Foreword

'The energy transformation and the opportunities it brings to Queensland continue to grow'

Planning of the Queensland transmission network has never been more important. We are going through a once in a generation change as we navigate to net zero by 2050. Powerlink, as the Jurisdictional Planning Body (JPB) for Queensland, is adopting a staged, least regret path when planning the transmission network to ensure Queenslanders remain connected to reliable and cost-effective electricity into the future.

The Queensland Government's 50% Renewable Energy Target by 2030 is well within our grasp. Proponents of significant variable renewable energy (VRE) generation, storage systems as well as alternative energy projects such as hydrogen, are in detailed discussions with Powerlink's experts to connect to the transmission network.

As we've seen in recent years, interest remains high from VRE generation projects proponents aspiring to connect in an ideal location such as Queensland. Since publication of the 2021 Transmission Annual Planning Report (TAPR), Powerlink has completed four projects to connect VRE developments and construction is underway to connect a further 1,640MW of generation and battery projects. Powerlink is also progressing a significant number of connection applications which are well advanced.

Powerlink's network planning shows that the transmission network will require augmentation in the years to come to enable the transfer of large amounts of energy from intermittent renewable generators to storage facilities and then to load centres. This has been conveyed in the recently released Queensland Energy and Jobs Plan and foreshadowed in the Australian Energy Market Operator's 2022 Integrated System Plan (ISP). As the transmission network expands, Powerlink is committed to proactive engagement and to working with communities, industry and stakeholders to create and sustain long-term value for customers.

In collaboration with the Queensland Government and industry, we are delivering Australia's first tranche of Renewable Energy Zones (REZ) which will unlock up to 500MW of renewable capacity in northern Queensland by the end of 2023 and support the development of one of Australia's largest onshore wind farms in southern Queensland by early 2024. These REZ sit at the forefront of transformational change and are a sign of what can be achieved as Queensland unleashes its renewable energy potential which is the envy of the world.

Looking out over the 10-year period of the TAPR, as we leverage the changing generation mix and load behaviours of the new energy system, it is clear challenges await us. Powerlink is looking ahead to meet these challenges with a focus on innovation and the introduction of alternate technology and non-network solutions to ensure the smooth operation of the transmission network and to shape the development of cost-effective investment solutions for our customers.

We trust the information contained in this TAPR such as the energy and demand forecasts, committed generation, current transmission projects and areas of possible future transmission network investments, will help inform communities, customers and industry about Powerlink's future plans.

As we embark on the energy transformation to connect Queenslanders to a world-class energy future, our commitment remains on providing safe, reliable and cost-effective electricity to more than five million Queenslanders and 238,000 businesses who depend on our services every day.

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