

# Ilford to Bylong Electricity Transmission Line Upgrade



KEPCO Bylong Australia (KEPCO) proposes to develop the Bylong Coal Project, located approximately 55 km north-east of Mudgee in New South Wales, Australia. In parallel with the proposed Bylong Coal Project, an upgrade of the electricity transmission line between Ilford and the Bylong Valley will be completed. The proposed upgrade will replace much of the existing 66 kilovolt (kV) feeders (transmission lines) to increase capacity to supply electricity to the Bylong Coal Project. The upgrade will also provide long-term benefits for the local area including improved performance and reliability for all residents and businesses connected to the electricity network.

## OVERVIEW OF PROPOSED UPGRADE

It is proposed to upgrade a section of transmission line commencing 8 km north of Ilford, running through Kandos and on to the Bylong Valley, totaling a length of approximately 67 km. The proposed route of the upgraded line will follow the same alignment as the existing transmission line for most of its length, and be within the existing Endeavour Energy easement.

A deviation of the existing transmission line for approximately 7 km between Kandos and Rylstone is proposed. This preferred alignment would run along existing road reserves on Henbury Avenue and Davies Road in Kandos and within part of the disused rail corridor. This alignment would be less visually intrusive than the existing 7 km corridor between Kandos and Rylstone and cause fewer disruptions to the electricity supply of residents during the construction phase. KEPCO is engaging with Government stakeholders and the current owners of the rail corridor to progress the preferred alignment option.

The objective of the upgrade is to improve reliability and supply capacity for the Bylong Coal Project. The upgrade will also provide improved safety for the wider community by upgrading the transmission lines to better control voltage and adding an overhead earth wire. This will provide increased protection to the line from lightning strikes, improve reliability and reduce the likelihood of power surges.

## LAND ACCESS

Landholders whose properties contain transmission line infrastructure to be upgraded have been requested to provide access to allow surveyors, engineers and construction crews to undertake site inspection and upgrade activities. Land access arrangements are being negotiated with affected landholders well in advance of the upgrade activities commencing. Where possible, landholders' preferred access arrangements will be taken into consideration when scheduling construction activities. Landholders with properties adjacent to the easement will also be directly consulted to ensure they are aware of the proposed works and any potential impact to their existing amenity.



*Indicative example of existing transmission line infrastructure*



Indicative example of upgraded transmission line infrastructure

## APPROVALS PROCESS

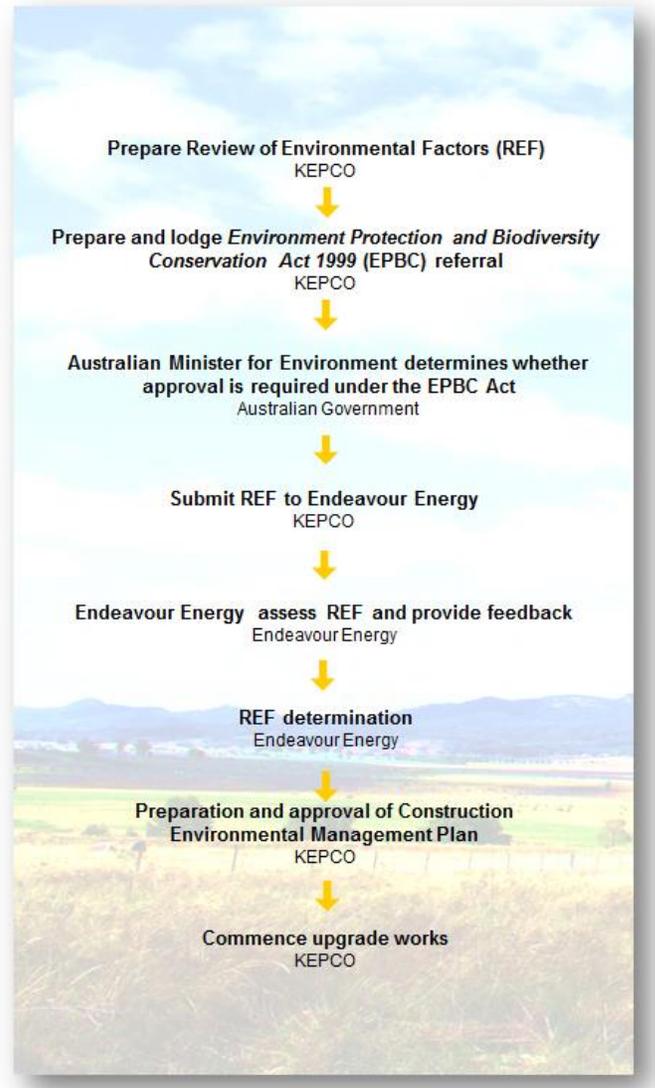
Endeavour Energy is the relevant energy services corporation within the meaning of *the Energy Services Corporations Act 1995* and is the proponent for the transmission line upgrade. KEPCO will carry out the upgrade on behalf of Endeavour Energy. A Review of Environmental Factors (REF) for the upgrade was determined by Endeavour Energy, the determining authority, and a Notice of Determination with conditions of approval for the upgrade was issued. The transmission line upgrade will be constructed in accordance with this determination.

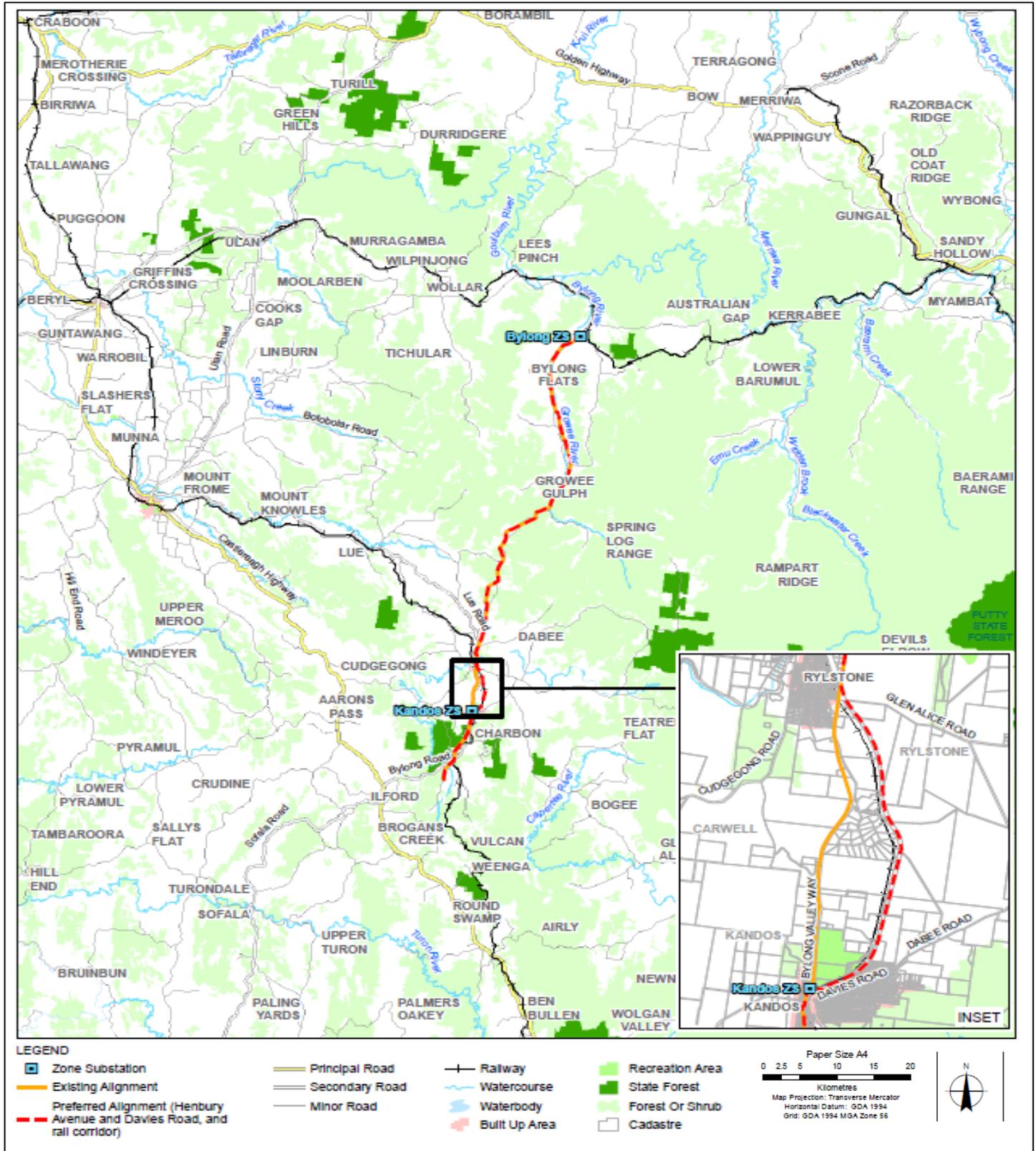
Under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), proposed actions that have the potential to significantly impact on matters of national environmental significance must be referred to the Australian Government to determine whether the proposal constitutes a 'controlled action' requiring approval from the Australian Minister for the Environment.

KEPCO, on behalf of Endeavour Energy, referred the proposal under the EPBC Act due to the potential for impacts on listed threatened species associated with the preferred alignment (EPBC 2016/7754).

The delegate of the Commonwealth Minister for Environment and Energy determined on 12 September 2016 that the proposal is not a controlled action provided it complies with the conditions set out in the determination, if the preferred alignment is adopted.

## INDICATIVE APPROVALS PROCESS





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## CONSTRUCTION ACTIVITIES AND POTENTIAL IMPACTS

The upgrade involves replacing the existing transmission line with a higher capacity transmission line and concrete poles that meet current design standards. Concrete poles are frequently used in rural locations because they require less maintenance than timber poles and are less prone to bushfire damage, minimising potential impacts to nearby landholders.

The upgrade will also involve the transfer of pole-mounted transformers, switchgear and equipment required to be installed separately on timber poles in accordance with the current design standards. Furthermore, the upgrade will include the provision of an overhead earth wire located at the top of the poles for the entire length of the line.

Construction of the transmission line will progressively move along the feeder route using mobile equipment such as posthole borers, cranes, 'cherry pickers' and winches.

The transmission line passes through the local communities and towns of Kandos, Rylstone, Clandulla, Charbon, Bylong, Reedy Creek, Breakfast Creek, Upper Growee, Growee, Ginghi, Budden and Lee Creek.

These communities may be impacted by construction activities, traffic control measures and short term electricity supply outages. Residents and businesses will be advised well in advance of any scheduled electricity outage occurring and mitigation measures. Temporary generation and cabling will be used to further reduce interruptions where appropriate and feasible.

In order to minimise the potential for traffic disruptions and delays, traffic flow through local towns will be managed in accordance with Mid-Western Regional Council's traffic management procedures. This may include providing appropriate communications, signage and personnel to direct traffic flows when upgrade works are being undertaken.

Any dust and noise generated by upgrade activities will be managed in accordance with the environmental mitigation measures outlined in the REF and Notice of Determination. These measures will aim to ensure that all works are compliant with the noise and dust limits identified through the planning approvals process.

## INDICATIVE TIMEFRAMES

It is currently anticipated that surveying of the line and detailed design will take place in the latter part of 2018, with construction to commence after that, subject to government approval of the Bylong Coal Project.

Construction activities are estimated to be over a period of 12 to 18 months as sections of the line are progressively upgraded. This estimate is indicative only and is dependent on the engineering, procurement and construction contractor's construction methods, the number of work crews and engagement with Endeavour Energy.

## BYLONG COAL PROJECT

In December 2010, KEPCO acquired Authorisations (A) 287 and A342 in the Mid-Western Regional Council local government area in NSW. Since this time KEPCO has carried out exploration activities in these areas to define the resources for potential future mining.

The proposed coal mine will recover up to 6.5 million tonnes per annum of run of mine coal to produce a high quality thermal coal product for the export market. The mine will include two open cut mining areas and an underground mining area. Subject to the obtaining of government approvals, construction is proposed to commence in 2019.

The project life is approximately 25 years comprising a 2 year construction period and 23 year operational period. Open cut operations are proposed to commence initially and last about 10 years (including 2 years decommissioning) with the operation of an underground mine commencing in around the seventh year of the Project.

Coal will be transported from the project site to the Port of Newcastle via rail. This will require the construction of a rail loop connecting to the existing Sandy Hollow to Gulgong Line which runs through the project area.

The mine is likely to employ up to 665 people during construction and provide direct employment for up to 470 workers during operations, with an average annual direct workforce of approximately 290 workers.

## CONTACT US:

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