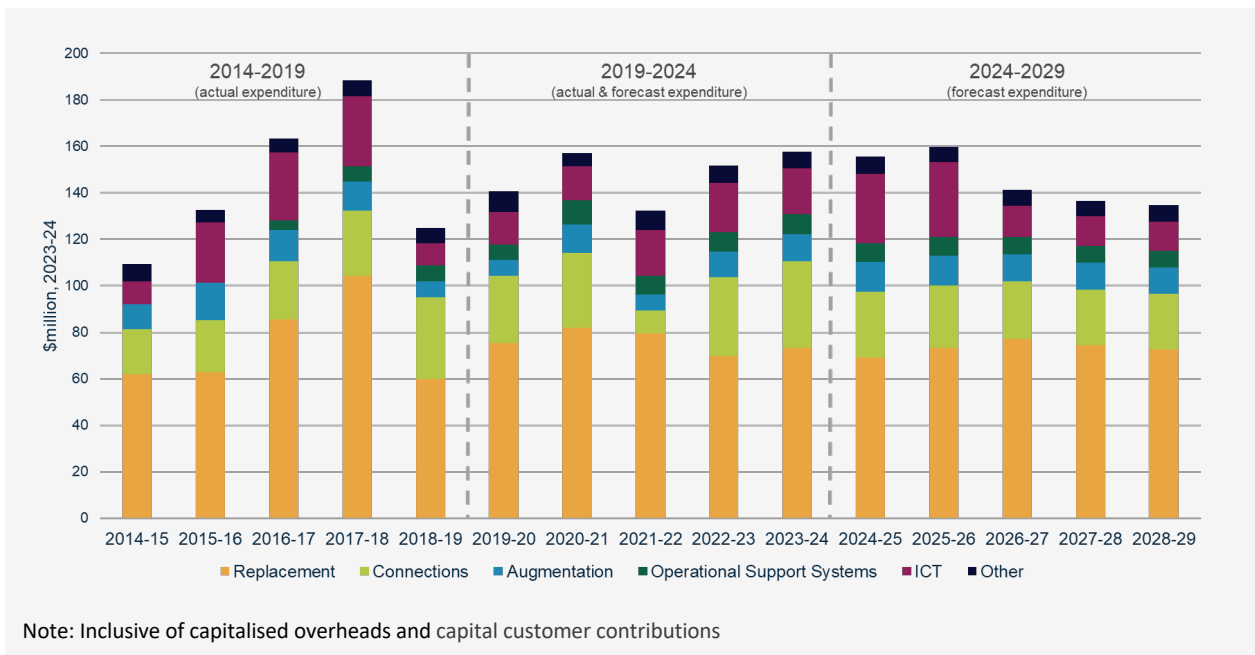
Figure 9. Transmission capex - investment mix



## 6.2 Distribution capex forecast

Figure 10 presents TasNetworks' forecast distribution capex, showing how it compares against historical expenditure.

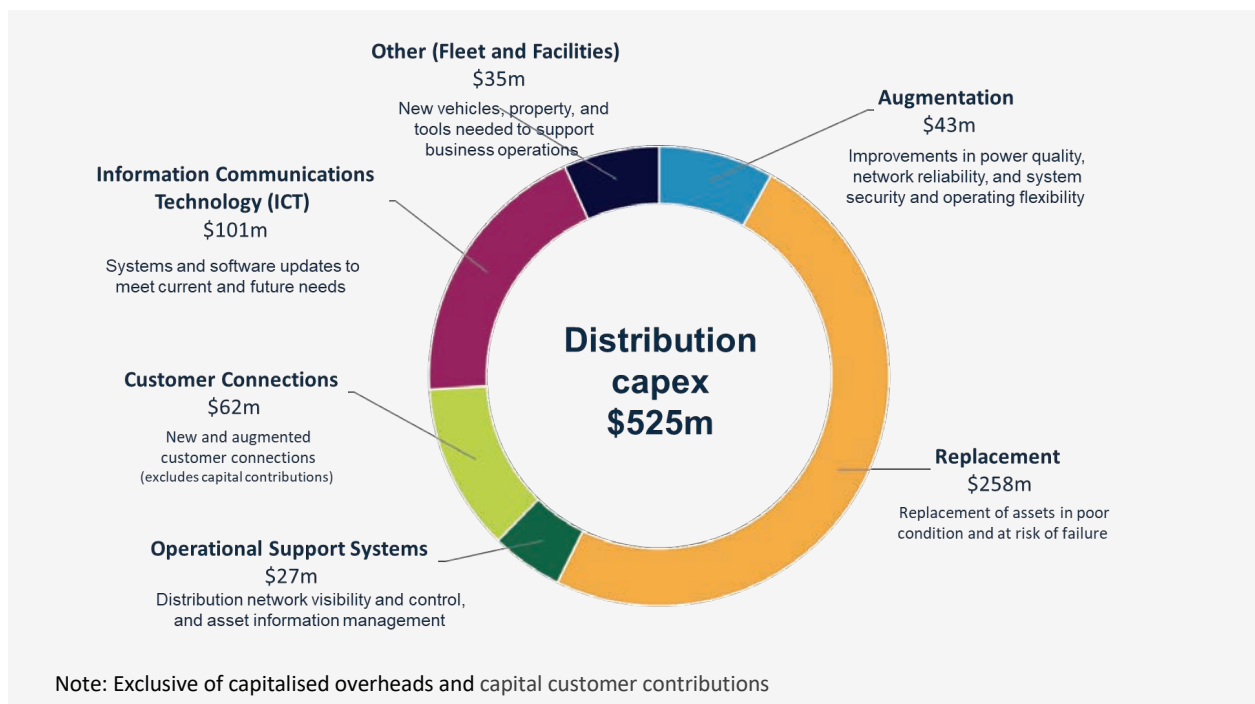
**Figure 10. Distribution network capex – historical and forecast**



Supporting affordability for our customers, TasNetworks' total distribution capex forecast for the 2024-2029 regulatory control period is \$831 million, representing a \$30 million reduction in capex compared with the AER's allowance for the current regulatory control period (2019-2024).

Figure 11 shows the mix of distribution network capital investments proposed in the 2024-2029 regulatory control period, excluding network overheads, together with a summary of the underlying drivers of that investment.

**Figure 11. Distribution capex - investment mix**



## 6.3 Investment in consumer energy resources

As discussed in section 3.2, it is projected that the implementation of solar PV and household batteries will continue to grow and the uptake of EVs will accelerate towards the end of this decade, but current forecasts predict insufficient uptake to cause widespread network constraints in the 2024-2029 regulatory control period for TasNetworks and our customers.

TasNetworks proposes a steady and modest investment in enabling ongoing connection of CER and improving our visibility of the low voltage network. Specifically, we forecast the need for \$6.3 million in capital investments for CER in the 2024-2029 regulatory control period, compared with forecast expenditure of \$0.2 million in the current regulatory control period.

Customers were presented with our CER forecast as part of TasNetworks' customer stakeholder consultation process and were supportive of our investment approach (see Attachment 1 Customer and stakeholder engagement summary for more information).

## 6.4 Delivering our forecast capex program

As of December 2022, TasNetworks employs about 1,100 full time equivalent staff to deliver transmission and distribution services, including alternative control services (ACS). This includes field workers, professional and paraprofessional staff (including, for example, engineers and technical officers), corporate and support staff.

TasNetworks' overarching program delivery approach is to:

- retain a base level of in-house resources to deliver our prescribed transmission and standard control distribution services
- leverage supplementary external suppliers to manage workload peaks and troughs, including that needed for any contingent projects that may be triggered.

Strategies are also applied to ensure the availability of an optimum mix of skills and resources required to deliver the forecast capex program. For example, we undertake annual programs to recruit and train powerline/substation apprentices and university graduates to maintain the skill and knowledge base of our trade skilled and professional workforce.

TasNetworks' forecast capex work program for the 2024-2029 regulatory control period is similar in quantum and resource requirement to the program being delivered in the current regulatory control period. As a result, TasNetworks considers that its resources and skills are sufficient and well positioned to deliver our proposed program for the 2024-2029 regulatory control period.

# 7 Key components of revenue allowance

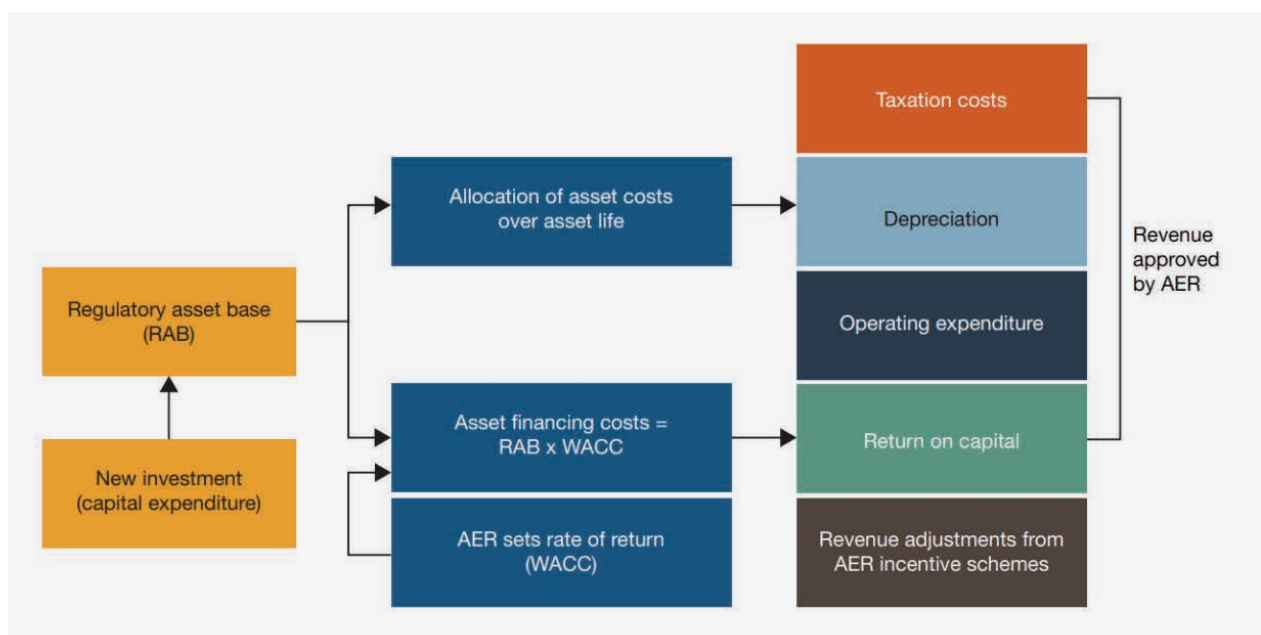
The revenue TasNetworks is allowed to earn through its network charges is intended to recover the cost of building, maintaining and operating both the transmission and distribution networks. It also provides TasNetworks with a fair return on its investment in the assets used to transmit and distribute electricity, and enables TasNetworks to recover the cost of that investment over time (through a depreciation allowance).

The AER sets the maximum revenues that TasNetworks can collect from customers over the course of each regulatory control period using a 'building block' approach that sums the efficient costs incurred by TasNetworks in delivering safe, reliable and secure network services. While the AER determines separate revenue allowances for the transmission and distribution networks, the revenue allowances for each network comprise essentially the same five building block components:

- a return on capital
- depreciation
- forecast opex
- the estimated cost of corporate income tax
- revenue adjustments resulting from the application of the AER's incentive schemes.

Forecasts of capex, the value of each network's RAB and the rate of return – which is set by the AER as part of its determination process – are key inputs into a number of the building blocks used to set maximum revenues (Figure 12).

Figure 12. Revenue building blocks



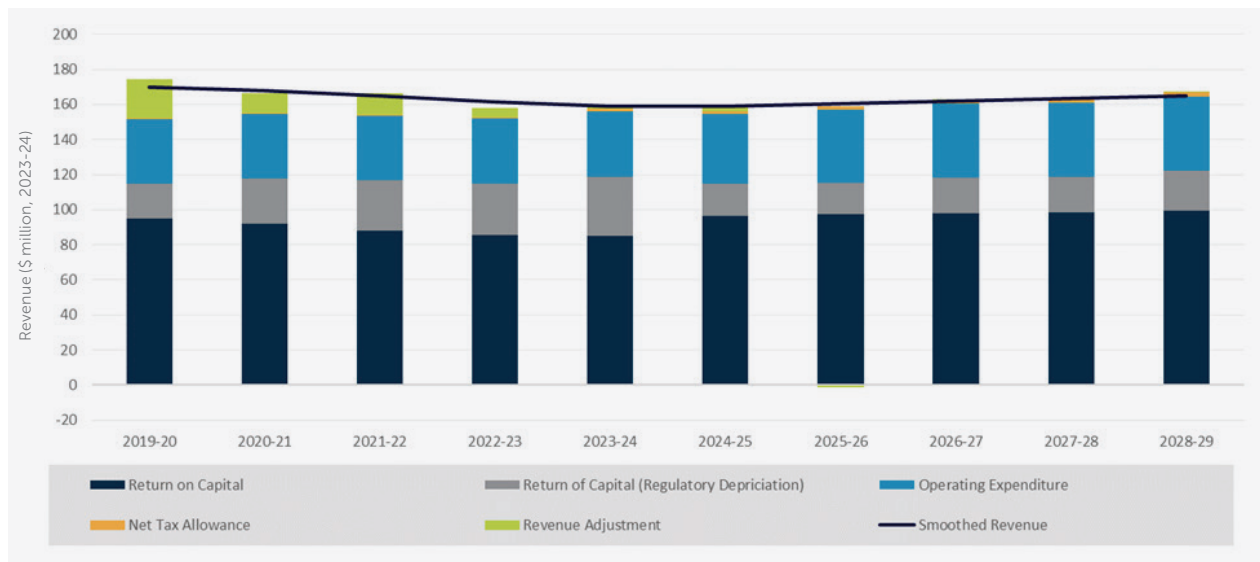
Source: AER

TasNetworks' Combined Proposal contains forecasts of each building block for the transmission and distribution networks in the 2024-2029 regulatory control period. The forecasts are consistent with the requirements of the NER, as well as any relevant guidelines, models and incentive schemes that the AER has developed under the NER.

The forecast total revenue requirement for our transmission network for the 2024-2029 regulatory control period is \$784 million (\$2023-24). This is about 4.8 per cent or \$39 million lower (in real terms) than our total revenue requirement for the 2019-2024 regulatory control period of \$823 million (\$2023-24).

Figure 13 presents annual revenue forecasts for our transmission network, in real terms, in each year of the 2024-2029 regulatory control period, compared with the 2019-2024 regulatory control period.

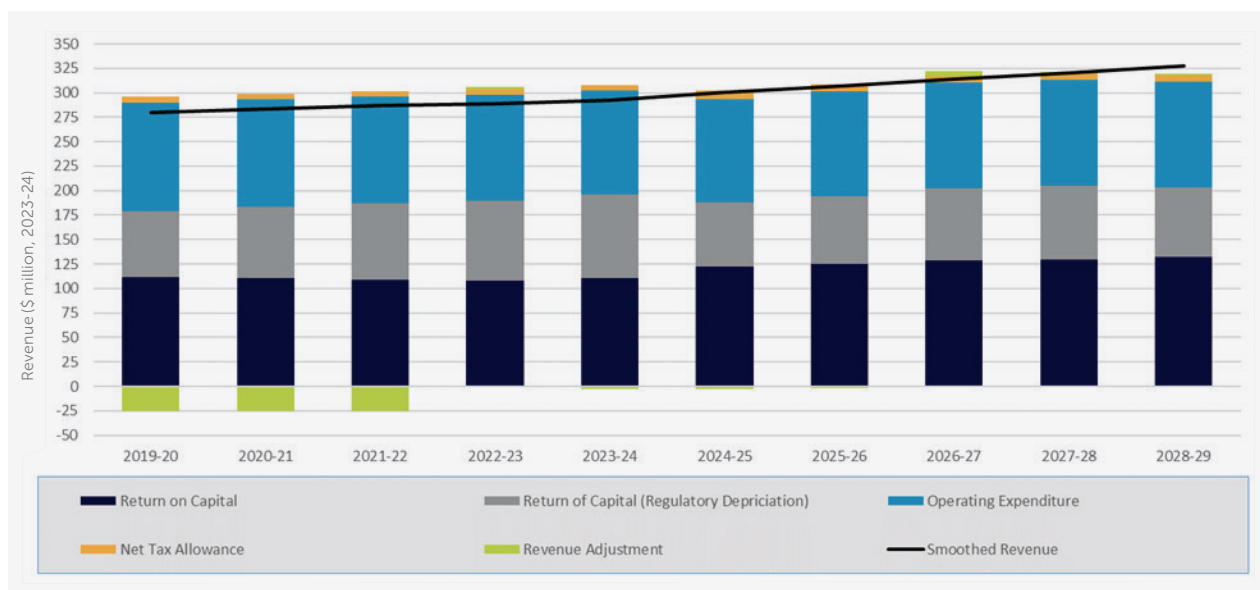
**Figure 13. Forecast transmission revenue (\$ million, 2023-24)**



The forecast total revenue requirement for our distribution network in the 2024-2029 regulatory control period is \$1,549.2 million (\$2023-24). TasNetworks' distribution network revenue allowance for the 2024-2029 regulatory control period is about 8.3 per cent (\$118.4 million) higher in real terms than the total revenue requirement for the distribution network in the 2019-2024 regulatory control period of \$1,430.8 million (\$2023-24). This is largely due to a forecast higher regulated rate of return in the 2024-2029 regulatory control period.

Figure 14 presents the annual revenue forecast for our distribution network, in real terms, for each year of the 2024-2029 regulatory control period and compares TasNetworks' forecast revenues with revenue outcomes in the 2019-2024 regulatory control period.

**Figure 14. Forecast distribution revenue (\$ million, 2023-24)**

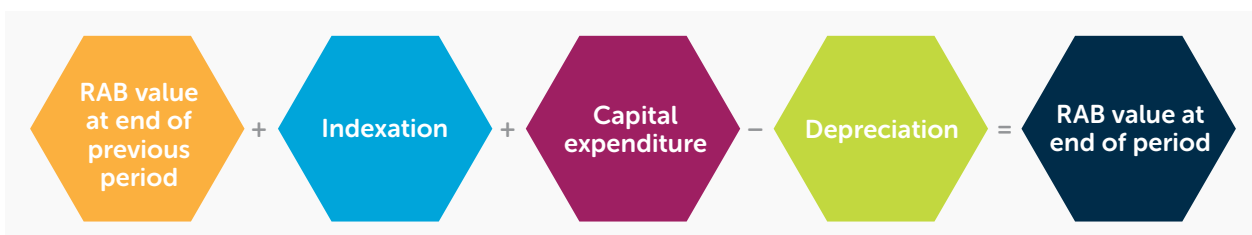


## 7.1 Regulatory asset base

The value of the RAB is the largest determinant of TasNetworks' revenue and, therefore, the network charges paid by the end users of electricity in Tasmania.

The NER requires the transmission and distribution building block proposals to each include a calculation of the RAB for each year of the 2019-2024 regulatory control period, derived using the AER's roll forward model (RFM).<sup>6</sup> In this way, the RFM is used to calculate the value of the RAB at the beginning of the 2024-2029 regulatory control period, which is fed into the AER's PTRM to forecast TasNetworks' RAB in the 2024-2029 regulatory control period.

Figure 15. RAB roll forward



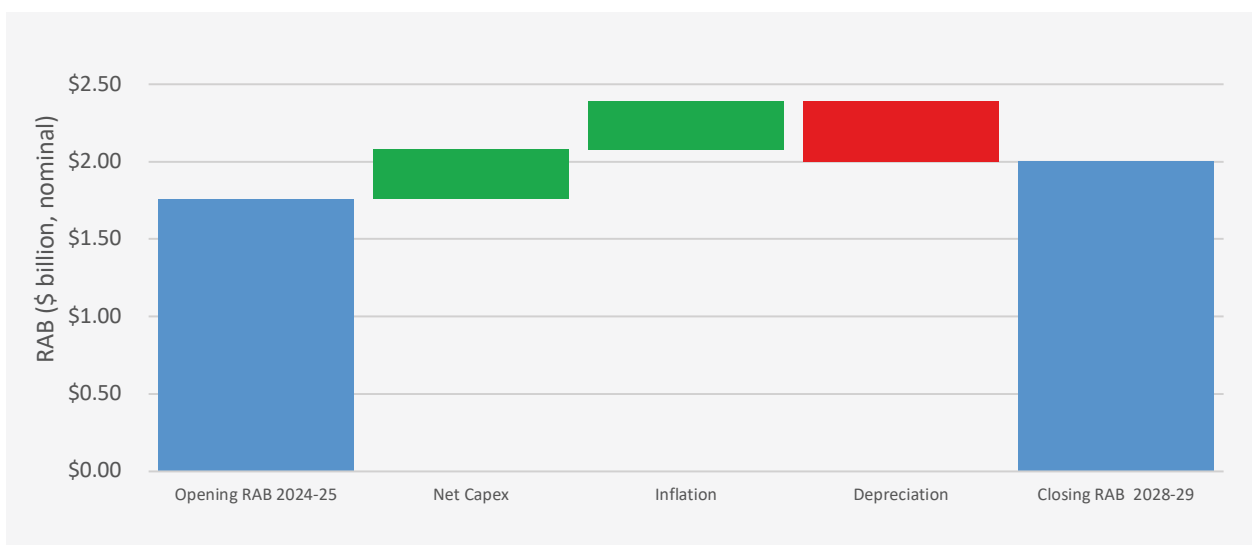
Over time, the values of our transmission and distribution network RABs have grown as we have made the investments needed to accommodate population and business growth in Tasmania and renew ageing infrastructure. We also face some comparatively unique challenges in ensuring that we invest in the assets needed to deliver safe and reliable network services across a geographically diverse service area (including servicing small populations in remote locations) without spending more than is needed.

Based on the value of TasNetworks' RABs in the 2019-2024 regulatory control period and forecasts of our capital expenditure and inflation, over the 2024-2029 regulatory control period our expectations are as follows:

- the value of TasNetworks' transmission network RAB is projected to increase by 13.8 per cent in nominal terms or decrease marginally (0.2 per cent) in real terms
- the value of our distribution RAB is projected to increase by 20.3 per cent in nominal terms or 5.4 per cent increase in real terms.

Figure 16 shows the contributors to the forecast change in the value of TasNetworks' transmission network RAB over the course of the 2024-2029 regulatory control period.

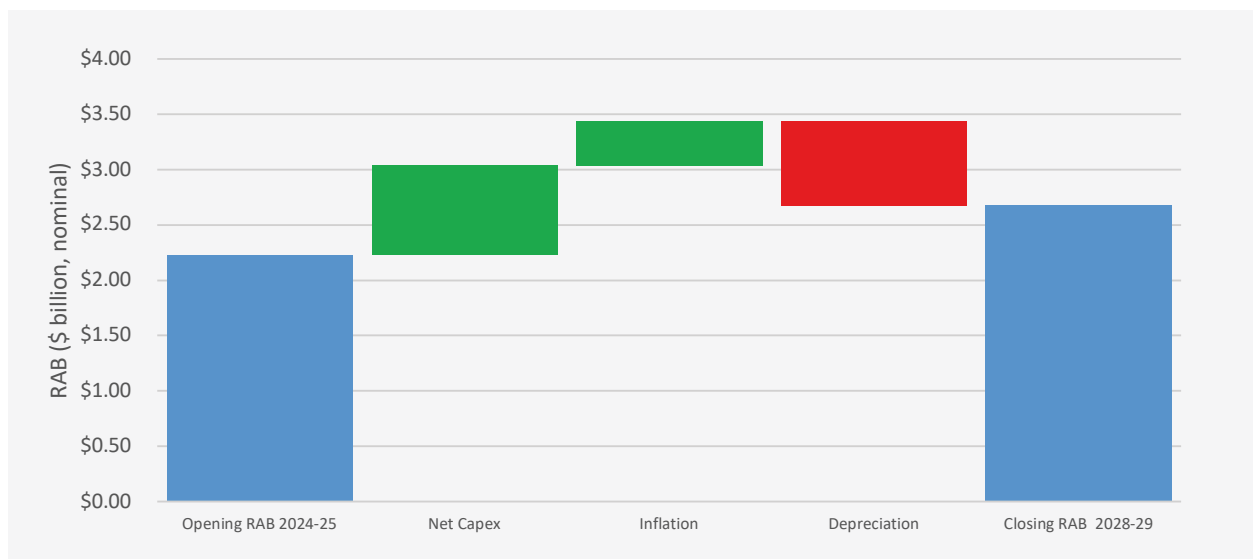
Figure 16. Drivers of transmission RAB value (\$ billion, nominal)



6 Clause S6.1.3(7) and Clause 6A.5.4

Figure 17 shows the contributors to the forecast change in the value of TasNetworks' distribution network RAB over the course of the 2024-2029 regulatory control period.

**Figure 17. Drivers of distribution RAB value (\$ billion, nominal)**



The roll forward of TasNetworks' transmission RAB for prescribed transmission services over the 2024-2029 regulatory control period is set out in Table 3.

**Table 3. Roll forward of transmission network RAB (\$ million, nominal)**

|   | 2024-25        | 2025-26        | 2026-27        | 2027-28        | 2028-29        |
|---|----------------|----------------|----------------|----------------|----------------|
| <b>Opening RAB</b>  | 1,758.7        | 1,799.0        | 1,858.8        | 1,908.8        | 1,958.8        |
| <b>Actual/estimated capital expenditure, net of contributions and disposals</b> | 54.4           | 73.3           | 65.6           | 66.6           | 61.6           |
| <b>Indexation on opening RAB</b>  | 58.9           | 60.2           | 62.2           | 63.9           | 65.6           |
| <b>Less: Straight-line depreciation</b>   | 73.0           | 73.7           | 77.8           | 80.5           | 84.3           |
| <b>Closing RAB</b>  | <b>1,799.0</b> | <b>1,858.8</b> | <b>1,908.8</b> | <b>1,958.8</b> | <b>2,001.7</b> |

The roll forward of TasNetworks' distribution RAB over the 2024-2029 regulatory control period is set out in Table 4 and reflects forecasts for net capital expenditure, depreciation and indexation.

**Table 4. Roll forward of distribution network RAB (\$ million, nominal)**

|   | 2024-25        | 2025-26        | 2026-27        | 2027-28        | 2028-29        |
|---|----------------|----------------|----------------|----------------|----------------|
| <b>Opening RAB</b>  | 2,223.0        | 2,323.7        | 2,429.7        | 2,512.5        | 2,591.1        |
| <b>Actual/estimated capital expenditure, net of contributions and disposals</b> | 162.6          | 173.6          | 158.5          | 158.1          | 160.5          |
| <b>Indexation on opening RAB</b>  | 74.4           | 77.8           | 81.4           | 84.1           | 86.8           |
| <b>Less: Straight-line depreciation</b>   | 136.3          | 145.4          | 157.1          | 163.6          | 164.3          |
| <b>Closing RAB</b>  | <b>2,323.7</b> | <b>2,429.7</b> | <b>2,512.5</b> | <b>2,591.1</b> | <b>2,674.0</b> |

More information about TasNetworks' forecasts for the roll forward of TasNetworks' RAB for the provision of prescribed transmission services and the RAB for the provision of standard control services in the 2024-2029 regulatory control period can be found in Attachment 3 Regulatory asset base.

## 7.2 Rate of return

Electricity networks are asset-intensive businesses, requiring thousands of poles, wires and transformers to convey electricity from the point of generation to the point at which it is used. Networks therefore involve significant capital outlays. A key component of the revenue allowances set for TasNetworks by the AER is, consequently, the return on capital TasNetworks receives on its investment in the assets used to provide prescribed transmission services and standard control distribution services.

This return on capital is set by applying a rate of return – calculated using the AER’s RoR Instrument – to the value of each network’s RAB. The AER is required to review and publish a new RoR Instrument every four years and each RoR Instrument is binding for all revenue determinations made during the subsequent four years. The AER’s 2022 RoR Instrument is expected to be published in February 2023. We have, therefore, applied the AER’s 2018 RoR Instrument for the purpose of determining the ‘placeholder’ rate of return estimates that appear in this proposal. We recognise that the 2022 RoR Instrument will be used to determine the rates of return that will ultimately apply to our distribution and transmission networks for the 2024-2029 regulatory control period.

Applying the 2018 RoR Instrument, our indicative rate of return for the first year of the 2024-2029 regulatory control period is 5.68 per cent for the transmission network and 5.71 per cent for the distribution network. These estimated rates of return are based on financial market data up until the end of September 2022 and both are significantly higher than the rates of return applying in 2022-23, reflecting changes in market interest rates and Australian Government bond rates.

## 7.3 Return on capital

Using the estimated RAB values and the placeholder indicative rates of return, our return on capital forecasts for each network in the 2024-2029 regulatory control period are presented in Table 5 and Table 6.

**Table 5. Transmission network return on capital (\$ million, nominal)**

|                   | 2024-25   | 2025-26   | 2026-27   | 2027-28   | 2028-29   | Total   |
|-------------------|-----------|-----------|-----------|-----------|-----------|---------|
| Opening RAB       | \$1,758.7 | \$1,799.0 | \$1,858.8 | \$1,908.8 | \$1,958.8 |         |
| Rate of return    | 5.68%     | 5.80%     | 5.85%     | 5.93%     | 6.03%     |         |
| Return on capital | \$99.8    | \$104.4   | \$108.8   | \$113.1   | \$118.1   | \$544.2 |

**Table 6. Distribution network return on capital (\$ million, nominal)**

|                   | 2024-25   | 2025-26   | 2026-27   | 2027-28   | 2028-29   | Total   |
|-------------------|-----------|-----------|-----------|-----------|-----------|---------|
| Opening RAB       | \$2,223.0 | \$2,323.7 | \$2,429.7 | \$2,512.5 | \$2,591.1 |         |
| Rate of return    | 5.71%     | 5.78%     | 5.85%     | 5.93%     | 6.03%     |         |
| Return on capital | \$126.9   | \$134.3   | \$142.2   | \$148.9   | \$156.3   | \$708.5 |

For more information about TasNetworks’ estimates of the rate of return that will apply to its transmission and distribution networks in the 2024-2029 regulatory control period, see Attachment 4 Rate of return.



## 7.4 Regulatory depreciation

Depreciation is the term used to describe the reduction in the value of assets that occurs over time due to factors such as wear and tear and obsolescence. In the context of a building block revenue determination, the inclusion of depreciation as one of the building blocks is intended to enable networks to recover the cost of their capital investments over the expected useful lives of the assets associated with the provision of network services.

We have calculated depreciation using the year-by-year tracking approach approved by the AER for our 2019-2024 regulatory control period. We continue to apply the same standard asset lives and straight-line depreciation approach previously approved by the AER.

Our regulatory depreciation (also referred to as return of capital) in any given year is calculated by deducting the inflation adjustment made to the RAB from forecast depreciation. Our regulatory depreciation forecasts for each network are presented in Table 7 and Table 8.

**Table 7. Transmission network depreciation (\$ million, nominal)**

|                                   | 2024-25     | 2025-26     | 2026-27     | 2027-28     | 2028-29     | Total       |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Straight-line depreciation</b> | 73.0        | 73.7        | 77.8        | 80.5        | 84.3        | 389.4       |
| <b>Indexation on opening RAB</b>  | (58.9)      | (60.2)      | (62.2)      | (63.9)      | (65.6)      | (310.9)     |
| <b>Return of capital</b>          | <b>14.2</b> | <b>13.5</b> | <b>15.6</b> | <b>16.6</b> | <b>18.7</b> | <b>78.5</b> |

**Table 8. Distribution network depreciation (\$ million, nominal)**

|                                   | 2024-25     | 2025-26     | 2026-27     | 2027-28     | 2028-29     | Total        |
|-----------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>Straight-line depreciation</b> | 136.3       | 145.4       | 157.1       | 163.6       | 164.3       | 766.8        |
| <b>Indexation on opening RAB</b>  | (74.4)      | (77.8)      | (81.4)      | (84.1)      | (86.8)      | (404.5)      |
| <b>Return of capital</b>          | <b>61.9</b> | <b>67.6</b> | <b>75.7</b> | <b>79.5</b> | <b>77.6</b> | <b>362.4</b> |

More information about TasNetworks' forecast of regulatory depreciation is in Attachment 5 Regulatory depreciation.

## 7.5 Forecast opex

Opex refers to the operational and other non-capital expenditure required to operate and maintain our transmission and distribution networks, and includes the costs associated with the following important activities:

- ongoing inspection, maintenance, and repair of network assets
- control of vegetation growth close to our assets, including poles and wires, to reduce safety hazards and interruptions to supply
- fault and emergency repairs and supply restoration arising from adverse events like storms and equipment failures
- customer service and corporate support activities like procurement, as well as the financial, legal and regulatory reporting required to meet our legislative obligations.

Our opex forecasts have been developed using the AER's preferred base-step-trend methodology. This is a three-step process, as shown in Figure 18.

**Figure 18. Base-step-trend approach to opex forecasting**



TasNetworks' 2024-2029 EFM provides a description of each element of the base-step-trend approach.

A separate opex forecast is developed for each of our transmission and distribution networks. Table 11 shows the total TasNetworks transmission and distribution opex forecasts using the base-step-trend approach.

Table 9. TasNetworks' forecast opex (\$ million, 2023-24)

|   | Transmission | Distribution |
|---|--------------|--------------|
| <b>Base opex (2024-2029)</b>                              | <b>185.0</b> | <b>457.7</b> |
| <b>Total rate of change (2024-2029)</b>                   | <b>(2.0)</b> | <b>2.9</b>   |
| <b>Step changes</b>                                       |              |              |
| <i>Cyber security</i>                                     | 15.4         | 3.9          |
| <i>Insurance</i>  | 6.7          | 19.1         |
| <b>Total step changes (2024-2029)</b>                     | <b>22.1</b>  | <b>23.0</b>  |
| <b>Category specific forecasts</b>                        |              |              |
| <i>Debt raising costs</i>                                 | 4.2          | 5.5          |
| <i>Other category specific forecasts</i>                  | 0.0          | 51.9         |
| <b>Total category specific forecasts</b>                  | <b>4.2</b>   | <b>57.4</b>  |
| <b>Total (base trend + rate of change + step changes)</b> | <b>209.3</b> | <b>541.0</b> |

Figure 19 and Figure 20 compare TasNetworks' opex forecasts for the transmission and distribution networks, respectively, to previous opex allowances approved by the AER.

Figure 19. Transmission – historical and forecast opex (\$ million, 2023-24)

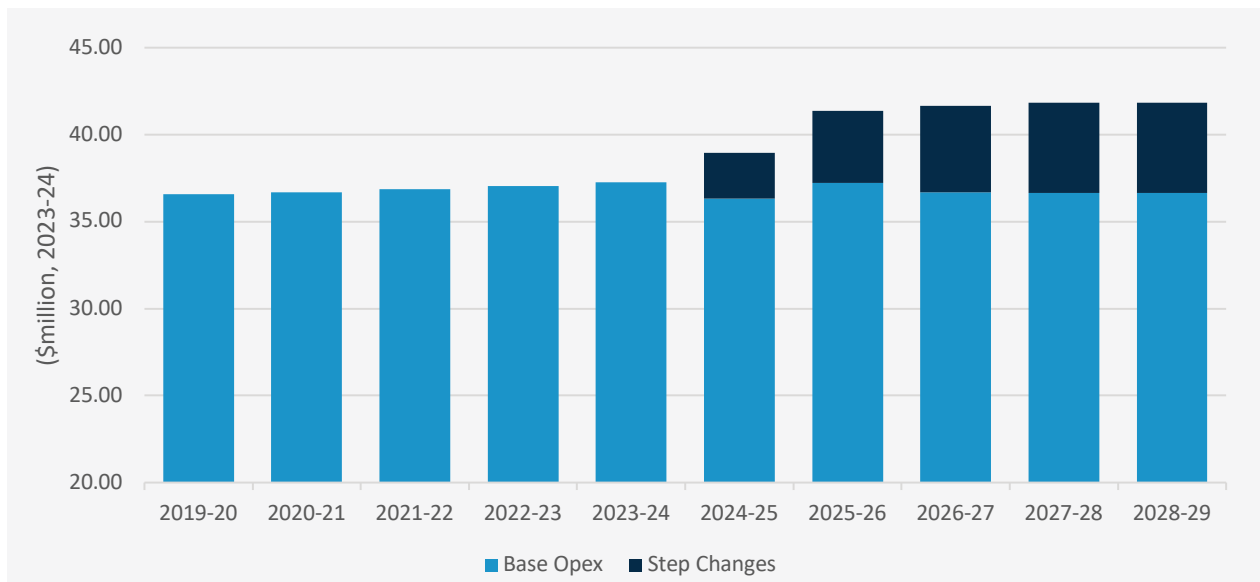
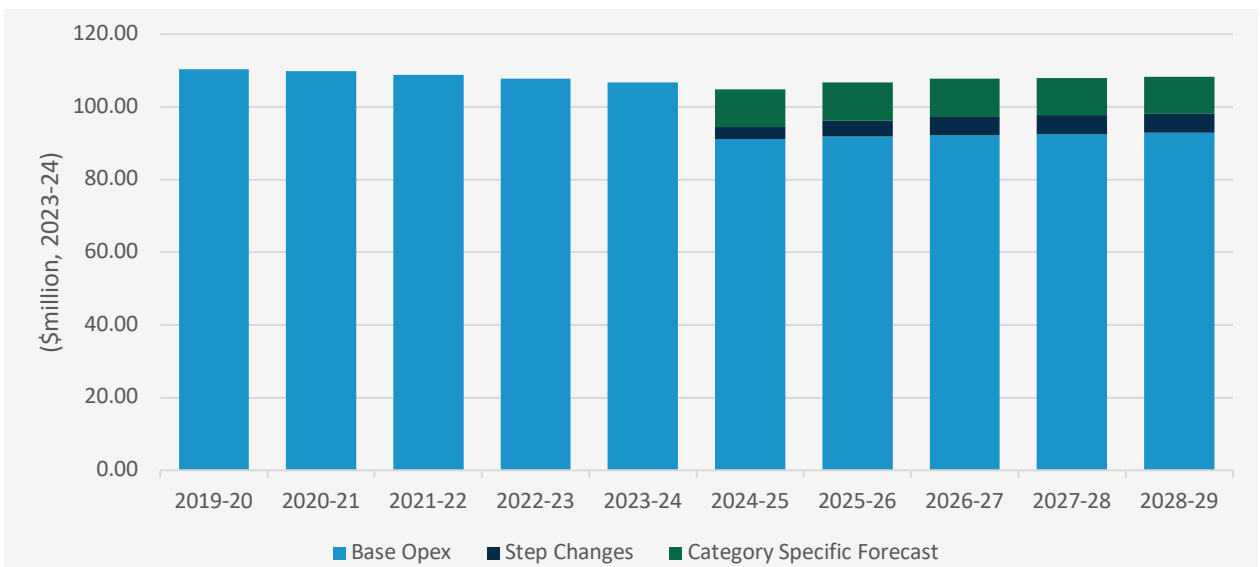


Figure 20. Distribution – historical and forecast opex (\$ million, 2023-24)



### 7.5.1 Base year

For both networks, we are proposing to adopt 2021-22 as our base year, on the basis that our opex in that year was efficient and provides a sound basis for projecting future operating expenditure requirements.

TasNetworks' transmission and distribution opex efficiency is demonstrated in the AER's annual benchmarking reports, which consistently show TasNetworks among the group considered by the AER to have above-average opex efficiency. Against the AER's opex multilateral partial factor productivity (MPFP) measure, TasNetworks joined the higher performing transmission networks in 2015. In the AER's 2022 report, TasNetworks had the second highest opex MPFP among the five transmission network operators in the NEM. For distribution, the AER's 2022 report assessed TasNetworks as the fourth (of 13) most efficient distribution network in the NEM in terms of opex efficiency.

### 7.5.2 Step changes

Two key areas of input cost pressures that are relevant to both our transmission and distribution network are forecast increases in insurance costs and cyber security expenditure.

We are, therefore, proposing step change increases in opex for both transmission and distribution to cater for increases in our insurance and cyber security costs.

#### 7.5.2.1 Insurance

TasNetworks, like other NSPs, has experienced significant increases in insurance premiums in recent years due to the increasing frequency of extreme fire and flooding events, as well as the threats to cyber security. This trend is forecast to continue in the remainder of the 2019-2024 regulatory control period and into the 2024-2029 regulatory control period. TasNetworks has sought expert advice to refine our insurance premium forecasts for our Combined Proposal.

#### 7.5.2.2 Cyber security / security of critical infrastructure

The proposed step change in cyber security will allow TasNetworks to:

- appropriately respond to and prevent the new emerging and ever evolving cyber security threats, which could potentially severely compromise our delivery of network services
- maximise the current investment made to date to continue our cyber security maturity journey
- support the increasing reliance on technology and services by instilling "security by design" principles

- continue to meet our compliance obligations including those imposed under the Commonwealth's *Security of Critical Infrastructure Act 2018* and *Privacy Act 1988*
- reduce the overall risk and impact of cyber-attack to our business, customers and community.

The allocation of cyber security expenditure between the transmission and distribution networks relates to where investments are required, given our legislative compliance obligations.

### 7.5.3 Rate of change

TasNetworks has proposed a three per cent efficiency dividend to apply to the base year expenditure for both networks in the first year of the 2024-2029 regulatory control period (2024-25) with a further 0.5 per cent efficiency applied in each year of the regulatory control period thereafter. The efficiency dividend largely offsets increases in output growth and real price growth.

### 7.5.4 Category specific forecasts

For any categories of opex for which base year expenditure does not reflect recurrent costs, category specific forecasts are prepared outside of the base-step-trend methodology.

Debt raising costs are a category specific forecast for transmission and distribution. In relation to distribution, TasNetworks has developed separate forecasts for Guaranteed Service Level (GSL) payments, the NEM levy and the Electrical Safety Inspection (ESI) levy. This is consistent with forecasting of these costs in the 2019-2024 regulatory control period.

## 7.6 Corporate tax

The corporate income tax allowance approved by the AER is calculated using the Australian corporate tax rate of 30 per cent, reduced by a forecast benefit to network owners of imputation credits.

Our forecasts of the taxation building block for both the transmission network and the distribution network are presented in Table 10 and Table 11.

**Table 10. Transmission network taxation (\$ million, nominal)**

|                             | 2024-25    | 2025-26    | 2026-27    | 2027-28    | 2028-29    | Total       |
|-----------------------------|------------|------------|------------|------------|------------|-------------|
| Corporate tax               | 3.9        | 5.3        | 4.7        | 5.6        | 7.2        | 26.7        |
| Value of imputation credits | (2.3)      | (3.1)      | (2.8)      | (3.3)      | (4.2)      | (15.6)      |
| <b>Taxation</b>             | <b>1.6</b> | <b>2.2</b> | <b>2.0</b> | <b>2.3</b> | <b>3.0</b> | <b>11.1</b> |

**Table 11. Distribution network taxation (\$ million, nominal)**

|                             | 2024-25    | 2025-26    | 2026-27    | 2027-28    | 2028-29    | Total       |
|-----------------------------|------------|------------|------------|------------|------------|-------------|
| Corporate tax               | 22.4       | 18.1       | 16.8       | 18.4       | 17.9       | 93.6        |
| Value of imputation credits | (13.1)     | (10.6)     | (9.8)      | (10.8)     | (10.5)     | (54.8)      |
| <b>Taxation</b>             | <b>9.3</b> | <b>7.5</b> | <b>7.0</b> | <b>7.7</b> | <b>7.4</b> | <b>38.9</b> |

## 7.7 Revenue adjustments and incentive schemes

We will continue to be subject to the following AER incentive schemes, which are intended to encourage us to continue implementing efficiencies in our expenditure, as well as continuing to strive to enhance our service performance. These schemes include:

- the Efficiency Benefit Sharing Scheme (**EBSS**) – provides financial incentives for us to achieve and maintain opex efficiency improvements
- the Capital Expenditure Sharing Scheme (**CESS**) – provides financial incentives to make capex efficiency gains
- Service Target Performance Incentive Scheme (**STPIS**) – primarily provides financial incentives to maintain or improve the reliability of our transmission and distribution network services
- the Demand Management Incentive Scheme (**DMIS**) and Demand Management Innovation Allowance (**DMIA**) – provides incentives to undertake efficient demand management solutions in operating our networks and a small amount of funding for innovative trials or pilots that will deliver benefits to Tasmanian electricity customers
- the Customer Service Incentive Scheme (**CSIS**) – provides financial incentives to maintain or improve services to customers that they value.

Any capital and operating efficiency gains or losses arising from the EBSS and CESS in the 2019-2024 regulatory control period are carried over as an adjustment to the total allowable revenue for each of our networks in the 2024-2029 regulatory control period.

### 7.7.1 Expenditure incentive schemes

Our EBSS and CESS carryover amounts for each network from the 2019-2024 regulatory control period are summarised in Table 12 and Table 13. Refer to Attachment 10 Efficiency benefit sharing scheme and Attachment 11 Capital expenditure sharing scheme for more information.

**Table 12. Transmission EBSS and CESS carryover amounts (\$ million, nominal)**

|                            | 2024-25    | 2025-26      | 2026-27    | 2027-28    | 2028-29    | Total      |
|----------------------------|------------|--------------|------------|------------|------------|------------|
| EBSS carryover             | 2.5        | (2.2)        | (0.2)      | 0.0        | 0.0        | 0.1        |
| CESS carryover             | 0.6        | 0.7          | 0.7        | 0.7        | 0.7        | 3.4        |
| <b>Revenue adjustments</b> | <b>3.2</b> | <b>(1.5)</b> | <b>0.5</b> | <b>0.7</b> | <b>0.7</b> | <b>3.5</b> |

**Table 13. Distribution EBSS and CESS carryover amounts (\$ million, nominal)**

|                            | 2024-25      | 2025-26      | 2026-27    | 2027-28    | 2028-29    | Total      |
|----------------------------|--------------|--------------|------------|------------|------------|------------|
| <b>EBSS carryover</b>      | (3.6)        | (3.4)        | 4.2        | 0.0        | 0.0        | (2.8)      |
| <b>CESS carryover</b>      | 2.2          | 2.2          | 2.3        | 2.4        | 2.4        | 11.6       |
| <b>Revenue adjustments</b> | <b>(1.5)</b> | <b>(1.2)</b> | <b>6.5</b> | <b>2.4</b> | <b>2.4</b> | <b>8.7</b> |

## 7.7.2 Service Target Performance Incentive Scheme

### 7.7.2.1 Transmission STPIS

Transmission STPIS is made up of three components:

- service component
- market impact component (**MIC**)
- network capability component.

TasNetworks' proposed performance targets for the transmission STPIS parameters satisfy the requirements of version 5 of the STPIS. In calculating our proposed performance targets, we have applied the methodologies specified in the scheme and in the AER's Framework and Approach for TasNetworks.

We have used performance data for the period 1 January 2017 to 31 December 2021 to set the service component targets and data for the period 1 January 2015 to 31 December 2021 to set the MIC parameters. TasNetworks considers the current design of the MIC is not suited to the current and future network operational conditions in Tasmania and has proposed an alternative for consideration for the 2024-2029 regulatory control period. TasNetworks recognises this is a departure from the current scheme but believes our proposal will lead to better outcomes for customers due to greater customer consultation during the outage planning process.

For the network capability component, a proposed network capability incentive parameter action plan has been developed in accordance with the requirements of version 5 of the STPIS. We have currently identified one low-cost priority project to improve network capability in the 2024-2029 regulatory control period. The Australian Energy Market Operator (**AEMO**) has reviewed this project and agreed with the assessment of the proposed project need, improvement targets and expected material.

Full details on our proposed transmission STPIS, including our revised MIC proposal, can be found in Attachment 12 Service target performance incentive scheme.

### 7.7.2.2 Distribution STPIS

TasNetworks proposes that the AER apply the components of version 2.0 of the STPIS to TasNetworks for the 2024-2029 regulatory control period, noting that TasNetworks is proposing to apply the CSIS to replace the customer service parameter of the STPIS.

We have used performance data for the period 1 July 2017 to 30 June 2022 to set targets for the STPIS and propose setting the major event day threshold using the methodology outlined in version 2.0 of the STPIS. Full details on our proposed distribution STPIS can be found in Attachment 12 Service Target Performance Incentive Scheme

## 7.7.3 Demand Management Incentive Scheme and Demand Management Innovation Allowance

DMIS will apply to TasNetworks' distribution network in the 2024-2029 regulatory control period. The DMIS operates separately to the Revenue Determination, via an application, reporting and approval process as set out in the documentation of the scheme.<sup>7</sup> There are no revenue adjustments to be determined as part of TasNetworks' Revenue Determination, with applications being required to be made during the 2024-2029 regulatory control period as potential projects arise.

The DMIA will apply to TasNetworks' distribution and transmission networks in the 2024-2029 regulatory control period. For the 2024-2029 regulatory control period the proposed DMIA allowances are shown in Table 14.

<sup>7</sup> AER, Demand management incentive scheme, Electricity distribution network service providers, December 2017

**Table 14. Proposed DMIAM allowance for the 2024-2029 regulatory control period (\$ million, 2023-24)**

|                          | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | Total       |
|--------------------------|---------|---------|---------|---------|---------|-------------|
| <b>Distribution DMIA</b> | 0.47    | 0.47    | 0.48    | 0.48    | 0.48    | <b>2.38</b> |
| <b>Transmission DMIA</b> | 0.20    | 0.20    | 0.20    | 0.20    | 0.20    | <b>1.01</b> |

Further information can be found in Attachment 13 Demand management incentives and allowance.

#### **7.7.4 Customer Service Incentive Scheme**

In July 2020, the AER introduced the CSIS to encourage distribution network service providers (**DNSPs**) to engage with customers to identify services they value and set targets to improve these services. Following engagement with our customers and stakeholders, TasNetworks proposes to adopt a CSIS to replace the customer service component of the STPIS – which measures the number of fault calls answered by a DNSP in less than 30 seconds – to better incentivise service improvement that our customers have said they value.

The proposed CSIS performance parameters are:

- customer satisfaction with complaints handling
- customer satisfaction with outages (planned and unplanned)
- customer satisfaction with new connections.

Further information can be found in Attachment 14 Customer service incentive scheme.

# 8 Network pricing

As a combined transmission network service provider (TNSP) and DNSP, TasNetworks prepares prices for both networks.

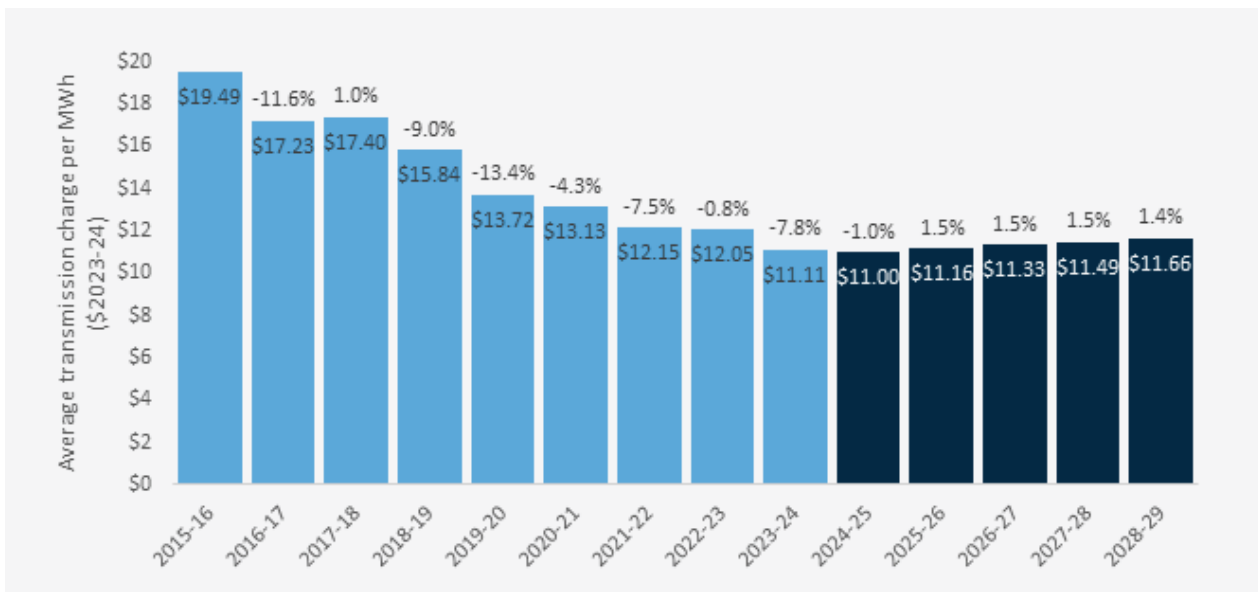
## 8.1 Transmission network pricing

The TNSP prices are determined in accordance with TasNetworks' *Transmission Pricing Methodology for 2024-2029* which incorporates new Rule requirements for the efficient management of system strength on the power system, reallocation of national transmission planner costs, and integration of energy storage into the NEM. TasNetworks has also considered the implications of becoming a coordinating TNSP (CNSP) should there be multiple TNSPs operating within Tasmania and TasNetworks is appointed the CNSP for the Tasmanian region.

TasNetworks' Transmission Pricing Methodology ensures that efficient network charges are passed through to customers and energy consumers and that costs are shared equitably. It allocates our regulated transmission revenue among customers through setting prices at each connection point throughout Tasmania. The TNSP prices are provided to the DNSP to be included in our distribution pricing calculations and used to charge our directly connected transmission customers.

TasNetworks' average transmission charges (Figure 21) remain low when compared to our historical prices. Consistent with our strategy of maintaining sustainable prices for our customers, Tasmanians will see small increases in transmission prices (approximately 1.5 per cent) for the last four years of the next regulatory control period. This will contribute to an increase in the transmission component of household charges for our distribution network customers.

Figure 21. Average charges for all transmission customers, average \$/MWh (\$, 2023-24)<sup>8</sup>



<sup>8</sup> TasNetworks will engage with our direct connected transmission customers individually on their indicative charges for the 2024-2029 period due to the confidential and commercially sensitive nature of individually calculated transmission prices.

## 8.2 Distribution network pricing

The distribution network price setting process is set out in our Tariff Structure Statement (**TSS**) and Tariff Structure Explanatory Statement (**TSES**).

Our 2024-2029 TSS sets out our proposed network tariff structures, with indicative prices, to recover the allowed annual revenue, as determined by the AER, over the 2024-2029 regulatory control period. The TSS demonstrates TasNetworks' compliance with the NER and the associated pricing principles.<sup>9</sup>

The accompanying TSES provides the supporting explanations and analysis for the network tariffs, structures and assignment policies proposed in the TSS. Both the TSS and TSES have been developed in consultation with our stakeholders over the past two and a half years, and the TSES incorporates the feedback we have received during this consultation process.

During our early implementation of network tariff reform, TasNetworks has offered cost-reflective network tariffs for all customer groups. The existing default cost-reflective network tariffs will be retained for the 2024-2029 regulatory control period, allowing our customers to choose when to use electricity by either paying more at peak times, or less during off-peak periods. To continue our progress towards cost reflectivity, we are proposing to make our flat rate network tariffs for residential and small business customers obsolete, meaning that new customers will not be able to connect to the flat rate network tariffs, and existing customers may be moved to the default cost-reflective network tariff (subject to certain conditions).

Customers continue to change their use of, and engagement with, the supply and distribution of electricity (through the use of solar PV, electric vehicles and battery storage (collectively known as CER)), motivating customers to change their expectations on the supply and use of electricity.

In Tasmania, it is projected that CER will continue to increase over the 2024-2029 regulatory control period and beyond. It is expected that the uptake of EVs will accelerate towards the end of this decade, and the implementation of solar PV and household batteries will continue to grow. TasNetworks is preparing for the continuing "electrification" of the economy by developing "future-ready" pricing structures for our customers.

TasNetworks does not expect CER to drive network expenditure for the 2024-2029 regulatory control period. Tasmania's minimum demand is comparatively stable, and it is expected that EVs will likely soak up solar generation in the short to medium term. As a result of our findings, TasNetworks is not proposing export network tariffs in the 2024-2029 regulatory control period but will keep monitoring for changes in customer usage patterns on the network.<sup>10</sup> However, information collected through a 2021 customer survey<sup>11</sup> (Figure 22) has resulted in TasNetworks proposing a revised structure for its residential CER network tariff (TAS97)<sup>12</sup> to address the potential increase in evening peaks resulting from convenience charging of EVs.

9 NER, Clause 6.8.2(c)(7)

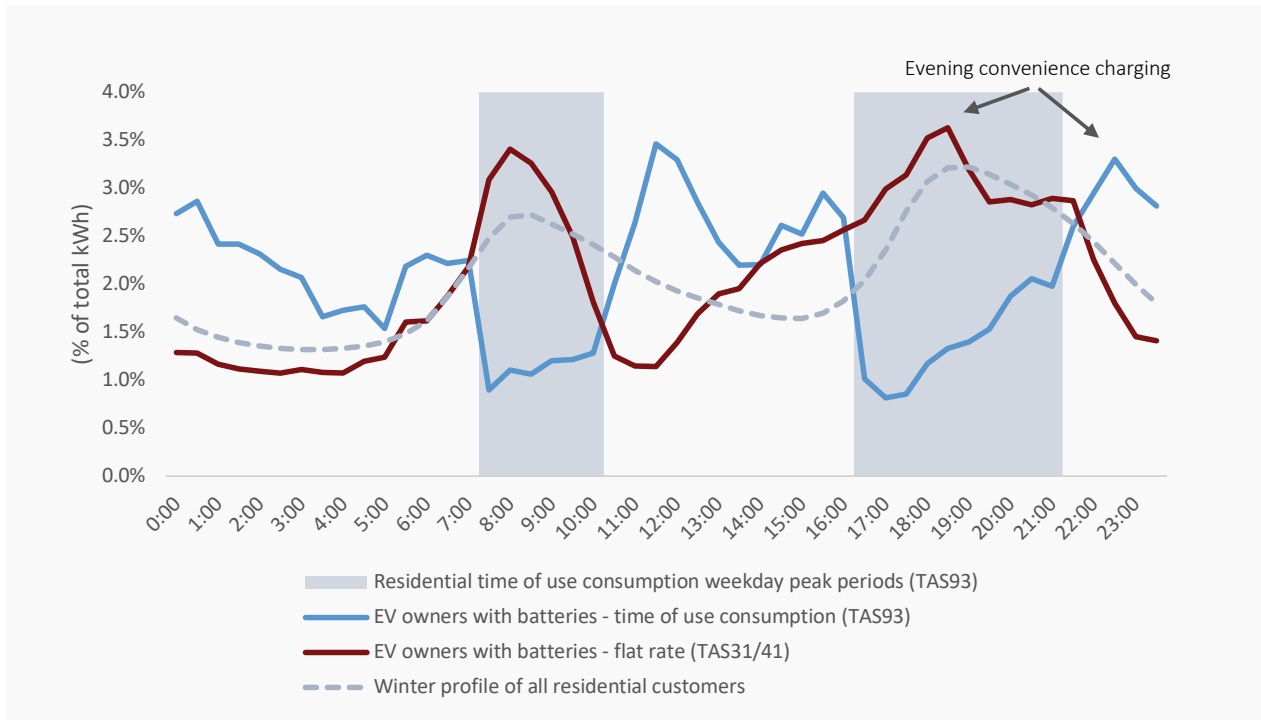
10 NER, Clause 6.8.2(c1)(1)(ii)

11 Source – TasNetworks' DER Customer Survey

12 Formerly the residential DER demand-based network tariff (TAS97)



**Figure 22. Winter consumption profiles of residential customers with EVs and batteries using current network tariffs**



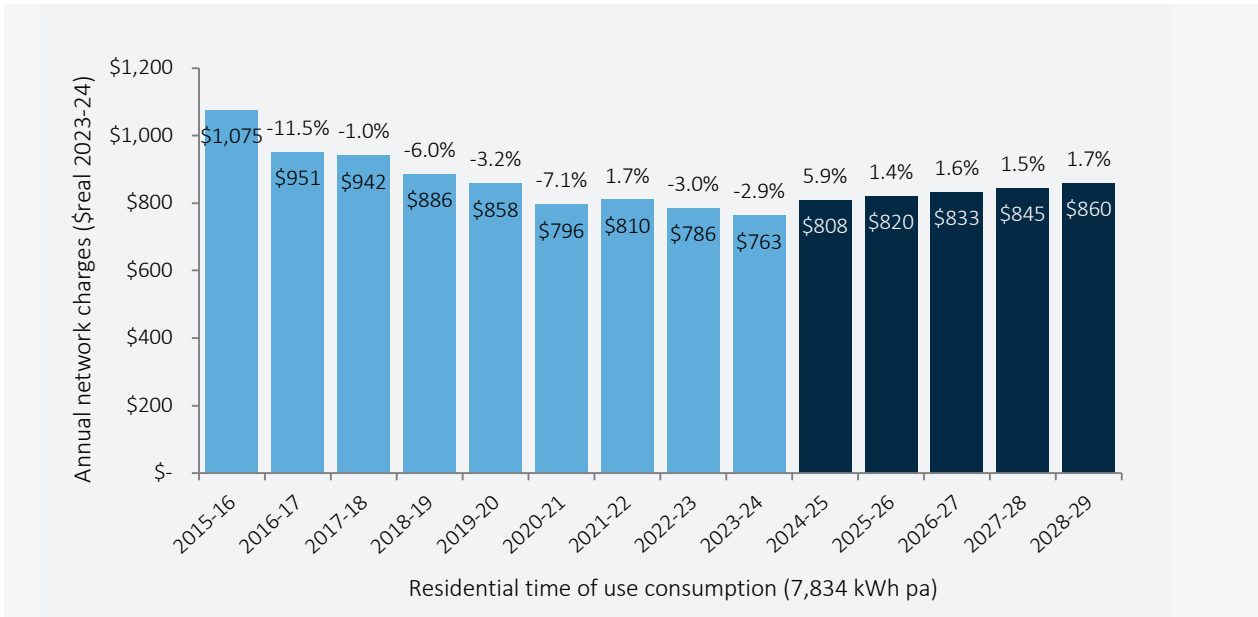
We are also proposing to change the small business time of use consumption (TAS94) network tariff weekday peak charging windows and weekend shoulder charging windows to better reflect usage on the network. In addition, we are proposing network tariffs for embedded networks connecting to the high voltage and low voltage networks. The embedded network tariffs will introduce a tiered daily service charge based on the network capacity of the embedded network at the embedded network’s connection point to the distribution network. For low voltage embedded networks there are four tiers proposed compared to two tiers for high voltage embedded networks.

Our proposed network tariffs have been developed following engagement with our customers. Stakeholders actively engaged in each key decision and subsequently confirmed that the collective decisions reflect our pricing principles of – *affordability, fairness, consistency, innovation, simplicity and choice*. Each reference group was included in a multi-step process to develop our stakeholders’ understanding of the current challenges facing our network, the implications of those challenges on setting network tariffs, and to explore the impacts of those decisions on residential, small and large businesses. Each workshop provided dedicated ‘deep dives’ for the key aspects of our network tariff strategy, including providing consultation papers prior to each workshop. A diverse range of views were able to be discussed and considered prior to decisions being made. A key theme in all our discussions was to ensure those customers who may be experiencing vulnerability have access to customer protections as we continue to progress towards greater cost reflectivity.

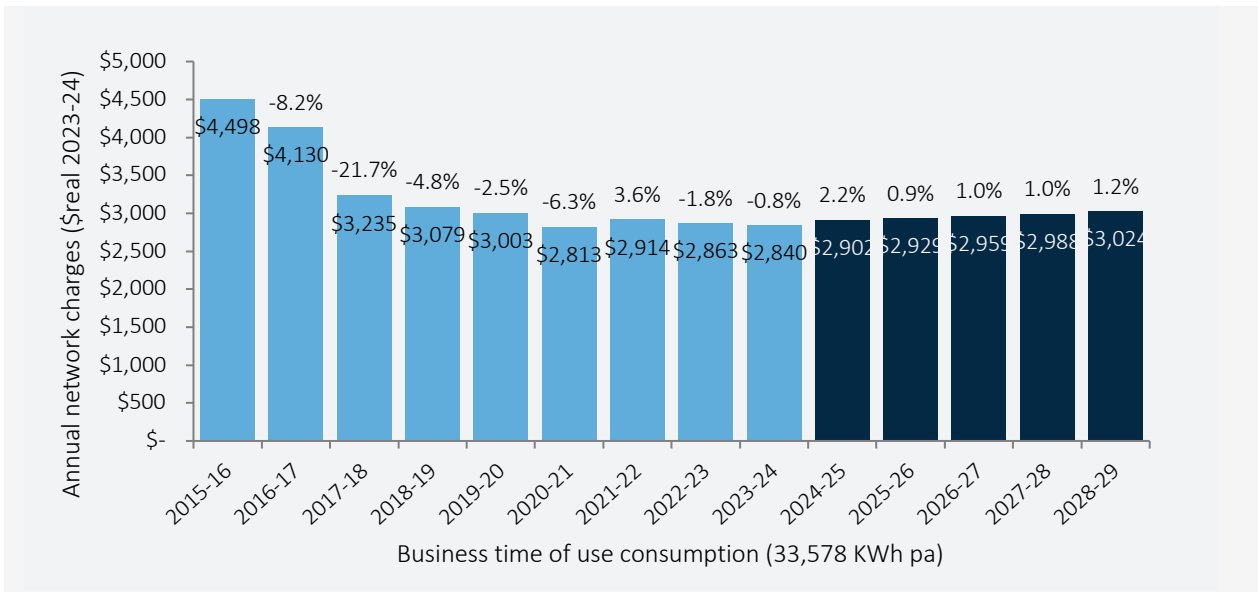
Our TSS and TSES provide a range of innovative network tariffs for our residential and business customers to provide them with choice to select the network tariff that best suits their circumstances. The proposed network tariff structures have been designed to encourage our customers to adapt their energy use to actively manage their costs. This will result in more equitable and fairer pricing that reflects how customers use the network and help reduce future investment in the network, and the resulting costs to customers, in the longer term. To facilitate our customers’ transition to cost-reflective network tariffs, the Tasmanian Government has committed to accelerating the rollout of advanced meters during the 2024-2029 regulatory control period.

TasNetworks has prepared indicative distribution network charges based on our proposed default network tariffs and according to our pricing principles, i.e. to provide sustainable prices for our customers while minimising upward pressure on the delivered cost of energy. Our proposed distribution revenue allowance is used to determine our indicative annual network charges for a typical residential and small business customer (Figure 23 and Figure 24) based on our default time of use consumption network tariffs, using average consumption of approximately 7,800 kWh per annum for residential customers and 33,580 kWh for small business customers.

**Figure 23. Indicative distribution network charges, residential customer (\$, 2023-24)**



**Figure 24. Indicative distribution network charges, small business customer (\$, 2023-24)**



# 9 Contingent projects

Contingent projects are significant network augmentation projects that are reasonably required to be undertaken in the 2024-2029 regulatory control period. However, the need for contingent projects and the associated costs within the 2024-2029 regulatory control period are not sufficiently certain to include in capex forecasts. Consequently, expenditure for these projects does not form part of the total forecast capex in the 2024-2029 regulatory control period, but the costs of these projects may ultimately be recovered from customers if unique trigger events occur.

No contingent projects have been identified in relation to the distribution network for the 2024-2029 regulatory control period.

Table 15 summarises the seven contingent projects relating to major augmentations of the transmission network that will reasonably be required to be undertaken in the 2024-2029 regulatory control period. The efficient costs of these projects will be fully assessed by the AER if the specific project trigger events occur during the 2024-2029 regulatory control period and TasNetworks submits a Contingent Project Application (CPA) to the AER. Customers and stakeholders will have opportunities to shape the contingent projects during the Regulatory Investment Test for Transmission (RIT-T), which is a common trigger event to all contingent projects and prior to submitting the CPA.

**Table 15. Contingent projects, 2024-2029 regulatory control period**

| Contingent project                            | Summary   | Triggers  | Indicative cost |
|---|---|---|-----------------|
| <b>George Town reactive support (Stage 1)</b> | Provision of dynamic reactive support to meet power system voltage and system stability requirements following new load connections in the George Town-Bell Bay area.             | <ol style="list-style-type: none"> <li>1. Customer commitment of additional load connecting to the transmission network in the George Town-Bell Bay area which will result in TasNetworks being non-compliant with power system voltage and system stability requirements at George Town</li> <li>2. Successful completion of a RIT-T</li> <li>3. Commitment by TasNetworks' Board to proceed with the project, subject to amendment by the AER of TasNetworks' revenue determination</li> </ol>                        | \$75m           |
| <b>George Town reactive support (Stage 2)</b> | Provision of reactive support to meet power system voltage and system stability requirements following new load connections in the George Town-Bell Bay area in excess of 300 MW. | <ol style="list-style-type: none"> <li>1. TasNetworks demonstrates that a second occurrence of load committed to connect to the transmission network in the George Town-Bell Bay area will result in TasNetworks being non-compliant with power system voltage and system stability requirements at George Town</li> <li>2. Successful completion of a RIT-T</li> <li>3. Commitment by TasNetworks' Board to proceed with the project, subject to amendment by the AER of TasNetworks' revenue determination</li> </ol> | \$80m           |

| Contingent project                                  | Summary   | Triggers  | Indicative cost |
|---|---|---|-----------------|
| <b>George Town Substation network reinforcement</b> | Rearrangement of the 220 kV connections at the George Town Substation and construction of a new substation in the Bell Bay area to address network security and performance standards obligations, following new load connections in the George Town-Bell Bay area. | <ol style="list-style-type: none"> <li>1. TasNetworks demonstrates that customer commitment of additional load connecting to the transmission network in the George Town-Bell Bay area will result in: <ul style="list-style-type: none"> <li>• a material increase in the probability of cascading failure, following non-credible contingent events, and/or</li> <li>• breaches of minimum network performance requirements under the <i>Electricity Supply Industry (Network Planning Requirements) Regulations</i></li> </ul> </li> <li>2. TasNetworks demonstrates that the solution required to meet the power system security obligations cannot be accommodated within the existing layout of George Town Substation</li> <li>3. Successful completion of a RIT-T</li> <li>4. Commitment by TasNetworks' Board to proceed with the project, subject to AER amendment of TasNetworks' revenue determination</li> </ol> | \$50m           |
| <b>Palmerston to Sheffield network upgrade</b>      | An upgrade of the transmission corridor between Palmerston and Sheffield to maintain network stability following the connection of new load in the George Town-Bell Bay area or connection of new generation in north west or central Tasmania.                     | <ol style="list-style-type: none"> <li>1. One or both of the following: <ul style="list-style-type: none"> <li>• Commitment of additional load from one or more customers to connect to the transmission network in the George Town - Bell Bay area; and/or</li> <li>• Commitment of new generation to connect in North West Tasmania or the Central Highlands that results in higher power flows on the Palmerston-Sheffield-George Town triangle and causes power flows through the Sheffield-Palmerston transmission corridor to be constrained in order to maintain network stability.</li> </ul> </li> <li>2. Successful completion of the RIT-T.</li> <li>3. Commitment by TasNetworks' Board to proceed with the project, subject to the AER amending TasNetworks' revenue determination.</li> </ol>   | \$212m          |

| Contingent project   | Summary  | Triggers   | Indicative cost |
|--|--|--|-----------------|
| <b>Sheffield to George Town network upgrade</b>              | An upgrade of the transmission corridor between Sheffield and George Town to maintain network stability following connection of over 300 MW of new load in the George Town-Bell Bay area or connection of new generation in north west or central Tasmania.      | <ol style="list-style-type: none"> <li>One or both of the following: <ul style="list-style-type: none"> <li>Commitment of additional load from one or more customers with aggregated load above 300 MW to connect to the transmission network in the George Town-Bell Bay area; and/or</li> <li>Commitment of new generation to connect in North West Tasmania or the Central Highlands that results in higher power flows on the Sheffield-George Town-Palmerston triangle and causes power flows between Sheffield and George Town to be constrained in order to maintain flows within thermal and/or stability limits.</li> </ul> </li> <li>Successful completion of a RIT-T.</li> <li>Commitment by TasNetworks' Board to proceed with the project, subject to amendment by the AER of TasNetworks' revenue determination.</li> </ol>          | \$166m          |
| <b>Palmerston to George Town via Hadspen network upgrade</b> | Upgrades of the transmission corridor between Palmerston and George Town to address thermal capacity issues, following connection of over 700 MW of new load in the George Town-Bell Bay area or connection of new generation in north west or central Tasmania. | <ol style="list-style-type: none"> <li>One or both of the following: <ul style="list-style-type: none"> <li>Commitment of additional load from one or more customers with aggregated load above 700 MW to connect to the transmission network in the George Town-Bell Bay area; and/or</li> <li>Commitment of new generation to connect in North West Tasmania or the Central Highlands that results in higher power flows on the Palmerston-Sheffield-George Town triangle and causes power flows on the Palmerston to George Town via Hadspen 220 kV transmission line to be constrained to maintain flows within thermal limits</li> </ul> </li> <li>Successful completion of the RIT-T</li> <li>Commitment by TasNetworks' Board to proceed with the project, subject to amendment by the AER of TasNetworks' revenue determination</li> </ol> | \$209m          |
| <b>Waddamana to Palmerston transfer capability upgrade</b>   | Upgrade of the transmission corridor between Waddamana and Palmerston to maintain power flows within thermal and/or stability limits, following connection of new generation in central or southern Tasmania.  | <ol style="list-style-type: none"> <li>Commitment of new generation in the Central Highlands and/or the southern transmission network that results in power flow through the Waddamana-Palmerston transmission corridor to be constrained to maintain flows within thermal and/or stability limits</li> <li>Successful completion of the RIT-T</li> <li>Commitment by TasNetworks' board to proceed with the project, subject to the AER amending TasNetworks' revenue determination</li> </ol>  | \$113m          |

More information about these contingent projects, including information about the opportunities for stakeholder involvement in the contingent project approval process, can be found in Attachment 7 Contingent projects.

# 10 Pass through events

In addition to the pass through events specified in the NER, TasNetworks proposes six more pass through events for the 2024-2029 regulatory control period:

- insurance coverage event (transmission and distribution)
- terrorism event (transmission and distribution)
- natural disaster event (transmission and distribution)
- insurer credit risk event (transmission and distribution)
- AEMO participant fee structure event (distribution)
- Renewable Energy Zone design report (transmission).

Each of the pass through events proposed by TasNetworks is consistent with the nominated pass through event considerations (defined in the NER)<sup>13</sup> that the AER must consider when deciding whether to accept a pass through event proposed by an NSP.

Together with the pass through events prescribed in the NER, the pass through events being nominated by TasNetworks should ensure that during the 2024–2029 regulatory control period the business does not face significant irrecoverable costs as a result of major events that are beyond our control and for which no allowance has been made in the regulated revenues set for TasNetworks by the AER. The protection provided by pass through events ensures that TasNetworks' financial capacity to invest in and operate our networks is not compromised by extraneous events that impose material, unavoidable costs on the business.

The approval by the AER of the pass through events nominated by TasNetworks will not expose customers to additional costs through their network charges during the 2024-2029 regulatory control period, unless any one of those events occurs and the AER approves a cost pass through application from TasNetworks. Similarly, the exclusion from TasNetworks' ex-ante revenue allowances of any costs potentially associated with pass through events means that our customers will not be asked to effectively insure TasNetworks against events that do not materialise in the coming regulatory control period. It will also ensure that TasNetworks can recover no more than the actual incremental costs incurred as a result of a pass through event.

Further information about each of the pass through events nominated by TasNetworks is contained in Attachment 17 Pass through events.

<sup>13</sup> See *National Electricity Rules*, Version 192, Chapter 10 Glossary

# 11 Alternative control services

In addition to standard control services (i.e. shared distribution network services relied upon by all customers), TasNetworks provides services to individual customers, including metering, public lighting and network ancillary services. The costs of these services – and the associated benefits – can be directly attributed to the customer who requests the service. These are referred to as Alternative Control Services (ACS).

While the cost of providing the shared distribution network is recovered from the wider customer base through network tariffs, the cost of ACS is recovered only from the customer that receives the service. This ensures that the wider customer base does not share in the cost of services that benefit just the one customer.

For these services, instead of setting a revenue cap, the AER caps the prices that can be charged or sets the input costs that can be used by TasNetworks to quote for jobs.

A summary of our ACS proposal is provided in this section and more detailed information is contained in Attachment 18 Alternative control services.

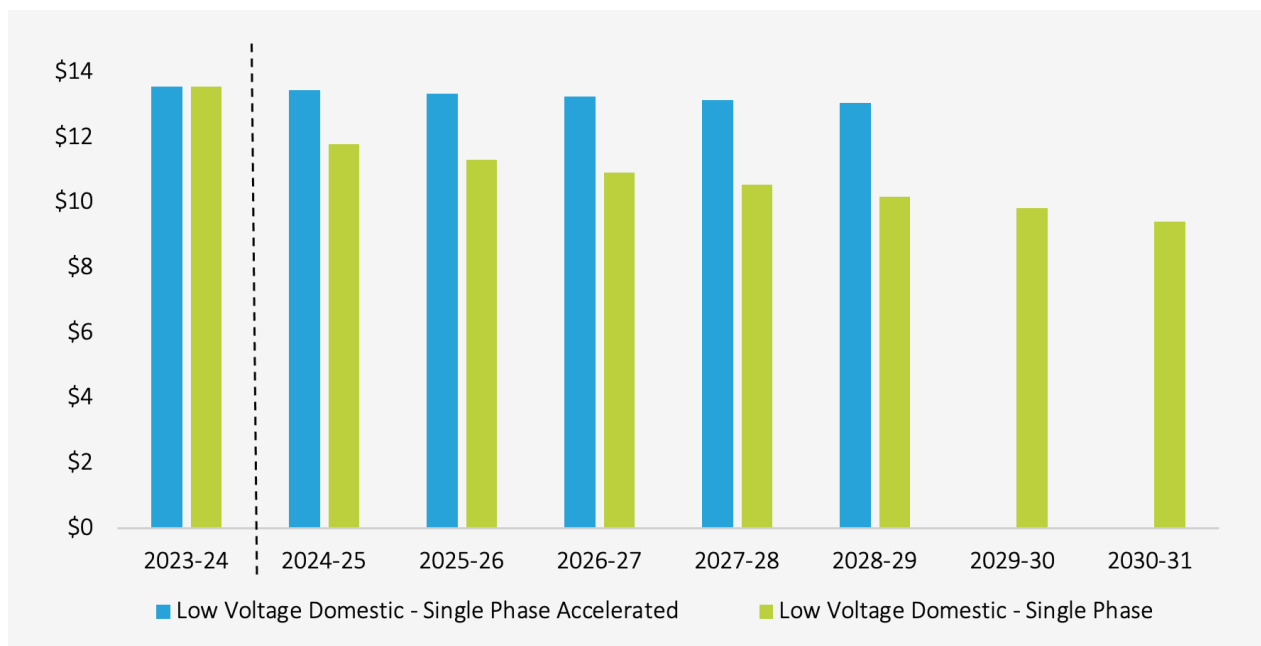
## 11.1 Metering services

During the current regulatory period, the accumulation meters that we own have progressively been replaced with advanced metering technology by Tasmania’s electricity retailers. We expect the rollout of new meters to be nearly completed by the end of 2027.

As a result, to better align the recovery of our legacy investment in meters with their significantly reduced service life, we propose to recover the remaining book value of these meter assets by the end of the 2024-2029 regulatory control period. Our operating expenditure forecasts also factor in the reduction in costs that will result from our metering services winding down earlier than expected.

Figure 25 shows the effects of this accelerated capital cost recovery.

**Figure 25. Metering capital cost recovery (\$ per meter, per annum)**



TasNetworks has used a 'building block' approach to develop its metering revenue forecast for the 2024-2029 regulatory control period. This revenue is used in conjunction with forecast volumes to develop a price cap for both the capital and operation components of the service.

Our approach accounts for the reduction in opex associated with the decline in the number of meters remaining in service. This has necessitated discontinuing the base-step-trend approach usually used to forecast DNSPs' operating expenditure. The savings stemming from the lack of new investment in meters being added to TasNetworks' metering RAB since December 2017 and the accelerated recovery of the capital cost of TasNetworks' legacy metering fleet have also been taken into account.

Table 16 sets out TasNetworks' proposed building block revenue for metering services in the 2024-2029 regulatory control period.

**Table 16. Proposed metering services building block revenue, 2024-2029 (\$ million, 2023-24)**

|                                  | 2024-25     | 2025-26     | 2026-27     | 2027-28     | 2028-29     | Total        |
|----------------------------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Return on capital                | 1.60        | 1.31        | 1.03        | 0.72        | 0.38        | 5.04         |
| Return of capital (depreciation) | 5.52        | 5.06        | 5.42        | 5.80        | 6.21        | 28.01        |
| Operating expenditure            | 1.76        | 1.88        | 2.07        | 1.16        | 0.83        | 7.69         |
| Revenue adjustments              | –           | –           | –           | –           | –           | –            |
| Net tax allowance                | 0.38        | 0.78        | 0.81        | 0.84        | 0.87        | 3.68         |
| Annual revenue (unsmoothed)      | <b>9.26</b> | <b>9.02</b> | <b>9.32</b> | <b>8.52</b> | <b>8.29</b> | <b>44.41</b> |

We tested this proposal with our Policy and Regulatory Working Group (**PRWG**) members who were supportive of the idea of aligning the recovery of the metering fleet's capital cost with its reduced service life, noting that this could be accomplished while still ensuring savings for customers compared to the current level of metering charges.

## 11.2 Public lighting services

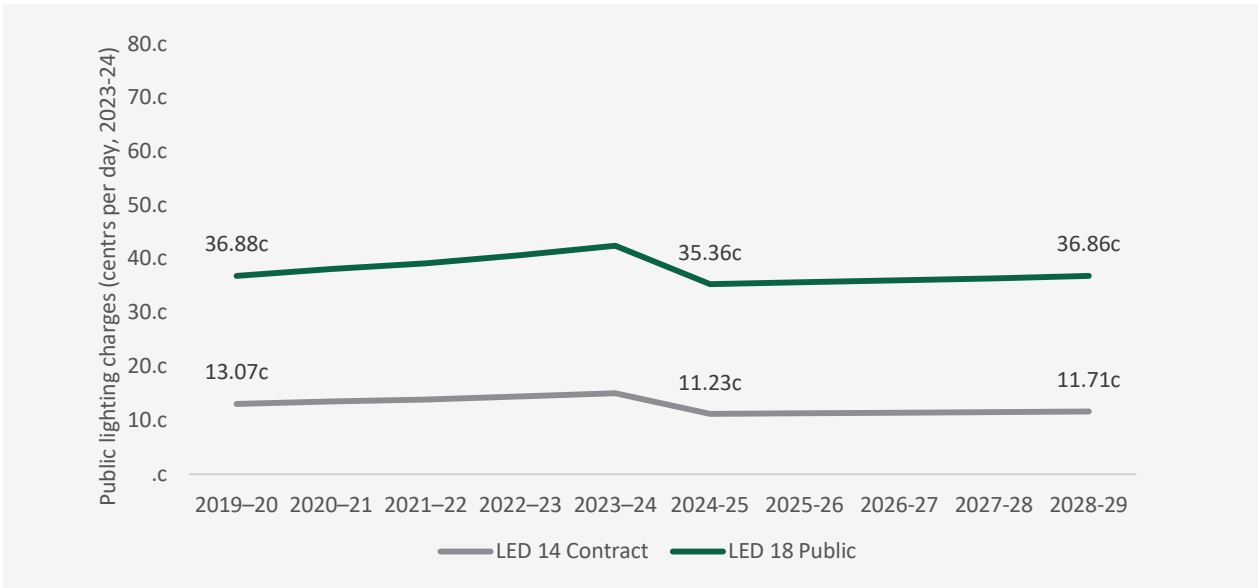
The public lighting services we provide include the provision, construction and maintenance of public lighting assets, as well as the maintenance of public lighting assets owned by other entities (under contract), including councils and government road authorities.

In the 2024-2029 regulatory control period, we are proposing to continue the transition to use of LED technology in light globes, with all new public and private contract lights installed to be LED fittings. In response to legislative requirements, we also propose to end the like-for-like replacement of mercury and sodium vapour globes, further accelerating the transition to LED fittings.

The transition to LED fittings will enable TasNetworks to realise savings in the maintenance of public lights. LED fittings do not require a replacement 'globe' over their 20-year life, allowing TasNetworks to maintain light fittings on a ten-yearly instead of four-yearly maintenance cycle. The associated reduction in opex has resulted in proposed public light rates approximately 15 per cent lower for the 2024-2029 regulatory control period, as shown in Figure 26.



Figure 26. TasNetworks' public lighting charges (cents per day, 2023-24)



We explored this proposal in detail with relevant stakeholders, particularly Tasmania's 29 local governments who are our main customers for public lighting services. While questions were raised about the attributes of LED light fittings, over 90 per cent of the stakeholders we polled agreed with our proposed strategy to transition to this new technology.

### 11.3 Network ancillary services

Network ancillary services refers to services we provide that are associated with, or incidental to, the provision of the shared distribution network services relied on by all customers. This includes services like temporary disconnections and basic connection alterations, as well as a range of administrative services. These are delivered as fee-based and quoted services. Our charges for these services must be developed based on a standard approach that has been approved by the AER.

### 11.4 Construction of private assets by TasNetworks

Some customers, particularly in rural and regional Tasmania, have trouble procuring the services of specialist contractors to undertake the construction of private electrical infrastructure, such as private poles. To address this lack of market depth, in the 2024-2029 regulatory control period we will provide private asset construction and augmentation services under new 'Provider of Last Resort' provisions.

A Provider of Last Resort means that we will provide this service only where a customer has been unable to source the services from a private electrical contractor and a process will be put in place with several controls to ensure that this is the case in practice.

We developed this proposal after engaging in extensive consultation with a range of stakeholders, including representatives from the electrical contracting industry. Many of these stakeholders acknowledged the need for this scheme in Tasmania given the lack of depth in the contracting market. Feedback from this engagement resulted in us strengthening the controls around our provision of these services, with a view to improving consumer protection and confidence regarding the cost of any construction work we undertake.

The AER has approved this service for the 2024-2029 regulatory control period. The full costs of undertaking works under this arrangement will be recovered as a quoted service from the customer requesting the service.

## 11.5 Reserve feeder construction and maintenance

TasNetworks provides reserve feeders for a small number of customers that require dedicated reserve network capacity and the costs are recovered under the terms of each customer's connection agreement.

The construction and maintenance of reserve feeders have been added to our classified services list approved by the AER for the 2024-29 regulatory control period. The construction of reserve feeders will be treated as a quoted service, while their maintenance will be provided as a fee-based service. We have updated our pricing methodology for the relevant charging parameters for approval by the AER.

## 11.6 Distribution connection pricing policy

TasNetworks is licensed to provide customer connection services in accordance with the provisions of the relevant electricity laws. These are customer-initiated services relating to the establishment, modification or extension/augmentation of a connection to our distribution network. We are the only party that can provide these services given they tend to involve works on (or related to) our distribution network. Our provision of these services is governed by the AER-approved Distribution Connection Pricing Policy, which includes charging arrangements.

We are proposing minimal change to our Distribution Connection Pricing Policy for the 2024-2029 regulatory control period. The only change we are proposing relates to the recovery of costs associated with asset relocations that are required as part of a connection service.

Providing a connection service sometimes requires the relocation of existing distribution assets, such as poles. The asset relocation service is a quoted service (distinct from the connection service) and attracts an additional charge to the connection applicant. We also occasionally receive requests from groups of customers and/or other third parties to remove overhead distribution network infrastructure and replace it with underground infrastructure to improve visual amenity.

Our current Distribution Connection Pricing Policy sets out the approach we apply in recovering the costs of an asset relocation. This separates the work into two main components:

- the works that are dedicated to specific customer(s) and provided as a quoted service
- the works that are required on the shared network and undertaken as a standard control service recoverable through network tariffs.

In terms of the second component, we currently apply a rebate to the connection applicant based on the accumulated depreciation of the assets that are being removed. The value of this rebate will depend on the age of the assets being removed, with older assets attracting a higher rebate given they have higher accumulated depreciation, even though the costs we incur in relocating assets are (largely) independent of their age.

The effect of this rebate is that the wider customer base of our distribution network is contributing towards the cost of this relocation. We do not consider that this approach is fair or equitable given our existing network customers did not cause the expenditure, nor do they benefit from it. We are, therefore, proposing to remove the rebate, which will mean that the connection applicant will bear the full cost of the relocation (with no subsidy from our wider distribution network customers). This also sends a more efficient price signal to a connection applicant of the costs of relocating distribution network assets. It has no impact on the revenue we receive from asset relocation services.

We tested this proposal with several stakeholders, including representatives of customers and third parties that commission asset relocations, as well as our PRWG. Members of the PRWG agreed that this would be a more efficient and equitable approach. The local government representatives we consulted were also supportive, even though the removal of the rebate will potentially increase the costs they would bear in future for asset relocations involving older assets.

# 12 Key risks and benefits

We intend that our Combined Proposal will enable us to provide a balanced outcome for customers in the 2024-2029 regulatory control period. However, it is challenging to predict all of our cost drivers with confidence over a five-year period, particularly given current inflationary pressures in the Australian economy and internationally.

Our forecasts have assumed that these inflationary pressures will moderate over the next five years. However, if this proves not to be the case, we may need to defer some expenditure while ensuring that our core safety, reliability and compliance requirements are met.

Given electricity affordability is the highest priority for our customers, our Combined Proposal is focused on minimising upward pressure on network prices driven by expenditure discipline and targeted service improvements. It balances several key risks and benefits, which are summarised in the tables below.

**Table 17. Key risks to TasNetworks' plans for the 2024-2029 regulatory control period**

| Risk   | Description  |
|--|--|
| <b>Increased expenditure cost pressures</b>        | Recent sharp increases in the costs of critical equipment and materials inputs are placing upward pressure on the cost of delivering our network services. It is currently unclear to what extent these cost pressures will dissipate in the 2024-2029 regulatory control period.  |
| <b>External environment uncertainty</b>            | The Australian economy is currently subject to relatively high inflationary pressures, the effects of higher interest rates and higher wholesale energy prices, which makes it more difficult for us to forecast demand and energy for our network services, as well as how quickly our network may need to change to reflect changing customer preferences, including solar, battery and EV take-up.  |
| <b>Managing more severe adverse weather events</b> | <p>Our networks are becoming increasingly subject to severe weather events, such as bushfires, which can cause major periodic disruption to the reliability of our network services to some customers and increase our costs of rebuilding damaged network.</p> <p>TasNetworks' strategy is to incorporate incremental improvements in asset and network resilience when developing and implementing our capital works program, ensuring resilience is built-in to our network over time and reducing the likelihood of a material increase in capital investment.</p> |

**Table 18. Key benefits of TasNetworks' plans for the 2024-2029 regulatory control period**


| <b>Benefits</b>                                       | <b>Description</b>   |
|---|--|
| <b>Sustainable network prices</b>                     | We have adopted a prudent and disciplined approach to develop forecast expenditure for the 2024-2029 regulatory control period, to maximise value for our customers at the lowest sustainable cost.  |
| <b>Operating a safe and reliable network</b>          | Our proposed expenditure will maintain the reliability and safety of our network services in the 2024-2029 regulatory control period. In addition, we have identified targeted improvements in reliability for those customers in regions currently receiving relatively poor service compared to our other customers. |
| <b>Delivering further business efficiency savings</b> | Our business transformation program will continue in the 2024-2029 regulatory control period to place downward pressure on our costs and network prices.   |

# 13 Next steps

Our Combined Proposal is subject to review by the AER, and their final decision will influence how much we spend on our networks over the next five years. We welcome your feedback on our Combined Proposal, either directly to us or through the AER's consultation process.

## How to get in touch with us:

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 1300 555 727

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The expected timeframes for the revenue determination process are as follows:

| Milestone   | Timing           |
|---|------------------|
| AER publishes issues paper                          | March/April 2023 |
| AER holds public forum                              | April 2023       |
| AER issues draft decision                           | September 2023   |
| TasNetworks' submits Revised Proposal (if required) | December 2023    |
| AER issues final determination                      | April 2024       |

