

Biala Wind Farm Transmission Line Connection and Substation Upgrade

**Submission to Upper Lachlan Shire Council in response to
JRPP Deferral Submissions**

Newtricity Developments Biala Pty Ltd

June 2018

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Biala Wind Farm

Transmission Line Connection and Substation Upgrade

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INTRODUCTION

The Southern Joint Regional Planning Panel (JRPP) is considering a development application (DA) for the Biala Wind Farm Transmission Line Connection and Substation Upgrade Project (DA 122/2017) (Transmission Line DA). At the JRPP session held on 14 March 2018, the matter was deferred with a notice issued on 20 March 2018. The Panel decision was to defer the determination of the proposal until additional information is provided to Upper Lachlan Shire Council (ULSC) for assessment.

Environmental Resources Management Australia Pty Ltd (ERM) was engaged by Newtricity Developments Biala Pty Ltd (Developments Biala) to prepare a submission to ULSC (dated 6 April 2018). ERM is an environmental consultancy with extensive experience in environmental impact assessment and planning approvals for renewable energy projects, including transmission lines and the preparation of the SoEE for the Transmission Line DA.

Marais Laying Technologies (Marais) was also engaged by Developments Biala to provide specialist underground cabling advice and contracting services. Marais are an international cable laying and trenching contractor who has Detailed Design Development.

COMMUNITY AND STAKEHOLDER NOTIFICATION OF SUBMISSION

ULSC made ERM's submission publically available for review and comment, with all previous submitters and JRPP attendees notified. Key stakeholders were also provided with the submission for review and comment.

RESPONSE TO COMMUNITY AND STAKEHOLDER SUBMISSIONS

The community and stakeholders made submissions to ULSC, which were provided to Developments Biala for consideration. ERM was engaged by Developments Biala to prepare this response to submissions report, with technical inputs from Marais and Golder Associates as appropriate. The submission issues and responses are provided in the table below.

3.1

COMMUNITY SUBMISSIONS

Submitter	Sub/JRPP	Submission Issue	Response
Jennifer Heffernan	Sub	Feels the proposal fails to meet the provisions of the ULSC DCP 2010. These are noted in an attachment to the submission.	<p>The general development objectives and controls outlined in the ULSC DCP have been considered in the preparation of the SoEE, as relevant to the Project and its potential impacts, and included in the management and mitigation measures.</p> <p>Developments Biala notes the following in relation to the DCP:</p> <ul style="list-style-type: none"> - Environmental impacts of the development have been minimised in the following ways: <ul style="list-style-type: none"> o An underground transmission line to an existing substation has been volunteered in lieu of an overhead line and a new substation. o The transmission line route avoids vegetation where practicably possible. The proposed route is indirect for this reason. o Environmentally sensitive areas have been extensively mapped and used to inform design development. o The transmission line follows property fence boundaries where possible to minimise impacts to agricultural land. o We have committed to discussing biodiversity offsetting requirements with OEH, despite the offsetting scheme not being applicable to this development. - Avoiding impacts to waterways: <ul style="list-style-type: none"> o The SoEE assessed all waterways in the Project Area. o Water NSW has inspected site and assessed the SoEE and determined that the Project will achieve a neutral or beneficial effect on water quality subject to implementation of proposed conditions. o Geotechnical experts and hydrologists have been consulted and have advised that the Project will not have any significant impact on the hydrology of the area.

Submitter	Sub/JRPP	Submission Issue	Response
			<ul style="list-style-type: none"> ○ Developments Biala is committed to implementing proposed mitigation controls, and obtaining relevant activity permits, in order to avoid impacts to waterways. - Indigenous heritage and archaeology: <ul style="list-style-type: none"> ○ Developments Biala is committed to implementing measures to avoid heritage impacts of the development. The SoEE describes the process for implementation of these measures throughout construction. Following submission of the SoEE in November 2017, Developments Biala has conducted the following: <ul style="list-style-type: none"> ▪ Detailed mapping of archaeologically sensitive areas; ▪ Further revision of the ACHAR; and ▪ Test excavations (in consultation with OEH). - Landscape screening: <ul style="list-style-type: none"> ○ Screening measures around the substation extension are discussed in the SoEE ○ No screening measures are necessary for an underground cable. - TransGrid and Essential Energy have been consulted regarding this development. A powerline easement is in place for the full length of the transmission line.
Jennifer Heffernan	Sub	Feels the environmental impact of the application has been very poorly composed and is almost dismissive of the impact. Feels the report cite all reviewed areas as having little to no significance or neutral impact, where impact is clear. Feels this is contradictory.	ERM and ULSC have undertaken the assessment of environmental impact in accordance with the requirements of the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act) and other relevant legislation and policy. This is through the preparation of ERM's SoEE and ULSC's Section 79C Assessment Report. Both conclude that the Project and its associated environmental impacts are unlikely to have a significant impact on the environment. Identified minor risks and impacts can be effectively managed through the implementation of mitigation measures during construction and compliance with the conditions of consent.
Jennifer Heffernan	Sub	Feels social impacts of the application have not been evaluated. The proponent nor ULSC have undertaken to establish this point and I strongly suggest that such data should be collected by either/both parties or	The potential social impacts associated with the construction and operation of an underground transmission line were assessed as being negligible, therefore were not considered in any further detail.

Submitter	Sub/JRPP	Submission Issue	Response
		preferably by an independent party not financed by the proponent. I will endeavour to establish the data personally as well that I will present to JRPP. This collection of should also be done prior to ULSC recommending this application.	
Jennifer Heffernan	Sub	<p>Feels that the economic impact has been assessed but has never been taken into account. Cites decrease in land valuations of neighbouring properties from construction of wind farm (does not cite TL). Also cites effect of noise, vibrations etc on productive animals and therefore neighbouring farming enterprise.</p> <p>States “given the transmission line facilitates the wind farm it should be assessed as impact, as well as the construction of the transmission line itself”</p>	<p>Not applicable to DA.</p> <p>Individual landowners have been consulted regarding the proposed route of the underground transmission line.</p>
Jennifer Heffernan	Sub	<p>Feels the additional information regarding transmission trenches provided by the proponent is “confusing, contradictory and misleading”. States “there is no detail provided as distances that the HDD will occur from roadsides or waterways (e.g. entry/exit points).</p> <p>Cites the following as particular points of confusion:</p> <ul style="list-style-type: none"> • At JRPP, proponent stated 4 trenches would be constructed at 2m intervals being 800mm deep; • Marais Laying Technologies report states trenches will be 2m apart and 950mm deep; 	<p>HDD will occur approximately 10-15m either side of roadways and Humes Creek and approximately 1.5m below the bottom of the creek.</p> <p>The maximum depth of trenching would be approximately 900mm at all locations along the alignment, with the exception of creek crossings which would be up to 1.4m deep.</p>

Submitter	Sub/JRPP	Submission Issue	Response
		<ul style="list-style-type: none"> Last paragraph of proponent's submission Section 1.7 states trenching to max depth 1.4m. <p>Would like some clarity around the nature of the trenching.</p>	
Jennifer Heffernan	Sub	Objector has made several attempts to contact OEH regarding the process for applying for an AHIP and has not been successful. Regarding council DCP and OEH website, objector puzzled by statement that application cannot be made until a DA is granted and would like more clarity.	<p><i>Applying for an Aboriginal Heritage Impact Permit: Guide for applicants (OEH, 2011) Page 5 states:</i></p> <p><i>"If your proposed activity also requires consent or a determination under Part 4 or Part 5 of the EP&A Act you should obtain this first, and then lodge your application for an AHIP. The AHIP application may be accepted before a decision or determination under the EP&A Act is made, but as a general rule OEH will not issue (where it is determined that an application should be granted) an AHIP before any necessary development consent has been obtained or determination made".</i></p>
Jennifer Heffernan	Sub	Notes that no geotechnicians or hydrologists have been consulted to assess the impact of HDD on Hume Creek or the trenching of Gurrundah Creek and Bannister Springs. Objector also notes that while they hold no qualifications in these areas, their research informs them that these professionals should be consulted with. Indicates that soil sampling and testing, along with geotechnical mapping should also be undertaken in regard to subsurface water.	<p>Developments Biala has engaged hydrologists and geotechnical engineers to assess the environmental impacts to the creek crossings in the Project Area.</p> <p>It is the opinion of technical specialists from ERM, Golder Associates and Marais Laying Technologies that trenching activities will not have any significant impact on the hydrology of the local area. Trenching in areas such as this is standard construction practice and stabilised, permeable backfill material will enable subsurface water flows once the construction works are complete.</p>
Jennifer Heffernan	Sub	Feels that the conditional approval of Biala windfarm should be taken into account regarding this application, despite instructions to the contrary. Feels	Not applicable to DA.

Submitter	Sub/JRPP	Submission Issue	Response
		that the impact of this approval is more far reaching than the easement.	
KJ & JL Hewitt	Sub	Notes that DA 122/2017 references SSD 6039 for relevance and requests the same consideration for submissions relating to DA 122/2017 – that they refer back to SSD 6039.	Not applicable to DA.
KJ & JL Hewitt	Sub	Feels that Newtricity failed to fully address the JRPP terms of deferral	Developments Biala is of the opinion it has addressed the JRPP's deferral terms and feels the comment is too vague to respond further.
KJ & JL Hewitt	Sub	Feels that Newtricity continue to provide inaccurate and outdated information	Developments Biala suspects this is referring to traffic data presented in the SoEE. Please refer to response below for recent traffic survey results.
KJ & JL Hewitt	Sub	Feels that Newtricity continue to lack in transparency and clarity	Developments Biala is committed to open discussion with the local community and stakeholders to ensure the best possible outcome for all. We have provided a record of consultation with the community to date – see response below.
KJ & JL Hewitt	Sub	Feels that Newtricity continue to demonstrate a blatant disregard for planning approvals and consents	<p>Developments Biala suspects this is referring to recent public road upgrade works undertaken in preparation for the Biala Wind Farm.</p> <p>We take the requirements under our projects planning approvals seriously. The Biala Wind Farm conditions of consent require us to do certain public road upgrade work before commencing wind farm works. Planning approval for the road upgrade work has been obtained through ULSC. We were concerned a wet winter would prevent the works on Kialla Rd from being possible, or would increase the impact of these works on the community. For this reason, we decided to commence them at the time we did. The works provide a wider benefit to the community as well as staff at our Gullen Range Wind Farm who regularly travel along this road. On this basis, we were happy to pay for these works without a determination of this DA.</p>

Submitter	Sub/JRPP	Submission Issue	Response
KJ & JL Hewitt	Sub	Feels that SSD6039 approval based on inaccurate information provided by Newtricity	Not applicable to DA.
KJ & JL Hewitt	Sub	Feels that Newtricity failed to engage community views thus dividing community and neighbours.	<p>Developments Biala has undertaken the following community engagement activities for the Biala Wind Farm and Transmission Line Connection and Substation Upgrade:</p> <ul style="list-style-type: none"> • 37 face-to-face visits to residents with 3-5kms of the project between November 2017 and March 2018 • Two Community Consultative Meetings (CCC) <ul style="list-style-type: none"> ○ 20th February 2018 ○ 22nd May 2018 • 500 brochures distributed to each resident • Brochures displayed at Upper Lachlan Shire Council • One project newsletter insert in the Crookwell Gazette <ul style="list-style-type: none"> ○ 1st May 2018 (1,000 copies) • Information Stand at the annual Crookwell Show <ul style="list-style-type: none"> ○ Two days - 10th - 11th February 2018-06-13 • CCC advertisements for new members <ul style="list-style-type: none"> ○ Crookwell Gazette <ul style="list-style-type: none"> ▪ 20th March ▪ 2,970 readers ○ Gunning Lions Club Newsletter <ul style="list-style-type: none"> ▪ 27th March 2018 ▪ Circulated to 1,000 readers and 250 digital subscribers • CCC posters placed in Gunning and Crookwell <ul style="list-style-type: none"> ○ March 2018 • Four electronic newsletter updates sent to 64 subscribers <ul style="list-style-type: none"> ○ 20th April 2018 ○ 30th April 2018 ○ 3rd May 2018 • Two mailed project newsletters to 150 residents within the project area <ul style="list-style-type: none"> ○ 20th April 2018 ○ 3rd May 2018

Submitter	Sub/JRPP	Submission Issue	Response
KJ & JL Hewitt	Sub	Feels that Newtricity failed to advise interruptions to existing successful business and implications that will result from Newtricity's activities with both Transmission Line and operation of Biala Wind Farm (SSD6039)	<p>Difficult to respond to as the submission is vague.</p> <p>The Transmission Line construction and operation will cause negligible interruptions to businesses.</p>
David and Sara Bugeja	Sub	Concerned about Newtricity's blatant breach of current consent conditions	<p>Developments Biala suspects this is referring to recent public road upgrade works undertaken in preparation for the Biala Wind Farm.</p> <p>We take the requirements under our projects planning approvals seriously. The Biala Wind Farm conditions of consent require us to do certain public road upgrade work before commencing wind farm works. Planning approval for the road upgrade work has been obtained through ULSC. We were concerned a wet winter would prevent the works on Kialla Rd from being possible, or would increase the impact of these works on the community. For this reason, we decided to commence them at the time we did. The works provide a wider benefit to the community as well as staff at our Gullen Range Wind Farm who regularly travel along this road. On this basis, we were happy to pay for these works without a determination of this DA.</p>
David and Sara Bugeja	Sub	Concerned about the direct environmental impact on their parcel of land, on stock and surrounds	See below.
David and Sara Bugeja	Sub	Concerned about all considerations regarding the intense poultry farming which takes place primarily on the property	<p>Developments Biala have corresponded and met with the Bugejas (via email on 6th Dec 2017, face to face meetings 15th Dec 2017 & 20th Feb 2018) and established that their primary concerns are around the impacts of noise on their poultry farming operations - specifically:</p> <ol style="list-style-type: none"> Noise from increased traffic on the roads closest to their property during the construction phase;

Submitter	Sub/JRPP	Submission Issue	Response
			<p>2. Noise from cable installation equipment which will be used on the portion of the transmission line route which passes close to their land</p> <p>It should be noted that after construction is complete the underground transmission line will have no significant visual, noise or environment impact on the surrounding land.</p> <p>Importantly it will have no noise impact during its operational life which could affect poultry farming operations. This response therefore focusses on addressing concerns around temporary noise during the construction phase.</p> <p>Developments Biala has committed to working with the Bugeja's during the construction phase to limit impacts on their poultry farming operations. Developments Biala has already performed some assessment of noise impact and has mitigation steps proposed as described below:</p> <p>Regarding Traffic Noise</p> <p>A Traffic Management Plan will be implemented which will include mitigation measures to minimise road traffic noise including such as:</p> <ul style="list-style-type: none"> • Ensuring vehicles are regularly checked and maintained in order to avoid unnecessary noise (correctly fitted mufflers, well-functioning brakes, etc); • Ensure vehicles comply with relevant State legislation in relation to roadworthiness and modifications • Instructing drivers to ensure vehicles are driven responsibly (maintaining speed limits, avoiding sudden braking and aggressive acceleration); • Erecting signs to avoid the use of airbrakes by construction heavy vehicles near the Bugeja property; • Keeping all delivery activities within the proposed hours of construction to limit the time period within which disturbance can occur. <p>Regarding Trenching Equipment Noise</p>

Submitter	Sub/JRPP	Submission Issue	Response
			<p>Developments Biala have established that the shortest distance between the transmission line and the poultry shed will be 800m – note that the trenching equipment will only be at this location for a brief period of time before continuing along the route and moving further from the shed.</p> <p>Noise levels associated with the proposed trenching equipment have been shared with environmental consultants ERM and they predict that considering the distance from the poultry shed and the presence of trees and elevation changes between the shed and proposed transmission line, the noise levels will be well below the Interim Construction Noise Guidelines.</p>
Charley Barber	Sub	Noted that an image presented by Derek Powell at the JRPP purported to represent the wetland on Mr Barber's property did not in fact show Mr Barber's property. Stated that if the land in the image was grazed, it could not have been Mr Barber's property.	There has been some confusion on the image presented by Derek Powell. Developments Biala showed an image of Gurrundah creek where the proposed cable route trenches across, which is south of Mr Barber's property, and not the wetlands he is referring to on his property.
Charley Barber	Sub	Noted that the images presented by Mr Powell also showed the springs as being dry. The objector categorically states that the spring has never been dry.	There has been some confusion on the image presented by Derek Powell. Developments Biala showed an image of Gurrundah creek where the Transmission Line is to be located with a dry bed to demonstrate its ephemeral nature.
Charley Barber	Sub	Noted that Mr Powell is unlikely to have photographs of Mr Barber's property, as none were taken with his knowledge. Indicates any access to his land was without permission.	All photos were taken from Mr Brown's land next door.
Charley Barber	Sub	The objector notes that they have taken a considerable number of photos of the springs and adjoining bushland, which are included for consideration.	Noted.

Submitter	Sub/JRPP	Submission Issue	Response
Charley Barber	Sub	Objects to the statement that Goldwind and Mr Barber are in “negotiations”. Does not feel that this is an accurate statement to describe two visits from Newtricity representatives regarding transmission line alignment options (either through his land or adjacent to it).	Developments Biala does not recall this statement being made. We confirm that we have met with Mr Barber to discuss the DA.
Charley Barber	Sub	Feels that construction works on Kialla Road demonstrates “supreme confidence” that Goldwind has that the JRPP will approve the connection between the windfarm and the substation. Acknowledges that the roadworks are approved under another DA.	We take the requirements under our projects planning approvals seriously. The Biala Wind Farm conditions of consent require us to do certain public road upgrade work before commencing wind farm works. We were concerned a wet winter would prevent the works on Kialla Rd from being possible, or would increase the impact of these works on the community. For this reason, we decided to commence them at the time we did. The works provide a wider benefit to the community as well as staff at our Gullen Range Wind Farm who regularly travel along this road. On this basis, we were happy to pay for these works without a determination of this DA.
Malcolm Barlow	Sub	<p>Objector raised concerns about the definition of the 20m impact area and how this will be managed.</p> <p>Noted a majority of the Gullen Range windfarm turbines were relocated some distance from the approved locations.</p>	<p>As part of the supplementary submission to the JRPP, the transmission line route has been defined as a 20m disturbance area. In order to accurately define the route and allow more detailed assessment of its impact, the site visit involved defining the exact route of the 20 m disturbance area. The centreline was GPS marked and prior to trenching activities being undertaken, the 20 m wide disturbance area will be marked out by the Contractor.</p> <p>Not applicable to DA.</p>

Submitter	Sub/JRPP	Submission Issue	Response
Malcolm Barlow	Sub	Objector raised concerns about the number of trenches to be excavated. Annexure A of the submission shows three trenches 2.2m apart on first page, then 4 trenches 2.0m apart on second page. Would like clarification of how many trenches will be excavated.	Marais has prepared typical cross-sections for general trenching activities, which were provided in the recent submission. A maximum of four trenches up to 2m apart will be constructed within the 20 m wide disturbance area.
Malcolm Barlow	Sub	Raised concern about waste material from work compounds (including used water, sewage, food scraps etc) will be managed. Would like clarification around this and would like all hardstand areas returned to their natural state.	Block and/or Portaloo's, with no off-site discharge of liquid waste. As noted in Section 4 of the SoEE: <ul style="list-style-type: none"> • topsoil will be stripped and stockpiled separately to subsoil for later use in rehabilitation following completion of construction works; and • where areas have been disturbed and ongoing use of disturbed areas is not required for operations, reinstatement of the natural ground level and revegetation of disturbed areas will be undertaken using a native grass.
Malcolm Barlow	Sub	Concerned about the reported number of trees being removed and the number of these which are hollow bearing. Worried that as access to the corridor is restricted, this information cannot be verified. Concerned about potential for trenching variation to impact more hollow bearing trees that reported, and would like to know how consent will be managed. Concerned about the percentage of HBTs out of total which will be removed.	Refer to response to OEH's submission.
Malcolm Barlow	Sub	Concerned about the collection of HBTs at the end of the corridor, which the objector feels indicates a 'major habitat area' for some species of local fauna. Would	Refer to response to OEH's submission.

Submitter	Sub/JRPP	Submission Issue	Response
		like clarification around the assessment of “low” or “not significant” impact.	
Malcolm Barlow	Sub	Concerned about hydrological impacts resulting from the proposed trenching. Highlights potential loss of ground water from the wetland/springs resulting from the proposed trenching.	See above.
Malcolm Barlow	Sub	Concerned about drilling under Hume and Gurrundah Creeks, particularly the nature and amount of drilling fluid required, and concerns about the potential for lowering of the water table and interference with the flow of the creeks.	<p>We would like to clarify that trenching will be undertaken under Humes Creek with HDD, but for Gurrundah Creek conventional trenching will be used.</p> <p>At Humes Creek, HDD will be well below the creek bed and stabilised with non-permeable casing. At Gurrundah Creek, trenching over it will be at a depth of 1.4m. As noted above, trenching activities will not have any significant impact on the hydrology of the local area. Trenching in areas such as this is standard construction practice and stabilised, permeable backfill material will enable subsurface water flows once the construction works are complete.</p> <p>HDD is a proven and regularly used method for crossing creeks with minimum impact. The majority of HDD should be possible with water only drilling fluid. If rocks are encountered then water and bentonite will be used. Bentonite is naturally occurring, non-hazardous and non-toxic. Waste drill fluid is allowed to pool and evaporate, then remaining dirt can be disposed of on-site in accordance with environmental best practice.</p>
Malcolm Barlow	Sub	Would like clarification regarding disposal of excavated trench material and the associated traffic impacts.	As noted in Section 4 of the SoEE, all excavated soil is expected to be re-used to backfill around the transmission line. It is not expected that any contaminated soils will be present. However, in the unlikely event that a contamination is uncovered, testing will occur and contaminated waste will be treated and disposed of at a suitably

Submitter	Sub/JRPP	Submission Issue	Response
			licenced facility. Therefore traffic generated by removal of excavated material is likely to be negligible.
Jennifer Heffernan	JRPP address	Does not believe panel can objectively assess the proposal.	This matter is not for Developments Biala to respond to.
Jennifer Heffernan	JRPP address	Feels that Newtricity have no respect for the community, regarding public information surrounding approvals and construction of the windfarm. Also feels that community consultation regarding the DA for the transmission line was not undertaken in an appropriate manner.	Refer to community engagement activities described earlier in this document.
Jennifer Heffernan	JRPP address	Concerned about consent conditions and how these are supervised/enforced.	This matter is not for Developments Biala to respond to. Developments Biala takes compliance with consent conditions very seriously.
Jennifer Heffernan	JRPP address	Concerned about “total disregard” for Aboriginal cultural heritage of the project area. Noted that the windfarm identified many site and archaeological findings of Aboriginal significance. Indicates that OEH requested Due Diligence assessment and submission of Site Recording Forms, which had not been completed as at 17 January 2018.	Refer to response to OEH’s submission.
Jennifer Heffernan	JRPP address	Concerned about total omission of survey work of the waterways, which the objector feels is negligent of the proponent and OEH. Would like waterways to be surveyed for fish species which may be impacted by the proposed works.	Through implementation of the proposed mitigation measures in the SoEE, the Project is not anticipated to have any significant impact on water quality and fish species and the overall environmental risk is considered to be low.

Submitter	Sub/JRPP	Submission Issue	Response
Jennifer Heffernan	JRPP address	Feels that the traffic report within the DA is relying on outdated information and is incorrect. Notes four school bus routes on the detailed roads and is concerned that these buses will be travelling on the roads during proposed peak traffic times.	<p>Developments Biala has undertaken consultation with schools and bus operators as part of Traffic Management Plan (TMP) preparation for the Biala Wind Farm. Developments Biala will also provide a TMP for the Transmission Line Connection and Substation Upgrade. It will include appropriate mitigation measures in relation to schools and school buses. . It is not anticipated that the vehicles involved in the construction of the Transmission Line Connection and Substation Upgrade will have a significant effect on school buses. Regardless, during the construction works the following mitigation measures will be implemented to avoid potential impacts to school buses:</p> <ul style="list-style-type: none"> • The information collected on bus routes and times will be included in the induction for all workers and form part of a Drivers Code of Conduct. • Drivers will be instructed to be aware of the potential for passengers waiting at bus stops and buses stopping to pick up passengers during these times. • All construction site vehicles will be fitted with vehicle tracking systems. • If complaints are received from bus operators or passengers then vehicle tracking information will be reviewed and corrective actions undertaken. This could include disciplinary action or additional traffic management controls, such as providing escorts for buses. <p>The SoEE states that Grabben Gullen Road carries approximately 400-500 vehicles per day. On Tuesday 6th of February 2018 a more comprehensive and up to date survey was completed by GTA as part of the preparation of the TMP for Biala Wind Farm. The day of the week selected was based on the recommendation of the community to ensure information was captured for a busy day. The updated survey counted 585 vehicles on that day, therefore Developments Biala considers that the approximation provided in the SoEE remains acceptable.</p>
Jennifer Heffernan	JRPP address	Feels council has been dismissive of the impact on neighbouring enterprises of the project (condition 25).	This matter is not for Developments Biala to respond to.

Submitter	Sub/JRPP	Submission Issue	Response
Jennifer Heffernan	JRPP address	Concerned about the decommissioning of the turbines, which the objector feels the community have not been informed about. Feels this also has not been addressed in the transmission line DA. Would like information about what will happen to the underground cable when the windfarm is decommissioned.	During decommissioning, the transmission line underground electrical reticulation cabling and the underground transmission line will be left in situ. The process of removing the subsurface infrastructure would pose a higher environmental risk than leaving it on the ground. Above ground infrastructure will be removed, rehabilitated and revegetated.
Jennifer Heffernan	JRPP address	Received information from “winning tenderer for earthmoving” who indicated contracts have been signed and services to be engaged in May 2018.	Developments Biala considers this information not to be correct as no contracts for construction have been awarded, other than for works to the public road.

3.2

NSW OFFICE OF ENVIRONMENT AND HERITAGE

Submission Issue	Response
Biodiversity	
<p>The alignment has avoided areas of Tablelands Snow Gun, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland (EEC) along the transmission line alignment, however a large patch of intact forest has not been avoided even though alternative options appear to be available.</p> <p>OEH has reviewed the alignment and requires further justification and clarification</p>	<p>The Biala Wind Farm Transmission Line Connection and Substation Upgrade Project (the Project) will enable the Biala Wind Farm to deliver the environmental, economic and social benefits outlined in the Biala Wind Farm EIS. It will connect the Biala Wind Farm to the existing electricity grid, thereby facilitating supply of renewable energy to supplement NSW and National energy requirements and assist in reducing greenhouse gas emissions.</p> <p>As part of Project design development, numerous connection options and transmission line design alternatives have been investigated since 2013. During preparation of the Preliminary Environmental Assessment for the associated Biala Wind Farm Project in 2013, broad potential corridors for the transmission line were identified, which included connection to the Yass to Goulburn 132 kV line via an on-site substation and a 22km overhead transmission line. Further investigations undertaken for the SoEE identified the current underground transmission line alignment and</p>

<p>as to why this patch has not been avoided. OEH has provided two options for the design alignment that would be more appropriate in avoiding the impacts.</p>	<p>design as the most viable connection option with the least environmental impact. Refer to Section 2.6 of the SoEE for further information.</p> <p>Since the preparation of the SoEE, detailed design development has further reduced environmental impact through an iterative process informed by further site investigations, detailed land boundary surveys and refinement of construction methodologies. A summary of this process is provided below and provides clear justification as to the final design and route alignment, and confirms that alternative options as suggested by OEH have been duly considered.</p> <p>The SoEE proposed a 20m disturbance area for the transmission line inside a 100m wide corridor. The final location of the 20m corridor inside the 100m corridor was to be determined prior to commencement of construction.</p> <p>Detailed Design Development (March 2018)</p> <p>As noted in ERM's <i>Submission to Upper Lachlan Shire Council in response to JRPP Deferral Notice</i> (April 2018), the detailed design alignment was defined on-site by a team using their environmental and engineering expertise to minimise environmental impact without compromising constructability. The 100m micro-siting corridor proposed in the SoEE was narrowed to a disturbance area of 20m.</p> <p><u>Humes Creek Crossing</u></p> <p>The detailed design alignment followed the previous alignment for the majority of the route. However, at the Humes Creek Crossing, the SoEE proposed two transmission line alignment options due to the complexity of design for HDD. During detailed design development, the northern alignment was confirmed as the preferred option to avoid impacts to the EEC and heritage sites which lie on the southern alignment option.</p> <p><u>Gurrundah Creek Crossing</u></p> <p>To the east of the Gurrundah Creek Crossing, due to the proximity to a non-involved landowners' property boundary, the alignment was modified by moving it slightly to the south and the removal of individual trees on the edge of the Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland (EEC) to the east of the creek are unavoidable. This section of the alignment is constrained by a number of factors.</p>
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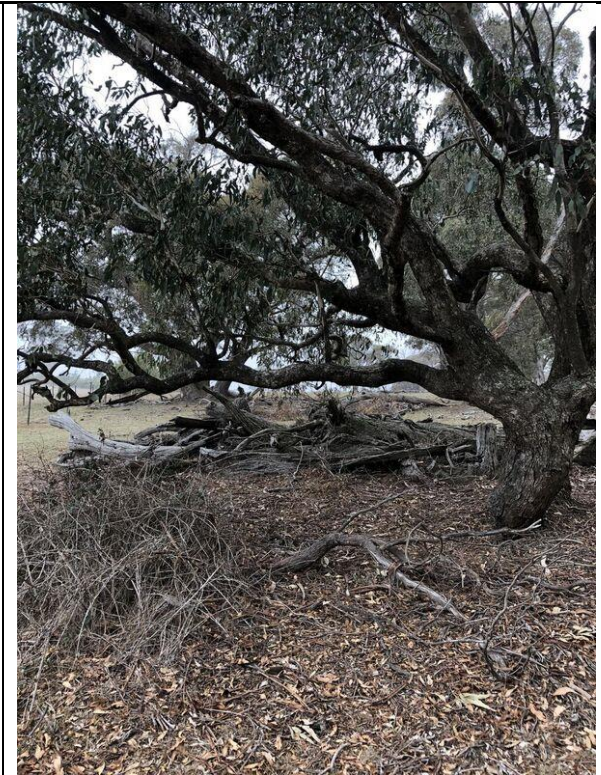
- OEH Option 1 (Southern) – This alignment would traverse prime agricultural land of which no landowner agreement is in place. Therefore the land is not within the current Transmission Line DA. This alignment would cross Gurrundah Creek at a location where it is more likely to be flowing, so potential water quality and hydrology impacts would be greater.
- OEH Option 2 (Northern) - This alignment would traverse farm land of which no landowner agreement is in place. Therefore the land is not within the current Transmission Line DA. The landowner is strongly opposed to the Transmission Line DA and the approved Biala Wind Farm. This alignment would also cross Gurrundah Creek at a location where it is more likely to be flowing, so potential water quality and hydrology impacts would be greater.
- Developments Biala Alternative Option 3 (TransGrid 330kV Easement) – Developments Biala has taken OEH’s concerns seriously and has investigated a potential option 3, where the alignment would pass along TransGrid’s 330kV overhead transmission line easement. This option requires the cable passing across prime agricultural land, or passing through another EEC. TransGrid is not in favour of locating the cable in their easement due to technical, security of supply, safety and legal reasons. This piece of TransGrid’s infrastructure is very important to security of electricity supply to Sydney.

Land Boundary Survey (June 2018)

Careful design of the alignment has successfully avoided areas of Tablelands Snow Gun, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland (EEC) along the 12km long transmission line alignment. Only one large patch of intact forest cannot be avoided and has been clearly documented by ERM in the SoEE (and supporting Ecology Impact Assessment, Annex B) (November 2017) and the *Submission to Upper Lachlan Shire Council in response to JRPP Deferral Notice* (April 2018). A detailed land boundary survey was undertaken to the east of Gurrundah Creek Crossing on 5 June 2018. The purpose of the survey was to more accurately define the exact land boundary so that the alignment could be refined to reduce impacts to the EEC. In response to OEH’s concerns, Developments Biala has further discussed this section of the route with Marais Laying Technologies (Marais). On the basis of these discussions, Developments Biala commits that tree felling activities along this 200 m section of the alignment will be contained within a 15m corridor. This narrowing is possible over this short distance and further reduces impacts to the EEC.

	<p>This area is already subject to ongoing edge effects and weed incursion and the transmission line has been designed to ensure that it does not fragment any areas of remnant vegetation. The direct trimming or removal of individual trees on the northern edge of the EEC is unlikely to modify the composition of the vegetation community and weed control measures will be implemented to avoid introduction of non-native species. Careful management and mitigation measures will be applied during construction, including strict vehicle hygiene and vegetation clearance protocols to further manage potential impacts. ERM confirm that through detailed design, impacts have been further reduced and can be appropriately managed during construction to ensure no significant impact to the long-term viability of this remnant patch of EEC. The overall environmental risk remains low.</p> <p>OEH have previously advised that offsetting under the new biodiversity offset scheme is not applicable to this development, but that Developments Biala could decide to opt in. Developments Biala is willing to discuss this with OEH, as part of the offsetting requirements for the wind farm development, which require offsetting arrangements to be put in place within 2 years of commencement of construction.</p> <p>Although the options for modifying the transmission line route proposed by OEH have been considered above, the proposed transmission line alignment has not changed since ERM's <i>Submission to Upper Lachlan Shire Council in response to JRPP Deferral Notice</i> (April 2018) was submitted to Council.</p>
<p>The information provided does not adequately address the impact of the alignment on this patch, therefore further information on the quality of the vegetation should be provided. Nor does it provide detail on the size of the hollows or if any of the hollows are utilised by threatened species. There are known threatened species and species of concern in that area, which utilise hollow bearing trees and forest areas, therefore further information on the size of the hollows and if the hollows have been surveyed for threatened species should be provided. OEH would be interested to know if there are any Wedge-tailed eagle nests within the forest patch. Wedge-tailed eagles are a</p>	<p>The patch of EEC is approximately 9.1ha in area and has been described in the Ecology Impact Assessment as being an already highly disturbed 'island' of vegetation occurring in an agricultural landscape. The vegetation is already exposed to the agricultural influences of grazing, weed dispersal and pest animal species. These existing impacts are clearly visible along the northern boundary of the EEC and within the area to be impacted (refer to photographs below). The quality of the vegetation improves away from the exposed edges and it is recognised as providing habitat resources for a variety of native flora and fauna.</p>

species of concern in regard to windfarms as they are regularly the victims to blade strikes.



With specific reference to the remnant patch of EEC, the 11 hollow bearing trees to be removed have the potential to provide roosting and nesting habitat for hollow dependant birds and mammals. Additional information on each of the hollow bearing trees to be removed is provided below.

Tree ID	≈ HEIGHT (m)	DBH (m)	0- 100mm	100- 200mm	>200mm
EC T1	4	0.45			1
EC T2	5.5	0.4			1
EC T12	17	1.5			3
EC T14	7.5	0.69		2	
EC T16	8	0.55			1
EC T17	13	1.19		5	
EC T20	10	0.78		8	
EC T22	15	0.66		2	
EC T24	17	0.92		2	2
EC T25	12	0.6	2		
EC T29	15	1.1	6	3	1

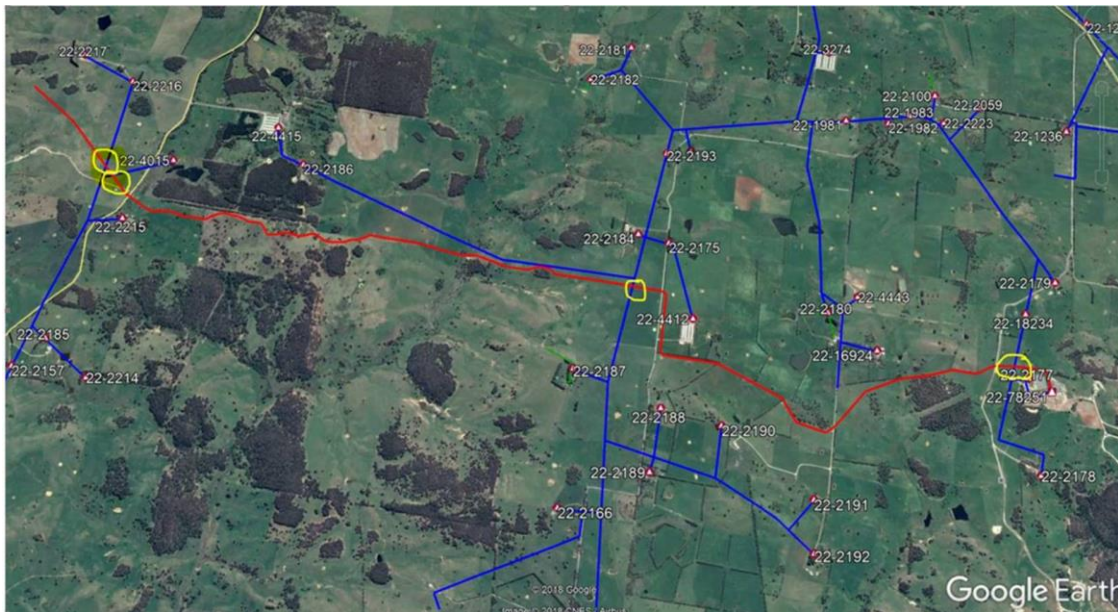
No large stick nests or characteristic wedge-tail eagle nests were recorded within the impact area and the risk of blade strike is not applicable to this DA.

No direct searches of the hollows has been undertaken and a conservative approach has been applied to the identification of threatened species that may utilise the habitats available. The hollows identified to be removed would provide a potential resource for a variety of fauna including the Powerful Owl, although no evidence of active hollow use (i.e. chewed/worn edges, active roosting sites, juvenile feathers or white wash) was observed within the impact area. This species generally requires large tracts of forest or woodland habitat, but can occur in fragmented landscapes as well. Other threatened fauna that may *potentially* utilise the areas of remnant vegetation within the Project Area include the regent honeyeater, dusky woodswallow, gang-gang cockatoo, varied sittella, white-fronted chat, little lorikeet, painted honeyeater, little eagle, scarlet robin, flame robin and microchiropteran bats. The direct trimming or removal of individual trees on the northern edge of the 9.1 ha remnant vegetation (0.23ha, 2.7% of the total area) is unlikely to modify the composition, or impact the availability or quality of the habitat resources that are currently available for these species.

	<p>An assessment of the hollows to identify any resident fauna will be undertaken prior to clearance activities as part of a detailed tree felling protocol. Using the approved Gullen Range Solar Farm Staged Tree Felling Protocol as a baseline, the clearing of all impacted hollow bearing tree will be undertaken using the following protocols:</p> <ul style="list-style-type: none"> • Prior to works commencing, an appropriately qualified ecologist is to undertake a brief site inspection to ensure that each hollow bearing tree to be removed is clearly marked so that machinery operators and site construction workers are aware of their presence; • Where a tree must be disturbed, the priority would be given to pruning rather than clearing; • Remove all immediately surrounding vegetation (that has been designated for clearing in relation to the project footprint), including trees and shrubs, prior to the removal of any hollow bearing tree; • On the day of removal, and immediately prior to removal (i.e. a few minutes before removal), the hollow bearing tree is to be shaken/tapped again in the presence of the ecologist who will check the hollow bearing tree for any signs of active/current use by fauna. This should be repeated several times, with the aim of 'substantially' shaking the tree. Most fauna would exit the tree during this process; • If an animal is observed to be present in tree, the tree is not to be felled. The tree trunk should be tapped by the excavator again to attempt to encourage the animal to move on. Once the animal has vacated the tree it can be felled in accordance with the protocol. If the animal refuses to move, the hollow bearing tree is to be left until it does so; • Once the above pre-clearance protocols have been conducted, the hollow bearing trees are to be felled (sectional removal only) in the presence of the ecologist and in accordance with the protocol; • Hollow-bearing limbs/branches to be retained for re-use are to be cut at least 10cm below the point where the solid wood of the limb begins (although it is acknowledged the depth of the hollows is often a best-guess and cannot always be guaranteed); • Once lowered gently to ground, the hollow-section is to be inspected for any signs of animals occupying the hollow by the ecologist, as well as being assessed and considered for suitability for re-attachment to an existing nearby tree to be retained. For hollow-sections found to be occupied, priority should be given to re-attaching this section on the same day; • In the case of any injured animals (of any kind), WIRES should be notified immediately, and priority given to arrangements to obtain care for the animal as quickly as possible; and
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	<ul style="list-style-type: none"> After all hollow-bearing limbs/branches have been lopped, the remaining trunk or other lower down solid limbs/branches can be brought down by an excavator if necessary. <p>Ongoing biannual monitoring and reporting will also be carried out to determine the success of the hollow replacement.</p>
Aboriginal Cultural Heritage	
Results of subsurface testing and survey must be documented in the ACHAR.	The ACHAR is currently being updated to include the results of the subsurface testing program.
The ACHAR must consider all areas of related infrastructure or ground disturbance, including access roads, construction compounds, laydown and stockpiling areas as well as the transmission line route.	The location of the access roads and other infrastructure was discussed with the RAPs on site during the subsurface testing and will be documented in the ACHAR. All landforms have now been tested and no concerns were raised by the RAPs regarding the location and assessment of the infrastructure and laydown areas. Standard unexpected finds procedures will apply to all areas of ground disturbance. All figures will be updated to ensure that they include all areas of ground disturbance prior to the draft ACHAR being issued to the RAPs for review.
Numerous Aboriginal sites have been recorded as part of the ongoing investigations, but have not yet been submitted to AHIMS.	Site Cards have been drafted and will be submitted to OEH by 22 June 2018.

Following Essential Energy's email submission to ULSC on 29th May sent by Fiona Duncan, Developments Biala has contacted Essential Energy (EE) to discuss the proposed development. EE has provided Developments Biala with GIS data showing the location of their existing assets. Four locations have been identified where the Transmission line will cross under EE's overhead powerlines as per the following image:



These locations have been discussed with EE's Asset Management team. EE have provided further advice to Developments Biala on requirements in order to work in their existing powerline easements.

A copy of the correspondence with Essential Energy's Senior Network Planning Officer Joe Barry is attached (*DA 1222017 Biala Wind Farm Transmission Connection*). Developments Biala advises the following in response to Joe Barry's email on 12th June:

- a. There will not be any alterations to the existing ground level for the proposed development.
- b. Developments Biala notes that Essential Energy will retain uninterrupted access to its infrastructure.
- c. Developments Biala's Construction Contractor will maintain safe working distances while building or operating machinery near any powerlines. (Refer to Workcover regulation 2001 Chapter 4 Division 8 and relevant Workcover Codes of practice for these safe working requirements/ SafeWork NSW Code of Practice – Work Near Overhead Powerlines)
- d. Developments Biala will install signage indicating the location of any underground cables installed across land subject to EE powerline easements.
- e. Developments Biala confirms that GPS coordinates of crossings will be supplied to Essential Energy so that the assets can be mapped and notations made on internal operational applications.

In response to Fiona Duncan's email submission to ULSC on 29th May, Developments Biala advises the following:

1. EE will be further consulted by Developments Biala closer to construction should the proposed development be granted consent
2. Developments Biala notes that any existing encumbrances in favour of EE will be complied with.
3. Any development activities within electricity easement locations will be undertaken in accordance with the latest industry guideline currently known as ISSC 20 Guideline for the Management of Activities within Electricity Easements and Close to Infrastructure. BJCE notes that approval may be required from Essential Energy should activities within the property encroach on their electricity infrastructure.
4. Developments Biala confirms a Dial Before You Dig enquiry has previously been carried out. A further enquiry would be carried out prior to design, and then prior to construction.
5. Developments Biala will be engaging a highly experienced Contractor to undertake these works. The Contractor is contractually required to refer to SafeWork publications such as the Code of Practice – Work near Overhead Power Lines and Code of Practice – Work near Underground Assets. Excerpts from the construction Contract are provided for information below:

• 2.2.7 → Existing Underground and Overhead Services¶

The Principal has undertaken initial Dial Before You Dig searches for the Site, as detailed in Appendix C Site Information. The Contractor shall undertake further searches for existing services prior to commencement of design and again prior to commencement of construction, including but not limited to Dial Before You Dig searches, site ground trothing and survey.¶

The Contractor shall satisfy itself that the extent and level of detail of the services information is adequate for design and construction purposes. The Contractor is fully responsible for locating all existing services and ensuring that work in and around these services does not impact the services.¶

The Contractor should note the Reeves property includes numerous water pipes which must be diverted by the Contractor in order that Reeves' farming operations are not affected. A plan of these water pipes is included in Appendix C Site Information.¶

Any services that may require relocation or additional protection is the Contractors responsibility. The Principal will require evidence from the Contractor to indicate that the third party has been consulted and any required changes are compliant.¶

• 2.7 → Working in Proximity to Overhead Power Lines and Underground Services¶

The Contractor shall note that the Works maybe in proximity to overhead power lines and underground utility services. The Contractor shall undertake services identification including Dial Before Your Dig to identify these services.¶

The Contractor shall ensure that all works in the vicinity of these services comply with all requirements of the service owners, the NSW WorkCover Work Near Overhead Power Lines Code of Practice, and industry best practice.¶

Site inductions and project safety documentation shall specifically address and highlight the risks, hazards, controls and precautions for works in the vicinity of overhead power lines and underground utility services.¶

In summary, like any other services in the area, we are committed to working safely near any existing infrastructure and this includes Essential Energy. Contracts with our construction contractors will include strict requirements to mitigate any safety risks associated with the works.

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