Powerlink

Proposed Genex Kidston Connection Project

Corridor Selection Report Summary

MARCH 2017

About Powerlink

Powerlink is a leading Australian provider of high voltage electricity transmission network services, combining innovation with insight to deliver safe, cost effective and reliable solutions. Our transmission network extends 1,700 kilometres from north of Cairns to the New South Wales border, and comprises 15,500 circuit kilometres of transmission lines and 141 substations.

Enabling a renewable energy economy is a key focus for Powerlink. Transmission networks will play a vital role in facilitating new, large-scale renewable and low emissions generation. Powerlink is well placed to support the development of renewable energy sources and deliver efficient connections for large-scale renewable generators to the National Electricity Market.

Key points

- Powerlink has been engaged by Genex Power (Genex) to prepare a Corridor Selection Report (CSR) for a potential 275kV high voltage electricity transmission line connection and substation for Genex's proposed renewable energy generation project at Kidston, around 270km north-west of Townsville.
- The proposed Genex project includes solar and pumped storage (hydro) and will have the capacity to generate approximately 520MW of energy.
- Powerlink thanks landholders and stakeholders who provided their feedback on the proposed transmission line project during its initial CSR consultation phase from November 2016 to January 2017. Following an analysis of these valuable insights, as well as desktop and field studies, Powerlink has completed its preparation of the CSR.
- A full copy of the CSR is available on the Powerlink website. Please contact us if you would prefer to receive a hard copy or electronic version on CD in the post.
- The CSR identifies a preferred study corridor and preliminary alignment for the proposed transmission line project that offers on balance the most appropriate location for the transmission line, taking into account social, economic and environmental factors. An area of interest has also been identified for a substation in the vicinity of Mt Fox.
- The CSR recommends the transmission line be generally located alongside existing Ergon Energy powerlines where possible, to minimise potential impacts from the proposed transmission line project.
- Irrespective of whether Powerlink or another entity undertakes subsequent phases of the project, further landholder and stakeholder engagement, and comprehensive on-ground studies, will be conducted before the transmission line's alignment and substation location is finalised.
- Decisions regarding the progress of the project will be made by Genex at an appropriate time.

Corridor development process

Powerlink has prepared the CSR in a staged manner. Each stage of the process has assisted with progressively identifying opportunities and constraints associated with the proposed transmission line, and understanding landholder and stakeholder feedback.

Stage	Focus	Timings
Key stakeholder engagement on Draft CSR (DCSR)	Local and state government engagement to seek local knowledge and identify preliminary opportunities and constraints.	Early to mid 2016
DCSR finalised	The three study corridor options within the proposed study area were investigated and evaluated. Two study corridor options were recommended for further analysis.	May 2016
Landholder and stakeholder engagement to finalise CSR	Further exploration of opportunities and constraints for the proposed transmission line project, specifically for the two recommended study corridor options. Further desktop studies were conducted and initial field studies were completed.	November 2016 to January 2017
CSR finalised	The two most feasible study corridor options were further examined, plus two refinements were made to the proposed study area – expansion of the study area's width west of Greenvale and tightening the study area at Mt Fox. Preferred study corridor and preliminary alignment were identified.	March 2017

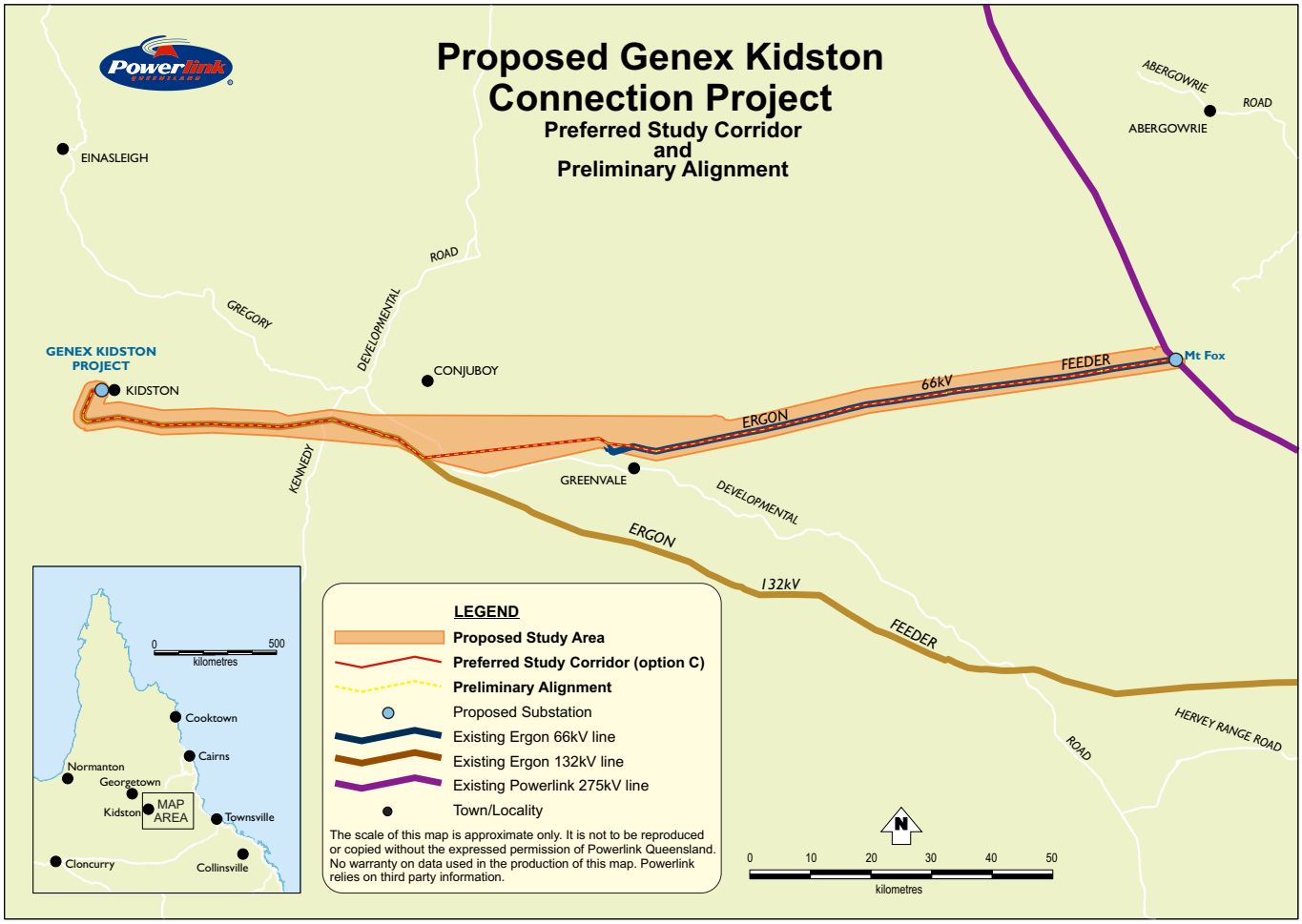
Stakeholder and landholder engagement

Powerlink undertook early and targeted engagement with landholders and stakeholders to assist with finalising the CSR. This engagement built on the initial stakeholder engagement undertaken for the DCSR during early to mid 2016.

Landholder engagement for the project occurred from November 2016 to January 2017. Most landholders took the opportunity to meet with Powerlink representatives face-to-face and provide early input into the CSR. Phone calls and emails were also used to seek landholder feedback on the project, provide follow-up information and discuss project activities.

Powerlink also hosted a stakeholder workshop in Townsville in November 2016. This forum provided an opportunity for key government and industry stakeholders to collaboratively explore the proposed study area and share feedback on opportunities, constraints and key issues.

We would like to thank all landholders and stakeholders who participated in consultation activities. We greatly appreciated your time, input and valuable insights.



Key findings

The CSR has selected both a preferred study corridor from the broader proposed study area and a preliminary alignment to serve as the basis for further investigation during subsequent assessment processes, should the project progress. This information is identified on the map above.

The preferred study corridor outlined in the CSR is option C (the most southerly option of the three potential corridors considered). This corridor presents on balance the most appropriate location for the proposed transmission line, taking into account social, economic and environmental factors. In particular, it has the:

- lowest potential for environmental impacts based on an independent ecological assessment
- highest potential to further reduce overall project impacts by generally locating alongside existing Ergon Energy infrastructure.

The preliminary alignment within study corridor option C is mapped at a nominal width of 120 metres around the centreline of the existing Ergon Energy powerlines. This represents sufficient area to place the proposed 275kV line either north or south of the existing Ergon Energy powerlines, depending on terrain and other local constraints. There may be some specific areas where this width could require variation. For example, to accommodate multiple Ergon Energy powerlines or associated infrastructure, or to work around particular topographic constraints. These potential variations will need to be further explored and refined in subsequent project investigations.

There are two areas where minor alternative alignments are required:

- between Greenvale and Conjuboy, due to the location of existing resource interests and large escarpments
- at Mt Fox, which will require additional refinement in future project stages when a specific substation site is selected. It is outside the scope of the CSR to select a single substation locality, but an area of interest has been identified to form the basis for future assessment and engagement as the project progresses.

Desktop and field assessments

In addition to engagement, the CSR was informed by a range of desktop and field assessments, including:

Assessment tool	Purpose
Remote sensing via satellites	To define the extent of vegetation in the proposed study area and the potential impact of the study corridor options
Third party ecological advice	To assess potential impacts for matters of State and National environmental significance
Likelihood of occurrence assessment	To supplement the third party ecological advice and build on available database information
Review existing Ergon Energy network survey data	To enhance understanding of the terrain in the proposed study area by accessing the best available existing data sources
Helicopter flyover	To enhance understanding of the proposed study area beyond information available on the ground

Engagement feedback

The matters most frequently raised by landholders during engagement were:

- potential impacts on property operations including mustering activities, access and security
- identification of constraints to the alignment including existing and proposed infrastructure, and topography on individual properties and in the adjoining area
- potential location alongside existing Ergon Energy powerlines in the region
- biosecurity and weed management during construction and maintenance, and the movement of weeds throughout the lifecycle of the proposed transmission infrastructure
- line design, including ground clearances.

Feedback from stakeholders, including local councils, state government departments, elected representatives, peak industry bodies and Aboriginal parties, was diverse. Their input is summarised in the CSR.

Next steps

The CSR provides a solid foundation to guide detailed investigations of the preferred study corridor and preliminary alignment in a future assessment process, should the project progress.

Genex has multiple options available to progress the proposed transmission line project. Irrespective of whether planning approval, acquisition and construction are undertaken by Powerlink or another entity, comprehensive environmental, technical and field studies will be undertaken. This is in addition to formal consultation opportunities for landholders and stakeholders.

Further Information

For more information or to provide feedback on the CSR for the Proposed Genex Kidston Connection Project, or request a hard copy or electronic version in the post, please contact:

Murray Abel
Landholder Relations Manager
Ph: (07) 3860 2377
Email: mabel@powerlink.com.au

FREECALL: **1800 635 369**
(business hours)

pqenquiries@powerlink.com.au

www.powerlink.com.au
(Go to 'Projects in My Area/ Northern')

Connect: