

North Queensland Area Plan Forum Summary of Findings

27 April 2017



Powerlink held an engagement forum in Townsville on 27 April with regional area stakeholders to gather strategic input on local issues, topics of interest and other factors to consider when planning transmission reinvestments in North Queensland.

The forum included an introductory presentation outlining the development of the network in North Queensland over time, along with an overview of the existing local transmission network, asset condition and current observations in regard to ongoing network requirements.

Following the presentation, stakeholders were invited to share their views and provide input into the following discussion points:

Discussion Point 1

What factors have the potential to impact on Powerlink's network in the next 10 years? (e.g. change in generation mix, demand levels, customer usage, new loads). What do customers need from the network?

Discussion point 2

What are the key drivers Powerlink should consider in deciding the best network (reinvest, reconfigure or decommission) or non-network solutions for this area over the next 10 years?

Key Themes

1. *Mutual benefits can be achieved through synergies*

- Identification of optimal locations for generation connection will assist generators and has the potential to improve system security and stability.
- Strategic development of the network in association with utility scale integration (including opportunities for renewable energy).

2. *Network resilience*

- Future strategy should preserve operating capability of the transmission network.
- Future strategy should consider high consequence/low probability events that may impact security of supply into North Queensland.

3. *Reliability and cost*

- Disparity in safety nets between Ergon Energy and Powerlink
- Challenges of maintaining inertia
- Provision and maintenance of low cost access for new generation and load connection

4. *Increased focus on stakeholder engagement*

- Important Powerlink works with regional councils to assist in the development of prudent regional development plans.
- Opportunity to improve and broaden communication and engagement practices in order to be better informed on regional stakeholder needs.

Summary of Group Discussions

The group discussion focused on factors particular to stakeholders in North Queensland, specifically future developments that have the potential to impact Powerlink's network and customer requirements that should be considered in future investment planning. Discussions with attendees were held in two smaller groups.

Group A Summary:

The key points raised were:

- The ability to maintain low cost access for new generation and load connection when considering reinvestment or reconfiguration of the transmission network.
- When making reinvestment decisions there needs to be alignment between Ergon Energy and Powerlink planning and access criteria.
- Early provision of information to stakeholders to allow identification of optimal locations for generation connection and potential improvement of system security and stability.
- The importance of a collaborative approach with regional councils which will assist in the development of prudent regional development plans.

Other points which were raised included:

- consideration of the existing network's capability to meet expansion of current customer loads when making reinvestment decisions;
- resilience of the network to major events such as cyclones and long-term outages of critical equipment;
- the potential for major load increases in the mining sector;
- the capability of the network to facilitate long-term regional development plans; and
- consideration of the impact of new generation connections on existing generators and resulting constraints.

Additional feedback:

- Stakeholders do not foresee significant net load growth in the area, taking into consideration other factors such as solar and energy efficiencies.
- Align the reliability standard between Powerlink and Ergon Energy.

Group B Summary:

The key points raised were:

- North Queensland is currently, and will continue for the next few years, experiencing high levels of new large power generating systems (particularly high levels of penetration of those that use renewable energy connecting to the system).
- Discussion focused on the potential for more strategic development of the network and utility scale integration to support developments between Townsville to Charters Towers including opportunities for solar (Renewable Energy Zones).
- The importance of an increased focus on resilience and emergency management when creating future plans into and within North Queensland was discussed.
- Challenges specific to North Queensland include exposure to significant weather events, system security issues with the increased high level of penetration of renewables, new large load developments and sustaining long term critical site or plant outages.
- Having a focus on affordability to consumers and stakeholders was raised. Particularly important in North Queensland are issues such as loss factor (and impact on price), and the operating capability of

the network including power quality, quality of supply and availability.

- There is an opportunity for Powerlink to improve and broaden communication and engagement practices. It was highlighted that Powerlink should improve understanding of regional stakeholder needs and work more closely with regional councils in relation to regional development plans, demand response initiatives and strategic growth.

Other points which were raised included:

- financial impacts on businesses/farmers as a result of changes to tariffs;
- consideration of both generation and load development when developing resilience plans;
- consideration of the impact of new generation connections on existing generators and resulting constraints;
- renewable energy targets should consider other types of technology e.g. storage (bagasse);
- impact of new technologies - e.g. Tesla for trucks (electric commercial vehicles) travelling greater distance in NQ than SEQ leading to an increased energy requirement; and
- consideration of the existing network's capability to meet expansion of current customer loads when making reinvestment decisions.

Additional feedback:

- One stakeholder particularly noted their appreciation of Powerlink's provision and management of retaining technical expertise to facilitate efficient discussions and connection enquiries. Their opinion was it should be maintained and not replaced by a 'commercial only' approach.

Where to from here?

Powerlink will use the input provided at this forum and continue to work with stakeholders in North Queensland to better understand their needs to ensure:

- future investment plans focus on maximising further value for customers
- the optimal use of existing assets
- the transmission network provides the most value and flexibility for our stakeholders moving forward.

As part of Powerlink's commitment to ensure an integrated and prudent approach to future network development and regional development in North Queensland, it is expected that Powerlink will continue discussions with stakeholders over the coming year, including regional councils and major customers.

Powerlink also anticipates progressing to a more comprehensive assessment of options together with the associated engagement activities during 2018 to arrive at the optimal end of life strategy for the 132kV transmission line assets between Strathmore and Townsville South substations.

Subsequent to this forum, in June 2017, the Queensland Government announced a plan for investment related to electricity supply in North Queensland. This plan aims to strengthen and diversify the north's energy supply. Powerlink is working with the Queensland Government in relation to the proposed development of strategic transmission infrastructure in north and north-west Queensland to support a clean energy hub. More information about this project is available on the Department of Energy and Water Supply (DEWS) website www.dews.qld.gov.au.