Foreword



'On track for 80% renewables by 2035'

It has never been so exciting to be in the electricity industry. Since the release of the Queensland Energy and Jobs Plan (QEJP) last year we have seen an increased interest in renewable generation, storage solutions, electrification of existing loads and new loads wanting to connect in Queensland. Powerlink has taken this unprecedented interest into account in its planning activities focusing on the delivery of a safe, reliable, cost effective and sustainable energy supply for Queenslanders.

Social license is so important and essential to the energy transformation. Powerlink is committed to genuine, transparent and honest consultation with landholders and communities, as we recognise the potential impacts of the delivery of new electricity transmission infrastructure and the need to share in the benefits it provides.

We are on track for 80% renewables by 2035 with Queensland reaching a significant milestone in August with over 25% renewable energy generation over the previous 12 months. Interest from proponents of variable renewable energy (VRE) generation has increased during 2023 with now over 37GW of wind generation and 30GW of solar generation with plans to connect to the transmission network.

In collaboration with the Queensland Government and Industry, Powerlink continues to progress the development of Renewable Energy Zones (REZs) across the State, with the Far North Queensland, Southern Downs and Western Downs Renewable Energy Zones (REZ) already in-flight. Taking advantage of existing transmission network infrastructure to facilitate development, these REZs will be completed in 2023/24 and 2024/25 and will enable up to 5,900MW of renewable generation, driving economic growth in the regions and delivering value for communities, industries and stakeholders.

With change comes opportunity, as the demand for decarbonised energy is expected to continue to grow in Queensland as industry moves to electrification. We have over 3GW of existing loads investigating electrification options and new loads seeking to connect in Queensland. This step change in the energy landscape is anticipated to bring significant benefits to Queenslanders by helping safeguard manufacturing jobs and creating new low-carbon domestic export markets.

Acknowledging the importance of maximizing the capacity of the transmission network and reducing the amount of infrastructure we need to build, Powerlink continues to find innovative solutions. This includes implementing non-network solutions to support future grid operation; implementing Wide Area Monitoring, Protection and Control (WAMPAC) systems to increase network capacity and reduce generator constraints; and investigating dynamic real-time ratings and Frequency Control and Ancillary Services to enable larger REZs.

Taking into consideration a diversified generation mix and potential future pathways, the Transmission Annual Planning Report sets the scene and represents Powerlink's current view of the development of the Queensland transmission network over the next ten years. Most importantly, creating value for communities, customers and industry while delivering safe, reliable and cost effective electricity to Queenslanders remains front of mind for Powerlink during the energy transformation.

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