2 Operating Environment

2.1 Introduction

This chapter sets out the key external drivers that impact Powerlink or are expected to impact Powerlink over the 2027-32 regulatory period and beyond.

This chapter builds on the business narrative developed with the Revenue Proposal Reference Group (RPRG) early in our customer engagement process for this Revenue Proposal (refer Chapter 3 Customer Engagement and Appendix 2.01 Business Narrative).

Key highlights:

- Our operating environment has changed significantly since we lodged our 2023-27 Revenue Proposal in January 2021. Unprecedented rises in transmission equipment prices and supply chain shocks have seen costs rising at multiples of the prevailing inflation rates. Compounding matters, the power system is becoming more complex to operate due to the changing nature of generation and demand.
- We consider that our forecast expenditure for the 2027-32 regulatory period is prudent, efficient and essential to the delivery of safe, reliable and cost-effective electricity supply.
- We have grouped the key elements of our operating environment in the 2027-32 regulatory period into themes of customers, costs and complexity.

  Customers
  - Affordability remains a key concern for customers, alongside predictable prices and a reliable, resilient electricity supply. These priorities continue to shape Powerlink's focus and decision making.

  Costs
  - A combination of global and local factors is placing significant pressure on delivery costs, and we expect this to continue into the 2027-32 regulatory period.
  - We have experienced unprecedented increases in the cost of major plant items since 2021; future cost increases are expected to revert to historical growth rates in line with inflation over the 2027-32 regulatory period.
  - We have sought proactive solutions to rising costs, such as developing new supply arrangements for key equipment and enhancing targeted investment on existing transmission lines.

  Complexity
  - System complexity encompasses changes in network demand and connectivity to the network, including increased cyber threats to the digital and telecommunications networks necessary to operate the transmission network.
  - Deliverability includes factors that can have a material impact on the cost and timeframe of projects, such as social licence to operate, workforce capacity and capability, and State and Federal Government approval processes.
  - Our approach now embeds social performance within our core processes, aligning with government policy, regulatory frameworks, and the Energy Charter's Better Practice Social Licence Guideline.

2.2 Our approach

Our operating environment continues to present challenges and risks, but also opportunities for Powerlink. Our priority remains to deliver safe, reliable and cost-effective prescribed transmission services to our customers. We also continue to have an ongoing role in guiding the market in Queensland, including through our Transmission Annual Planning Report, during a period of significant change for the energy industry and our customers.

We have summarised the key elements within our operating environment into three themes: customers, costs and complexity. These themes influence and impact our day-to-day business and how we plan the future development and operation of our network. Consequently, they underpin various components of our Revenue Proposal and are discussed in further detail in this chapter.

2.3 Customers

Our purpose is to connect Queenslanders to a world-class energy future. We aim to achieve this by consistently prioritising their long-term interests throughout the energy transition. Our purpose is supported by four strategic objectives, including to *Drive value for Queenslanders.*

We put customers at the centre of our decision making and maintain a sharp focus on the cost-effective delivery of our services. We are proud to be a foundation signatory to The Energy Charter and remain committed to its principles[6]. We recognise that to deliver against these principles we must continue to seek customer views and input to inform our Revenue Proposal, as well as our day-to-day business activities.

The following sections outline the key elements that have shaped our Revenue Proposal, reflecting what customers told us matters most: affordability, price predictability, and a reliable and resilient electricity supply.

More detail on our engagement approach and response to customer feedback on our Revenue Proposal is provided in Chapter 3 Customer Engagement.

2.3.1 Affordability

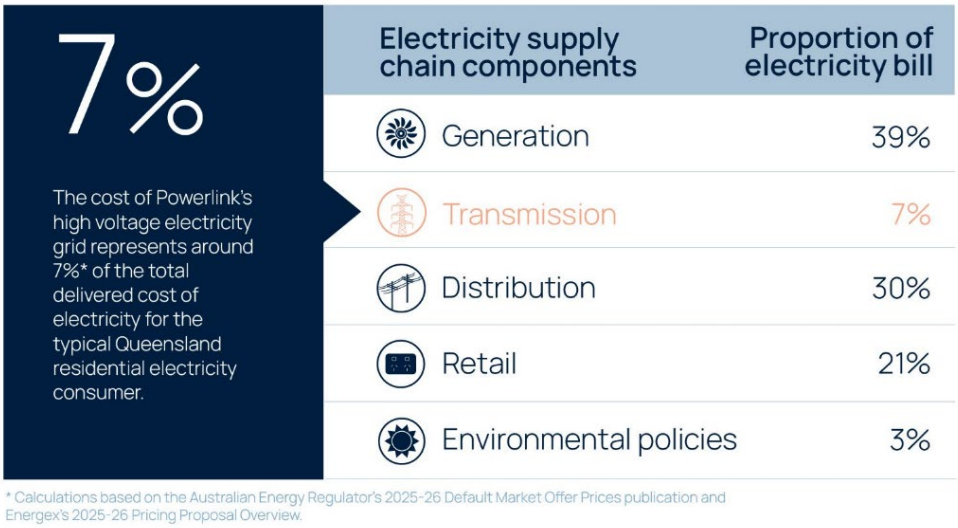
Our network serves more than five million Queenslanders, for whom the cost of electricity remains a key concern.

The 2025 Queensland Household Energy Survey[7] highlighted significant ongoing concerns about electricity affordability, particularly among renters (66%), households without rooftop solar (58%), and those with lower incomes[8] (56%). In addition, AER research showed that more than 60,000 residential customers in Queensland were on either a payment plan or a hardship program to manage their electricity payments[9]. In particular, the number of customers on a hardship program has increased since 2020/21 by more than 13,000 (74%) to 30,759.

Our transmission network charges comprise around 7% of the average residential household bill in Queensland (refer Figure 2.1). With this front of mind, we will continue to guide the market to minimise bulk electricity supply costs for our customers.

[6] The Energy Charter established five principles, including *We will put customers and communities at the centre of our business and the energy system,* and *We will improve energy affordability and value for customers and communities* (refer https://www.theenergycharter.com.au/about/)
[7] Queensland Household Energy Survey (qhes.com.au).
[8] Less than $31,000 per annum.
[9] Annual retail markets report 2024-25 - Jurisdictional snapshot, Australian Energy Regulator, November 2025.

Figure 2.1 - Breakdown of typical Queensland household electricity bill



Powerlink's 2023-27 Revenue Proposal, lodged with the AER in January 2021, sought to respond to affordability concerns by forecasting a small decrease in our capital expenditure and no real growth in operating expenditure compared to the 2018-22 regulatory period. While these targets were set in the context of Powerlink's reasonable expectations of the operating environment at that time, the circumstances that unfolded are very different. In particular, unprecedented increases in transmission equipment prices driven by increased global demand, and the increasing complexity of the operating environment meant that we were unable to deliver our capital and operating expenditure programs as originally planned.

We continued to target improved outcomes for our customers in our capital expenditure planning, engaging with customers and other stakeholders, including the AER, as part of our Asset Reinvestment Review[10] which commenced in 2022. The review considered alternative strategies for transmission line refit works and resulted in the deferral of capital works within the current 2022-27 regulatory period.

We commenced a trial of in-situ replacement of secondary systems panels. The trial is expected to reduce costs, support shorter network outage times and enhance our capability. Powerlink will continue to develop this and other innovative approaches to addressing network needs in the context of a changing environment.

Our capital expenditure forecasts build on these reviews and incorporate efficiencies in line with the expected benefits. This is discussed further in Chapter 4 Capital Expenditure.

We also continue to seek innovative ways to prioritise work and enhance utilisation of resources to manage the cost impacts on operating expenditure. These improvements have been factored into our forecasts, which we discuss further in Chapter 5 Operating Expenditure.

We recognise our impact on affordability is not limited to the prices we charge for prescribed transmission services. Our role in connecting new generators and storage facilities, such as pumped hydro energy storage (PHES) and battery energy storage systems (BESS), across Queensland is important to ensure customers have access to the lowest cost electricity when they need it.

[10] Asset Reinvestment Review, Powerlink, June 2023.

Network outages, constraints and congestion on the transmission network can lead to higher wholesale prices, if lower cost generation is constrained and more expensive generation is required to meet customer demand. As part of the economic assessment for major new transmission network investments, we analyse the potential benefits of improved network operation on the wholesale market. In this way we seek the best overall outcome for our customers.

In developing our plan of future network investment needs, we have aligned with the Queensland Government's Energy Roadmap 2025[11] which charts a pragmatic path to meet the State's energy needs over the next five years and beyond. Our capital expenditure forecast, and proposed contingent projects, enable the transmission network to keep pace with demand growth and decentralisation as new generation and storage capacity connects to the grid. We also have regard to the Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP), which presents a coordinated approach to necessary transmission developments in the National Electricity Market (NEM) and a plan for Australia's eastern power system for the next 20 years.

We are committed to delivering cost-effective transmission services to improve affordability within an increasingly complex operating environment. Consistent with that commitment, we have worked to ensure that our forecast expenditure for the 2027-32 regulatory period is prudent, efficient and essential to the delivery of safe, reliable and cost-effective electricity supply.

2.3.2 Price predictability

Large commercial and industrial (C&I) customers in Queensland, including our directly connected customers, value stable prices and predictability in future charges. This was clearly identified in a recently conducted survey with large C&I customers of both Energy Queensland and Powerlink. For this reason, we engaged with the RPRG and major customers to develop our position on an appropriate approach to smoothing the indicative price path in our Revenue Proposal. As a result, we applied a balanced approach to smooth revenues to deliver a more stable price path over the 2027-32 regulatory period. We discuss this approach further in Chapter 10 Maximum Allowed Revenue and Price Impact.

For the purposes of this Revenue Proposal, we have proposed largely administrative changes to our Pricing Methodology to reflect recent Rule changes. We discuss the customer surveys and related engagement in Chapter 3 Customer Engagement, while Chapter 14 Pricing Methodology discusses the proposed pricing methodology changes in further detail.

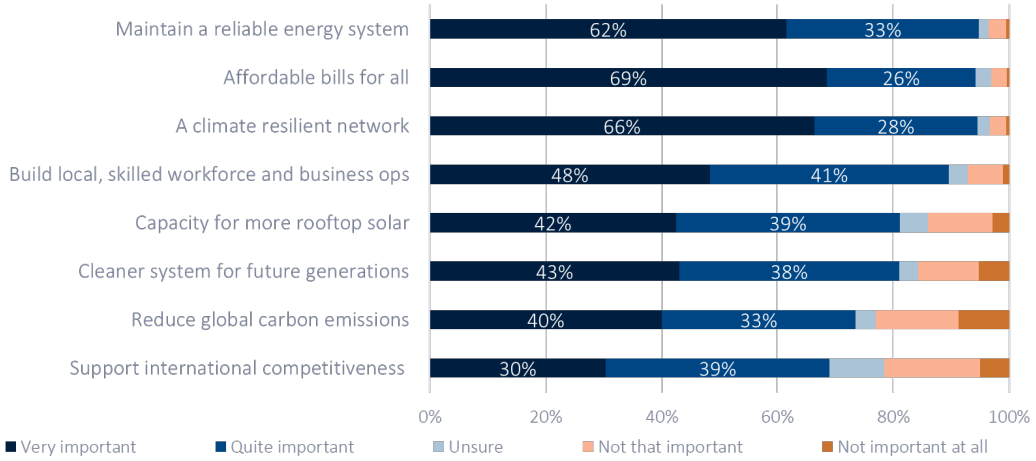
2.3.3 Reliability and resilience

Reliability of supply, even during extreme weather events, is important to our customers.

The results of the 2025 Queensland Household Energy Survey indicate that households considered investment to support reliability and resilience of the network as important (very important or quite important), as illustrated in Figure 2.2. Three-quarters of households that responded considered that they had a reliable electricity supply, with only 3% unhappy with the reliability of their supply.

[11] Queensland Energy Roadmap 2025, Queensland Treasury, October 2025.

Figure 2.2 - Importance of investment by purpose (Source: Powerlink, QHES)



Our large C&I customers rated the need for reliability as a high priority, and it was also a concern for the agricultural sector. Extreme weather events and supply disruptions disproportionately affect rural areas, where the remote location of assets and the absence of diverse supply paths can result in longer restoration times and more frequent outages.

Electricity is an essential service, yet those most affected by higher prices often have fewer options to reduce demand. As rooftop solar and household battery adoption continues to grow, support will be necessary to address cost impacts on vulnerable and lower income groups who may be unable to access these consumer energy resources.

We are committed to addressing these challenges by advancing a low-cost energy transition, ensuring fair cost allocation, aligned with the principles of distributional and procedural fairness, and building partnerships across the energy supply chain to achieve better outcomes for customers.

Our capital expenditure forecast has been prepared to ensure the ongoing reliability and resilience of our network and is presented in Chapter 4 Capital Expenditure.

2.4 Costs

At the time of lodging our 2023-27 Revenue Proposal with the AER in January 2021, Powerlink's operating environment was markedly different to today. Our forecasts of a reduction in capital expenditure and no real growth in operating expenditure were reasonable at the time and reflective of our view of the future operating environment. It was aimed at keeping costs low for Queenslanders, while continuing to provide prudent and efficient transmission services.

Events such as the long-tailed global supply disruption following COVID-19, Russia's invasion and war in Ukraine, and global targets for emissions reduction driving unprecedented demand for materials, equipment and specialised labour could not have been reasonably foreseen at that time.

These cost pressures are not unique to Powerlink, with similar trends being experienced by other transmission and distribution businesses across the NEM, and indeed, around the globe. We expect the global and local competition impacting the supply chain to continue for the foreseeable future, with a challenging operating environment continuing throughout the 2027-32 regulatory period.

2.4.1 Global impacts

The ongoing increased demand for materials, equipment and specialised labour is driven primarily by global structural shocks to historical trade patterns for energy due to the Russia-Ukraine war and commitments to net-zero greenhouse gas emissions targets. The latter continues to drive a significant shift in the mix of generation globally, and the need to substantially expand electricity networks to accommodate the shift.

Over 100 countries have adopted net-zero pledges by the middle of the century, representing about 70% of current global greenhouse gas emissions[12]. To support these targets, the global demand for new electricity infrastructure is substantial. In November 2025, the International Energy Agency (IEA) identified that under current policy settings for emissions reductions, 25 million kilometres of new transmission and distribution lines would need to be delivered by 2035 and a further 20 million kilometres of existing lines would need to be replaced[13]. This is equivalent to over half of the existing global grid in the next decade.

The Energy Transitions Commission, a global coalition of leaders from energy producers, energy users, financiers and environmental groups, identified a similar need, stating in September 2024 that global networks must grow from around 68 million kilometres to a range of around 110–200 million kilometres by 2050[14]. The investment required for this necessary expansion is estimated to reach US$650 billion per year by 2035[15], a 67% increase on current global investment levels.

Locally, Infrastructure Australia published its Infrastructure Market Capacity Report in November 2025. The forecast expenditure for the five-year outlook, from 2025 to 2029, for utilities infrastructure investment is $36 billion[16]. This is predominantly due to transmission line projects and represents a $20 billion increase on the previous year's outlook.

The impact of this significant global and local demand on the cost of transmission projects in Australia has been reflected in the 2025 Electricity Network Options Report published by AEMO. In its update to the ISP Transmission Cost Database, GHD Advisory noted that global demand along with Australian demand is competing for the same pool of skills, production floor capacity and other supply chain arrangements[17]. As a result of these global and local cost pressures, the 2025 Electricity Network Options Report identifies that the costs for transmission line projects have increased by up to 55%, while transmission substation projects have increased by up to 35%, in real terms since 2023[18].

AEMO notes that the cost increases are primarily driven by:

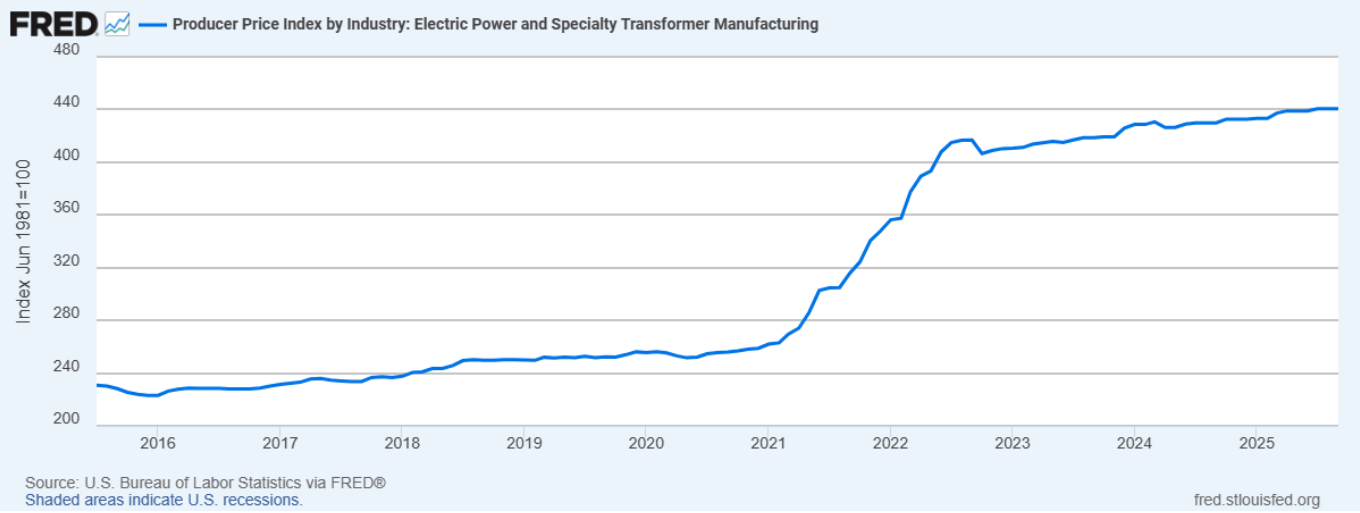
- sustained supply chain pressures on materials, equipment and workforce
- market competition driven by a high number of concurrent projects under development in the NEM
- project complexity, including an increased number of projects planned for remote areas
- social licence to operate imperatives, including regular community and landholder engagement along proposed transmission line routes, and
- additional contracting costs to account for risk allocation in engineering, procurement and construction contracts in response to pressures in the current market.

[12] Emissions Gap Report 2025, United Nations Environment Programme, November 2025, page xii.
[13] World Energy Outlook 2025, International Energy Agency, November 2025, pages 148-149.
[14] Building grids faster: the backbone of the energy transition, Energy Transitions Commission, September 2024, page 9.
[15] World Energy Outlook 2025, International Energy Agency, November 2025, page 150.
[16] Infrastructure Market Capacity 2025 Report, Infrastructure Australia, November 2025, page 18.
[17] ISP Transmission Cost Database Tool: 2025 Update, GHD Advisory, May 2025, page 41.
[18] 2025 Electricity Network Options Report, Australian Energy Market Operator, August 2025, page 32.

2.4.1.1 Unprecedented cost increases

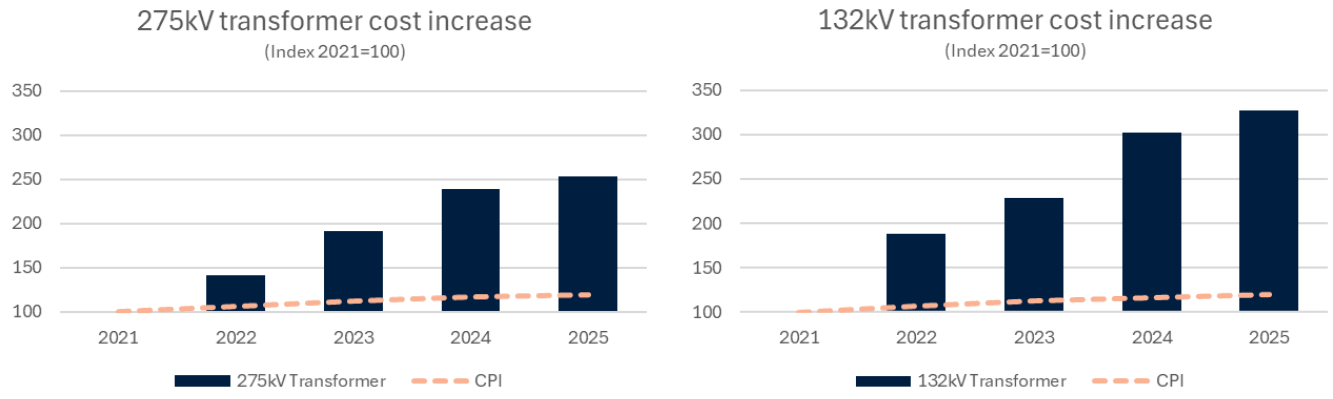
The United States Bureau of Labor Statistics tracks the producer price indices of a range of transmission-related equipment. The Electric Power and Specialty Transformer Manufacturing producer price index is shown in Figure 2.3 below[19] which illustrates that the price of transformers has increased substantially in the four years from 2021 to 2025. The scale of price increase over the last four years is unprecedented, equivalent to the cumulative price increase over the preceding 40 years.

Figure 2.3 - Historical United States transformer price index



These cost impacts are borne out by Powerlink's recent experience, with the price of transformers doubling over the last four years, significantly exceeding the Consumer Price Index (CPI) as shown in Figure 2.4.

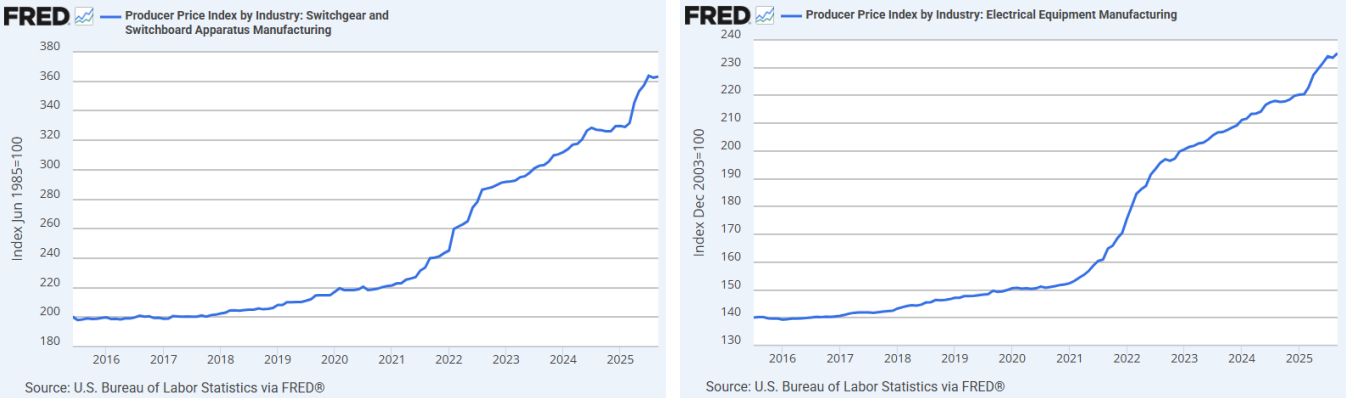
Figure 2.4 - Historical Powerlink transformer cost indices



[19] Producer Price Index by Industry: Electric Power and Specialty Transformer Manufacturing, US Bureau of Labor Statistics, retrieved from FRED (Federal Reserve Bank of St. Louis) on 29 December 2025.

Similar cost effects can be seen for switchgear and associated equipment[20, 21] as shown in Figure 2.5.

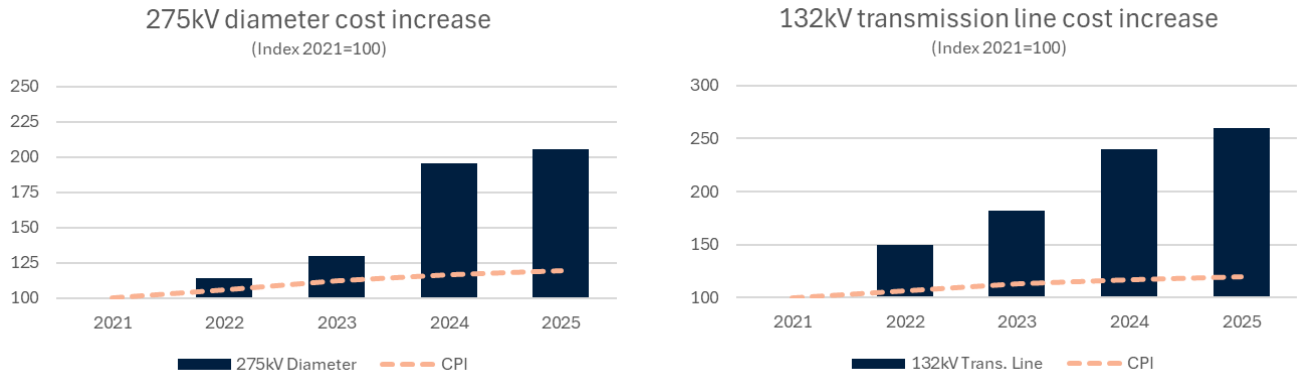
Figure 2.5 - Historical United States switchgear and equipment price indices



Composite cost metrics, which include contractor and internal labour costs in addition to plant and materials, illustrate the impacts of these increases on transmission development. Similar to the cost of major plant items, the cost of delivering transmission assets has doubled over the past four years.

Figure 2.6 shows the changes in delivered cost of a 275kV switchgear diameter in a substation and the delivered cost per kilometre of 132kV transmission line.

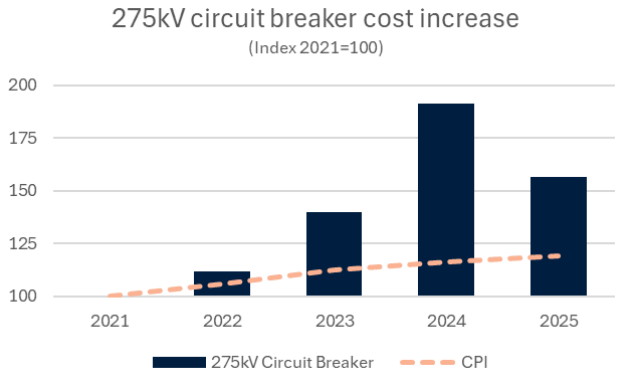
Figure 2.6 - Historical Powerlink composite cost indices



While significant global demand has driven costs upward and extended delivery timeframes for most transmission equipment types, we have sought to mitigate these impacts. For example, Powerlink has reduced the cost of 275kV circuit breakers by developing alternative supply options, as shown in Figure 2.7 below. Through proactive engagement, we negotiated for a key supplier to establish a new manufacturing facility in China, providing a lower cost and reducing the reliance upon the manufacturing plant in the United States.

[20] Producer Price Index by Industry: Switchgear and Switchboard Apparatus Manufacturing, US Bureau of Labor Statistics, retrieved from FRED (Federal Reserve Bank of St. Louis) on 29 December 2025.
[21] Producer Price Index by Industry: Electrical Equipment Manufacturing, US Bureau of Labor Statistics, retrieved from FRED (Federal Reserve Bank of St. Louis) on 29 December 2025.

Figure 2.7 - Historical Powerlink 275kV circuit breaker cost index



In 2022 Powerlink undertook a review of our approach to life extension, or refit, of transmission lines, namely our Asset Reinvestment Review. The review considered targeted investment in life extension of transmission line assets, which provided the opportunity to reprioritise our capital expenditure in the current 2022-27 regulatory period. The outcomes of this review underpin our forecast for the 2027-32 regulatory period, as highlighted in Chapter 4 Capital Expenditure.

2.5 Complexity

Powerlink has categorised the types of complexity impacting Powerlink's operating environment into two key categories – system complexity and deliverability.

System complexity encompasses changes in network demand and connectivity to the network, including increased cyber threats to the digital and telecommunications networks necessary to operate the transmission network. Overall, increased system complexity drives the need for a greater range of data that must be monitored in real time to operate the transmission network in a safe, reliable and cost-effective manner. This in turn requires more sophisticated technology, techniques and skills to be developed and implemented.

Deliverability encompasses those factors that can have a material impact on the cost and timeframe of projects, such as social licence to operate, workforce capacity and the regulatory environment. Deliverability influences the processes necessary to enable the cost-effective and timely completion of essential work to replace ageing assets and extend the transmission network.

2.5.1 System complexity

The transmission system is becoming more complex to operate. More than 11,100MW of large-scale renewable generation capacity, across 49 projects, has been added (or under construction) to the Queensland transmission network since 2018. In addition, approximately 8,000MW of rooftop solar is installed across Queensland[22].

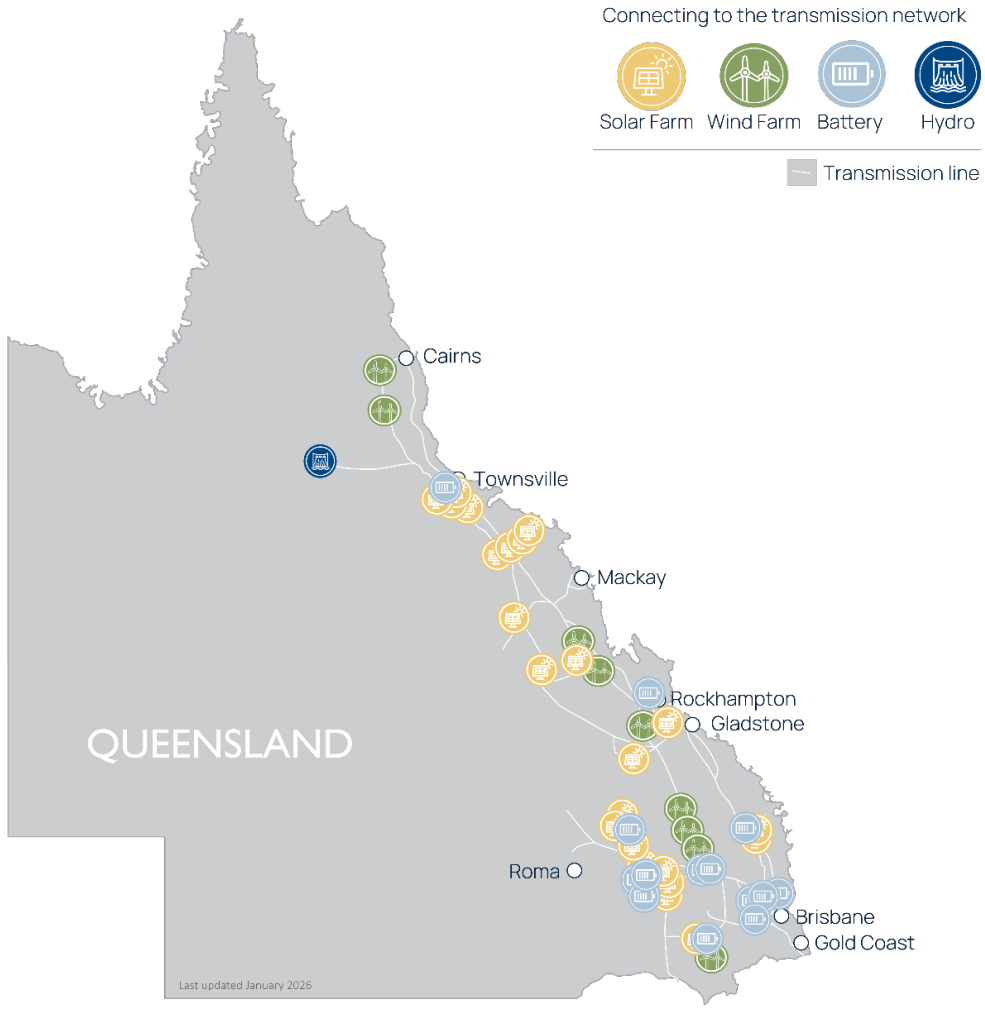
Figure 2.8 shows the number of current and completed connection projects (up to January 2026) and illustrates the increasing number of geographically dispersed generators, BESS and PHES connected to Powerlink's transmission network. This trend is expected to continue throughout the 2027-32 regulatory period.

It is important to note these connection projects are not regulated projects and their connection costs are not included in our Revenue Proposal expenditure forecasts. However, they may drive the need for additional

[22] Rooftop solar and storage report: January to June 2025, Clean Energy Council, September 2025, page 7.

investment in the prescribed transmission network, depending on the nature, number and location of connections and the timing of thermal generation retirements.

Figure 2.8 – Transmission connections since 2018



The increasing number of geographically distributed, inverter-based generators connected to the transmission network presents technical challenges in keeping electricity supply and demand balanced in real time. It also creates complexity in how we operate and plan the network. This is further complicated by generator connections within the distribution network that may impact transmission network performance or constraints. We work closely with Distribution Network Service Providers (DNSPs) Energex and Ergon Energy (part of the Energy Queensland group) through joint planning and other processes to identify and understand the impact of such generation within the distribution network.

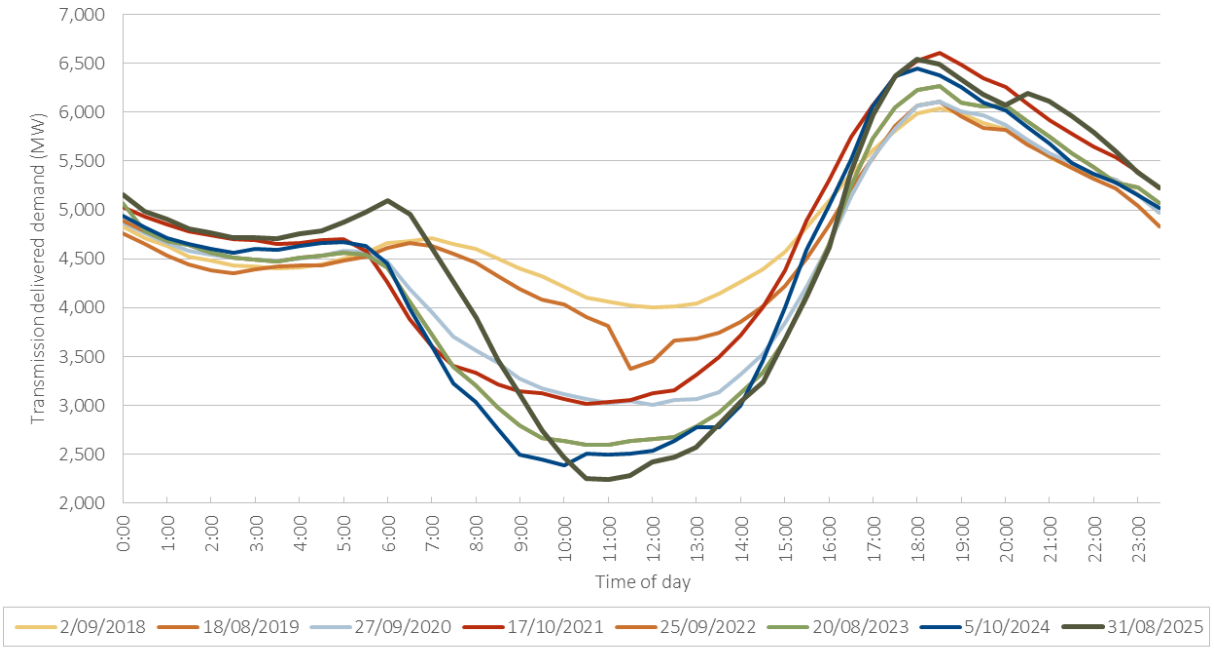
As the complexity of the system increases, the risk of unanticipated events in response to system disturbances increases. This requires increasingly complicated planning and scenario analysis to ensure that system disturbances can be mitigated within operational timeframes.

2.5.1.1 Operating envelope

A key driver of system complexity on the transmission network is the increasing operating envelope – the gap between maximum and minimum demand. This is especially challenging while planning and managing network outages to deliver work.

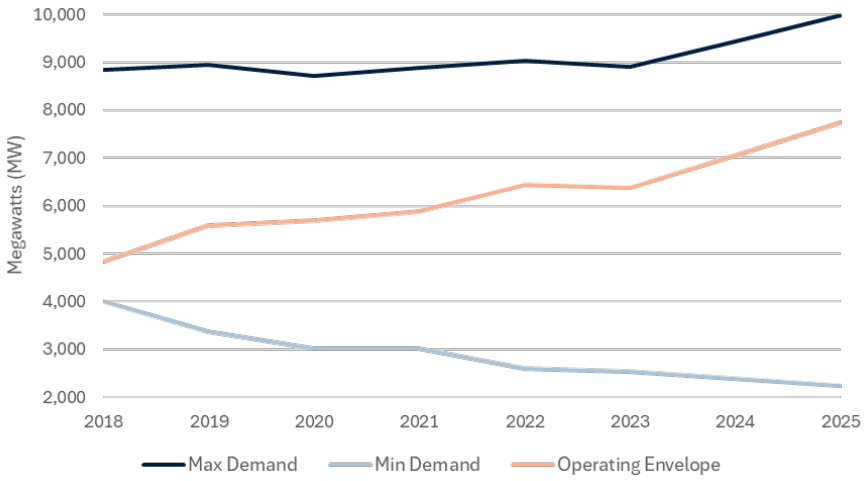
The increased operating envelope is predominantly due to the fall in minimum demand on the transmission network. Figure 2.9, from Powerlink's 2025 Transmission Annual Planning Report (TAPR), shows how minimum demand during the day has continued to decrease since 2018. This is driven by the significant uptake of rooftop solar, which contributes to meeting demand during daylight hours and results in a lower minimum demand on the transmission network.

Figure 2.9 - Changing minimum demand conditions (Source: Powerlink)



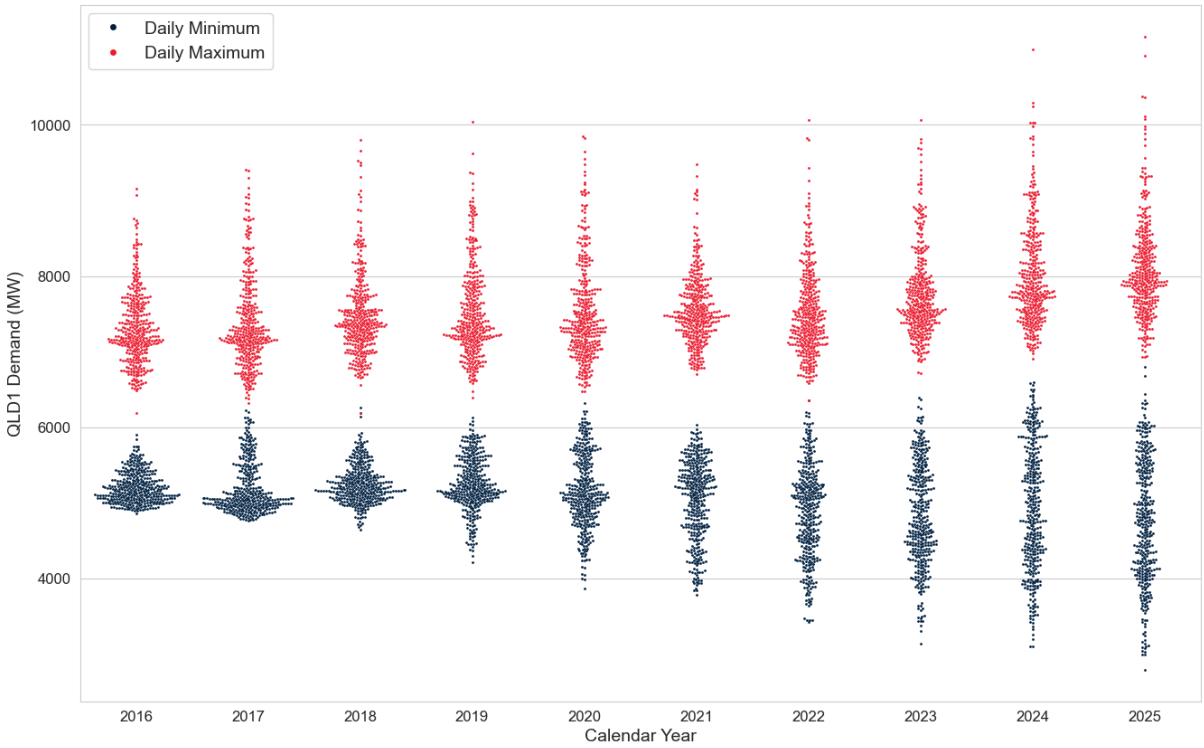
While minimum demand has fallen significantly, maximum demand has continued to increase. This means that the Queensland energy system's operating envelope has increased by almost 60% from 4,834MW in 2018 to 7,735MW in 2025, based on transmission delivered demand, as shown in Figure 2.10.

Figure 2.10 - Operating envelope – transmission delivered demand (Source: Powerlink)



In addition, the daily maximum and minimum demand is becoming more variable and less predictable, with an increasingly broad spread of values. This results in further complexity in operating and planning the network, as a far greater range of potential demand scenarios must be provided for, resulting in considerably more analysis and scenario planning. The increasing spread of maximum and minimum demand each year is shown in Figure 2.11, where the maximum and minimum operational demand for every day of the year is represented by a dot.

Figure 2.11 - Operating envelope – transmission operational demand (Source: Powerlink)



The operating envelope and its daily variability are contributing to increasingly dynamic operating conditions for the network, particularly for reactive plant such as Static Var Compensators, capacitors, reactors, and transformer tap-changers. Many of these assets were not originally expected to operate under such variable conditions, having been installed based on historical network assumptions.

The rapid increase in dynamic technologies such as batteries and inverter-based resources connected to the network add further complexity. These assets offer new opportunities to support system security services, including voltage control and inertia, but they are inherently variable in nature. Synchronous condensers, which provide protection-grade fault current, are also expected to play a critical role in delivering an underlying level of system strength services. While these technologies expand our toolkit, they also introduce a multi-faceted operational challenge.

We are committed to implementing the most efficient mix of tools, balancing capital investment with market-based solutions to manage complexity and deliver safe, reliable and cost-effective outcomes for customers and the market. Long duration storage, advanced energy management tools and operational forecasting capabilities will be key to managing the complexity and security of supply challenges during all variable conditions including minimum load scenarios. Operational forecasting tools will also support improved visibility of network conditions during planned outages.

Managing the security of the transmission network within the increasing operating envelope is a significant operational challenge and remains a key focus for Powerlink in the 2027-32 regulatory period.

2.5.1.2 Cyber security

As information technology and operational technology become increasingly integral to energy system operations, the risk of cyber attacks grows. Implementing robust cyber security measures, including threat detection, incident response, and regular assessments, is essential for safeguarding critical infrastructure.

As a Transmission Network Service Provider (TNSP), Powerlink is required to comply with the *Security of Critical Infrastructure Act 2018*, which includes mandatory reporting requirements and the development of risk management programs. The Act is a key driver for entities like Powerlink to enhance security and resilience against various threats by implementing measures to mitigate risks associated with cyber threats, espionage, and other security concerns.

We are advancing the cyber security of our network to protect against the rising level of emerging threats by aligning with the Australian Energy Sector Cyber Security Framework (AESCF). We are required to continue this focus in the 2027-32 regulatory period. We also work closely with the Australian Signals Directorate in cooperation with its Critical Infrastructure Uplift Program (CI-UP) which regularly provides advice and recommendations to further secure Powerlink's assets through targeted investments.

Our response to this increasingly complex environment includes enhancing physical security of sites as both a barrier measure for cyber security and protection of primary network assets. These issues drive further compliance obligations that must be considered when assessing the deliverability of our necessary works.

2.5.2 Deliverability

Powerlink, together with other network service providers, faces significant challenges in delivering safe, reliable and cost-effective transmission services. These challenges arise from the scale of work increasing demand for skilled resources, the need to secure and maintain social licence through the energy transition, the ongoing requirement to protect the environment and manage impacts and meeting additional regulatory and legislative obligations.

2.5.2.1 Workforce capacity and capability

Infrastructure Australia, in its Infrastructure Market Capacity Report, identified a significant uplift in infrastructure works in the five-year outlook period to 2028/29. It reports that the Major Public Infrastructure Pipeline has increased to $242 billion, with utilities investment having doubled to $36 billion compared to its 2024 report [23].

Construction activity for the 2032 Olympics and Paralympics is another factor Powerlink has considered in its future resource planning.

For the energy sector, the transition to net zero is expected to remain a key driver of investment, as ageing generating plant is progressively replaced. Infrastructure Australia, estimate the total pipeline, including public and private funding, for projects to build transmission, solar, wind and pumped hydro is now $163 billion for the five years to 2028/29[24]. This contributes to a significant demand for specialised workforce, with demand expected to peak in mid-2027, leading to a potential resource gap of up to 300,000[25] full-time equivalent positions.

Powerlink has adopted several strategies specifically aimed at securing sufficient workforce capacity and capability to enable delivery of its forecast portfolio of work, including the 2027-32 regulatory period.

- **Major Projects Division –** We have established a dedicated division to oversee the delivery of large projects within our capital expenditure program to ensure cost-effective delivery and robust governance throughout the project lifecycle.
- **Field delivery resource models –** We have expanded our regional workforce capacity in response to forecast increases in workload across central and northern Queensland. In parallel, we have secured a new Service Level Agreement with our maintenance service provider to ensure that field delivery resources are aligned with projected demand, supporting efficient and reliable network service delivery over the regulatory period.
- **Panel arrangements** – We are consolidating our transmission lines and substations outsourcing arrangements under a newly established panel agreement with delivery partners to support the efficient delivery of construction works. This enhanced framework will introduce additional delivery partners and incorporate scalable capacity provisions to accommodate future workload increases. The expanded panel structure is expected to foster competitive tension, improve cost efficiency, and support timely execution of capital works across the regulatory period.
- **Proactive staff attraction and retention –** We have focused on our recruitment and retention strategies and practices to secure the highly skilled workforce required, including increasing our early career programs (i.e. apprenticeship and graduate programs).

2.5.2.2 Social licence to operate

As a result of a changing energy system and related network development, impacts are being felt in regional and rural communities. Stakeholders impacted by energy infrastructure development, including transmission, seek to influence and shape how change occurs, limit negative impacts, and deliver positive economic and social outcomes.

Neglecting community expectations and a lack of community acceptance of transmission infrastructure projects can lead to significant challenges, including project delays, increased costs, and strained relationships with stakeholders. Powerlink considers proactive engagement and investment is essential to mitigating these risks. Communities, landholders and Traditional Owners are key stakeholders in Powerlink's activities.

[23] Infrastructure Market Capacity 2025 Report, Infrastructure Australia, November 2025, pages 5-6.
[24] Infrastructure Market Capacity 2025 Report, Infrastructure Australia, November 2025, page 28.
[25] Infrastructure Market Capacity 2025 Report, Infrastructure Australia, November 2025, pages 43-44.

Social licence to operate has emerged as an increasingly critical enabler of project delivery, influencing planning, engagement and investment decisions. Social licence (the acceptance by stakeholders of our operations within their community) is critical for Powerlink to successfully construct and maintain our network over the life of the assets. We expect this to continue to be a critical enabling activity into the 2027-32 regulatory period.

The requirement to recognise and achieve strong social licence to operate has informed changes to the Rules and supporting regulations. The National Electricity Amendment (Enhancing community engagement in transmission building) Rule 2023 came into effect in December 2023[26]. Consistent with the long-held view of TNSPs, the Australian Energy Market Commission (AEMC) identified that social licence is critical to the timely delivery of the major transmission infrastructure required for the energy transition. The rule benefits consumers by supporting the timely delivery of the transmission needed to connect cheaper renewable generation to customers[27].

Community expectations in relation to developing new energy infrastructure continues to shape government policy. In 2025, the Queensland Government implemented changes to the *Planning Act 2016,* introducing a Community Benefit System that includes mandatory social impact assessments and community benefit agreements for new solar, wind and BESS developments.

Powerlink had already embedded social performance as a core management system. We actively engage communities, landholders and Traditional Owners in our transmission easement planning process, avoid or manage social impacts, and seek to deliver enduring benefits that create a positive legacy beyond project completion. This approach aligns with the Energy Charter's Better Practice Social Licence Guideline, our strategic objectives and regulatory requirements, supporting a positive social licence to operate for Powerlink and long-term value for Queensland communities.

We have progressed initiatives to improve our approach to early engagement, corridor selection processes and community benefit and social value investment including uplifts in landholder and neighbour payments, establishing Indigenous partnership agreements and undertaking social impact assessments. These considerations inform our forecast for capital expenditure (refer Chapter 4 Capital Expenditure).

2.5.2.3 Environment

Climate resilience has been identified as a key concern by our customers (refer Section 2.3.3). We will continue to adopt proactive approaches to managing the network as conditions change, address wider environmental protections, and comply with relevant legislation. This includes related reporting requirements, which may lead to additional initiatives and obligations.

We are also seeking collaborative approaches in complying with legislation, such as the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). We have been working closely with the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) to support better collaboration, culminating in a Memorandum of Understanding between Powerlink and DCCEEW in October 2024.

[26] National Electricity Amendment (Enhancing community engagement in transmission building) Rule, Australian Energy Market Commission, November 2023.
[27] Rule Determination National Electricity Amendment (Enhancing community engagement in transmission building) Rule, Australian Energy Market Commission, November 2023, Page 35.

Beyond the complexities of environmental compliance requirements, extreme weather events in Australia and across the world have placed upward pressure on insurance premiums. We continue to engage directly with insurance underwriters, our customers and the AER to propose appropriate insurance policies, excess levels and premiums. Further information on our proposed approach to insurance is provided in Chapter 5 Operating Expenditure.

2.5.2.4 Energy market regulation

The NEM regulatory environment continues to change. Key consultations recently concluded, underway, or expected to soon commence relevant to electricity transmission include:

- system security reforms, such as the AEMC's Improving Security Frameworks for the Energy Transition Rule change, and the pending Security Framework Enhancements Rule change proposal
- broader regulatory reform, such as the Electricity Network Regulation Review and the Integrated System Plan Framework (ISP) Review, and
- incentive schemes, including the Service Target Performance Incentive Scheme (STPIS) Review.

The outcomes of these consultations could have material impacts on our operations, such as changes to funding models for future network investment and the way revenue is collected, which could affect the project development lead time or time to deliver necessary works. We proactively provide input into these processes, with the outcome determined by the various bodies involved.

We will implement any changes required. However, until we know the scope and scale of these, it will be difficult to estimate the cost impacts on the business. As a result, we have not allowed for changes in our operating expenditure forecast that may result from in-progress regulatory processes (refer Chapter 5 Operating Expenditure). If material costs are likely to be incurred, we may seek a cost pass through (refer Chapter 11 Pass Through Events).

2.5.2.5 Federal and Queensland Government policies

As a Government Owned Corporation, Powerlink must be responsive to the requirements and policy settings of the Queensland Government. We continue to work closely with Queensland Treasury, and across the Queensland Government more broadly, to engage on future policy settings. The Queensland Government’s Energy Roadmap, published in October 2025, utilised Powerlink modelling and data to help shape its direction and future planning.

Relevant policies from both the Queensland Government and the Federal Government that could affect our Revenue Proposal have been considered and no additional policies have been identified that may impact our submission. We will continue to maintain ongoing oversight of emerging policy and legislative developments throughout the revenue determination process.