## **Foreword**



'Welcome to Queensland!'

The transformation of Queensland's electricity industry to clean, renewable energy continued at pace in 2023/24. Since the release of the Queensland Energy and Jobs Plan (QEJP) and Queensland SuperGrid Infrastructure Blueprint in 2022, and key enabling legislation earlier this year, Powerlink has seen increased interest in renewable generation and storage investment proposals, with over 67GW at the enquiry and application stage. Similarly, there is over 10GW of electrification of existing loads and new loads wanting to connect in Queensland.

## Benefiting Queenslanders by optimising planning and investment opportunities

Powerlink has an unprecedented opportunity to leverage off multiple investment pathways, such as the Queensland SuperGrid Infrastructure Blueprint (to be updated in 2025), planning the regulated shared network and through the connection of non-regulated renewable energy and firming projects. With communities front of mind, the co-ordinated, optimised and least-regret planning of all three investment pathways will deliver the transmission network of the future that is needed to provide clean, affordable and reliable electricity to Queenslanders.

## Building the SuperGrid and realising Renewable Energy Zones (REZ)

As a key component of the energy transformation, the Queensland SuperGrid is a new high capacity transmission backbone to enable the efficient transportation and storage of renewable energy across the state, starting in southern Queensland, extending to central Queensland and then Townsville, with a final stage to Hughenden as part of the CopperString 2032 project. Recent market information indicates greater benefits can be achieved through construction of a transmission line along a more inland route than originally proposed, allowing for connection to be built in stages at a lower capacity initially, and paced to align with interest from renewable energy proponents which will deliver cost savings through investment deferral.

As the recently appointed REZ Delivery Body for Queensland, Powerlink will make recommendations which identify suitable areas of Queensland for REZs. Genuine and transparent engagement with communities to prepare and develop REZ Management Plans will support the optimisation of renewable generation projects located within REZs.

REZ delivery is well underway with the Far North REZ commissioned in July 2024, energisation of the Southern Downs REZ, and the near completion of construction of the Western Downs REZ. Powerlink is currently investigating the potential for the development of the next three REZs with developers.

## Identifying opportunities in a dynamic external environment

Queensland has abundant renewable resources, and solar and wind projects specifically, to deliver cost-effective generation solutions. Powerlink is focussed on delivering strategies which will ensure electricity customers receive cost effective and efficient services.

Implementing innovative solutions and leveraging digital technologies will continue to be central to Powerlink enabling the transformation. This includes shared network replacements to ensure reliability for customers, implementing non-network solutions, particularly for system strength to support future grid operation, increasing the capacity of the shared network to reduce congestion by implementing Wide Area Monitoring, Protection and Control systems, and investigating dynamic real-time ratings and Frequency Control and Ancillary Services to facilitate larger REZs.

The Transmission Annual Planning Report presents Powerlink's current view of the development of the Queensland transmission network over the next ten years. No doubt that view will change and evolve as the energy transformation is realised and becomes embedded in the way we plan and develop the transmission network of the future. What won't change is Powerlink's commitment to supporting communities, customers and industry while delivering safe, reliable and cost effective electricity to Queenslanders.

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