

## Meeting minutes

Meeting name	Borumba pumped hydro project: Transmission sub-group meeting
Location	Australian Institute of Country Music (AICM), 26 Channon Road, Gympie and Microsoft Teams (online)
Date and time	11 November 2022, 12:00 pm to 2:40 pm
In-person attendees	Ian Stehbens (community member) (IS), Dan O'Regan (HQ Plantations) (DOR), Graeme Elphinstone (Gympie District Beef Liaison Group) (GE), David Arthur (Wide Bay-Burnett Environmental Council) (DA), Petra Van Beek (Gympie Chamber of Commerce) (PVB), Colin Langton (Powerlink) (CL), Luke Duncan (Powerlink) (LD), Rebecca Powlett (Queensland Hydro) (RP), Rebecca Grady (Queensland Hydro) (RG).
Online attendees	Stuart Traill (Electrical Trades Union) (ST)

## Meeting purpose

The purpose of this meeting is to engage with stakeholders to introduce and discuss the corridor options for the two transmission connections for the Borumba Pumped Hydro Project.

This meeting is part of the ongoing stakeholder engagement program for the Borumba Pumped Hydro Project and associated transmission connections.

## **Minutes**

Agenda Item	Minutes and Actions
1.0	Introduction and housekeeping
	RP spoke to acknowledgement of country, Remembrance Day, and venue's emergency procedures.
	Queensland Hydro and Powerlink
2.0	RP noted, as a result of the Queensland Energy and Jobs Plan (QEJP), the Queensland Government announced Queensland Hydro to deliver large scale hydro projects for Queensland. Powerlink will continue to focus on their core business, which is distribution, including transmission lines.
	RP noted open door policy with regards to questions and concerns for both Powerlink and Queensland Hydro – all stakeholders will be directed to the most appropriate organisation to address their questions.
	Transmission sub-group
3.0	RP noted that this sub-group is a branch off from the full stakeholder reference group and have is made up of members that reported an interest in the particular sub-topic. Sub-group members have a responsibility to help report back to the full stakeholder reference group. All terms of reference remain per the full stakeholder reference group.
	Transmission Connections – overview and scope
4.0	CL and LD welcomed stakeholders to the sub-group meeting.
	LD noted Powerlink have been talking to the community about transmission lines for some time, as part of a commitment to early engagement.

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Agenda	
Item	Minutes and Actions
	CL noted hydro generation/storage projects and transmission lines work hand-in-hand to deliver pumped hydro energy storage (PHES) projects.
	LD spoke to Powerlink's background, noted Powerlink was formerly known as the Queensland Energy Commission (QEC).
	DA asked if there are any thoughts on duplicating the powerlines from northern New South Wales to Texas?
	CL noted that this is being investigated; however, no decision has been made regarding the location or timing of this project.
	GE asked where this Borumba transmission sub-group sits in reference to the Powerlink South Burnett stakeholder reference group?
	CL noted Tarong sub-group is separate to the Borumba reference group and has had one meeting to date to discuss transmission line specific information. LD noted that the Borumba group is the first to see this corridor information. Powerlink has the view that priority needs to be given to landholders in the focus area of Tarong and Halys. This is very much geographically based.
	CL noted previous engagement has been regarding the study area for the placement of transmission lines, to gain information on impacts and areas which are of importance. This ran in line with AECOM's desktop study with high, medium and low impact mapping. Community input and AECOM's desktop study are the two paths from which the existing corridor options have been drafted, in the aim to find a recommended or preferred option. Once this preferred option has been found, the process will be to locate a 60 m to 70 m wide corridor inside this option.
	CL noted national parks are high priority areas to be avoided; however, due to the 4 km width of the current draft corridors, some options shown on the current corridor maps show impact to national park.
	LD noted that since rebranding from QEC to Powerlink, the early engagement process has changed and now recognises the importance of landowners' preference. LD recognised that no landowners want transmission lines on their property.
	GE asked 275 kV capacity for 60 m wide corridor. CL noted a 70 m wide corridor is required for a 500 kV transmission line.
	IS asked if towers located on higher terrain have different spacing. CL noted this is not the case, and that most towers are $450 \text{ m} - 600 \text{ m}$ apart. IS noted the country being investigated sits in intense relief. CL noted that this is mapped in the desktop study to find the best placement of the towers.
	IS noted that flat country, clearing is necessary; however, in high relief country this may not be necessary. CL noted that vegetation can be left in the lower areas, with clearance calculations considered and with security in mind.
	IS noted that from Borgan to Monsoldale the valleys are intense.
	GE asked if there is still an option on the table to run two transmission lines side by side. CL noted this is only an option if two lines run together, due to them sharing a path out of Borumba until a split off point.
	CL noted that the transmission lines may be up to 500 kV as part of the QEJP to consider the wider regional effect of renewables and the pumped hydro combined. LD noted that the regional implications are being considered.
	CL noted that there has been a community survey since last engagement. CL referred to slides for questions and survey findings.



## Agenda Minutes and Actions Item GE asked how the survey was advertised and if it asked questions directly related to transmission lines? RP noted that the survey was put out for Borumba via Facebook, QR code, etc. 320 responses were received. Two questions related to transmission lines. IS noted the survey somewhat forced stakeholders to choose an option, when sometimes no option was preferred. RP noted open text box question was designed to capture options and help to mitigate this, as well as multiple other forms of engagement. IS asked what are the "other factors Powerlink should consider" in the survey? RP to take on notice for full stakeholder reference group. RP noted this is a snapshot; however, all considerations will be recognised and considered. CL noted undergrounding work scope is vastly different. Overground can deal with fluctuating topography, whereas underground must be flat and requires excavation and maintenance as a grassed area. DA asked if water crossings are an issue when undergrounding. CL noted that directional drilling is required in this case which can result in complications. GE asked if a high conflict area, could there be a mix of under and overgrounded lines? CL noted this is an option when dealing with a high conflict area. CL noted cables require joints and maintenance. GE asked if there is a ballpark dollar figure for comparing over and underground? CL noted this is difficult due to the different options and station placement. CL noted a general rule is three to 10 times more expensive to underground; however, this varies a lot and there is not a fair comparison. PVB noted Cairns case study, there was a large issue with electric and magnetic fields (EMF). However, this is still an issue with undergrounding. CL agreed that sometimes undergrounding is closer than overgrounding. LD noted a consideration is the horizontal separation from occupants of the land, as well as from regular work activities. LD noted verification and updating of EMF studies is constant to avoid harm. CL noted base levels are used, as well as a swing with wind studies to ensure easement safety. PVB noted there may be no point in undergrounding considering these impacts. IS noted geology in the area will make undergrounding difficult also. DA and PVB agreed. LD noted that economics doesn't stack up when working in rural areas, which affects taxpayers. CL noted the release of the QEJP (spoke to slide dot points). Borumba is a high priority transmission project to connect into the grid of the 'backbone'. GE noted the term "super-grid" is more political than engineering. IS asked which are the other transmission projects? CL noted other projects are: Woolooga to Central Queensland Central Queensland to Pioneer Burdekin 3. Pioneer Burdekin to Townsville Townville to Hughenden GE asked how "backbone" transmission differs to normal transmission? LD noted this is a Powerlink term as a historical term for transmission that runs from north to south in Queensland. CL discussed the Regional Energy Transformational Partnership Framework (RETPF) per slide 8. LD noted

principles 3 and 4 are required to build a local workforce with local opportunities.

these roles. LD noted that this is a viable option for projects going into 2035 and beyond.

DA noted approvals will also be simplified. PVB noted this is an "all eggs in one basket" situation.

DA noted that there would be a number of highly skilled people in mining who could be re-trained to take on

GE noted that there is a political spin in the engineering, how will this be actioned? CL noted that there is an action plan to ensure this comes to fruition. CL confirmed that at a higher voltage, this is deliverable. For 275kV lines, it will need to happen more quickly than this. LD noted cost savings of the higher voltage lines.



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	ST noted that with mine workers coming across into transmission lines work, there is a need to be careful of the minimum standards of safety related training. Conversations are occurring between Electrical Trades Union of Australia (ETU) and Powerlink. PVB noted that there needs to be a training centre further south, as TAFE is insufficient. DA agreed that there is an investment needed in the TAFE sector to supply skills.
	ST noted that an aging workforce (20% is over the age of 50 years), who will likely retire during the middle of this boom. Conversations are being had around incentivising keeping people in the industry. ST noted that all stakeholders need to come together to solve these mutual issues. ST noted Cert 2 is full (minimum requirement into electrical trade), so significant investment in training is required. LD noted that Queensland is not in isolation in this power boom – so there is an appetite to source workers locally.
	GE noted concern that Powerlink may not have capacity to deliver all QEJP. CL noted that this can be delivered, however it will need to be a joined effort as this will be a huge challenge. GE asked if this is deliverable from an engineering point of view? CL confirmed Powerlink believe this is deliverable. LD noted Chief Executive Officer of Powerlink has responded to the QEJP, with a plan to deliver the framework.
	DA asked if there is a change to the business model required? For example, moving from contractors to its own construction capability? ST noted this is a conversation currently, with a preference to train additional Australian tower builders and electricians. ST noted that there is likely to be a mixture. Decisions are required to be made shortly.
	Tarong/Halys connection corridor options
	CL showed project map and potential transmission connection points.
	GE asked RP if the Brisbane Valley area connections mean that there needs to be another reference group? RP noted that the local councils and Members of Parliament are being spoken to currently. Local stakeholders will be engaged with, with the release of these maps.
	GE noted the middle corridor (through state forest) looks to be very neat with fewer stakeholders.
5.0	LD noted that State forests aren't being targeted; however, if there is no pathway through the connection may need to lean into the State forest.
	GE asked DO'R if these lines are going through forestry? DO'R noted that Queensland Parks and Wildlife manage some State forest.
	IS noted some of state forest has significance for Indigenous people.
	GE asked if planted forests are hoop pines? DO'R noted this would be mostly hoop pines. DA asked if these are native? DO'R noted this is mainly a mix of native pine and hardwood.
	DA asked IS if the northern leaning corridor to Tarong is ruled out? IS noted that it would be undesirable to the geological monument country in Kingham Gorge and Yabba Range.
	Woolooga connection corridor options
	DA asked if the first 10 km - 12 km from Borumba are co-located? CL confirmed that this is the case.
6.0	IS noted "it cannot go west here" – this is a no-go area as this is wildlife and scenery heavy. Four camera traps have been placed there for threatened species just last week.
	CL noted the central western split option goes through a valley. Which keeps out of the national park and the mountain range. Eastern split option is more residential which presents issues.
	LD noted that these maps have been largely developed via desktop surveys. Next step is community engagement and cultural and ecological surveys.

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	GE noted that Widgee community will prefer western central option.	
	Regarding the eastern corridor, IS noted that western side is less populated and less subdivided (called "the pineapple divide" in Kandanga Valley).	
	GE asked why the western option is so wide? CL noted this is to avoid the main body of the mountain range, national park and state forest. CL referred to document package, options document, and noted that this is a significantly longer route.	
	GE noted that "people who have got a transmission line might just get another transmission line".	
	DA asked IS if the western most corridor to Woolooga is ruled out? IS noted that he would rule it out.	
	Outline next steps and Q&A	
	PVB asked what the compensation process for the landowners? CL noted that the process is to work with the community to find a preferred option for an easement. The owners on the easement remain owners of the land, and a settlement negotiation is held with a valuation of the land. Easement placement is a government process, and community engagement seeks to find any reasonable objections and mitigate this. However, following the community consultation period, the Minister will have final say on this. CL noted that property owners will be compensated. LD noted that there are multiple heads of compensation. Full compensation for dispossessed land where towers sit, as well as linear corridor and business disturbance (for farmers etc.), and visual amenity compensation. LD noted QEC's historical compensation framework has been vastly improved upon by Powerlink. CL noted that the financial outcome will be a lot better.	
	GE noted that weeds are high population in Widgee. CL noted that Giant Rats Tail grass and small blocks of land in this area cause a challenge for this option.	
7.0	IS asked what the consultation with an environmental group for the resource reserve revocation for the national park will look like. DA noted consultation with primarily environmental groups on the 24/11, which is the stakeholder reference group meeting. RP noted that there would be an informal question for the stakeholder reference group members after the formal stakeholder reference group meeting on 24/11. RP noted that Queensland Hydro are aware some environmental groups have been disappointed about the resource reserve revocation under the <i>Nature Conservation Act 1992</i> and that this resource revocation is for geotechnical drilling and will be talked through at the stakeholder reference group meeting.	
7.0	IS noted Powerlink previously said they would avoid the Kingaham Gorge waterfalls; however, the map options do not indicate this at this 4 km width. IS invited DA to view this tomorrow. Primeval Forest is located here, which creates a unique and to-be-protected area. IS noted that ecologically and visually these areas are very important. RP noted that this is the beginning of the conversation and to be refined until the 70 m width is agreed upon.	
	GE asked when Chris Gwynne will announce the results of the new Mary Basin Water Plan? RP noted the hydrology studies will be discussed at the full stakeholder reference group meeting, as well as information regarding the Department of Regional Development, Manufacturing and Water's (DRDMW) resource plan. DRDMW are comfortable with our hydrology results being discussed with the community. GE noted concern with SEQwater taking resources from the Mary Valley. RP clarified that the Borumba PHES project's remit and modelling pertains only to the energy project. RP noted that Borumba and DRDMW are using the same hydrological models. RP noted that DRDMW team has been restructured.	
	PVB asked if there would be a social housing sub-group established? RP noted that when this information and actions are available, this is likely to be established. PVB noted this is of relevance now, as these matters and conversations take time to resolve in communities and in government. RP noted these discussions are likely to begin early 2023.	
	GE asked if this presentation will be sent to stakeholder reference group members? RP confirmed that this will be sent.	



Agenda Item	Minutes and Actions
	IS thanked the team for excellence presentations, collaboration and attitude "it's wonderful to engage with you". PVB, GE and DA agreed.
	LD noted further engagement to be undertaken to discuss transmission line placement. CL noted that if engagement has not been sufficient, Powerlink seek further input.
Meeting closed 2:40 pm	

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