

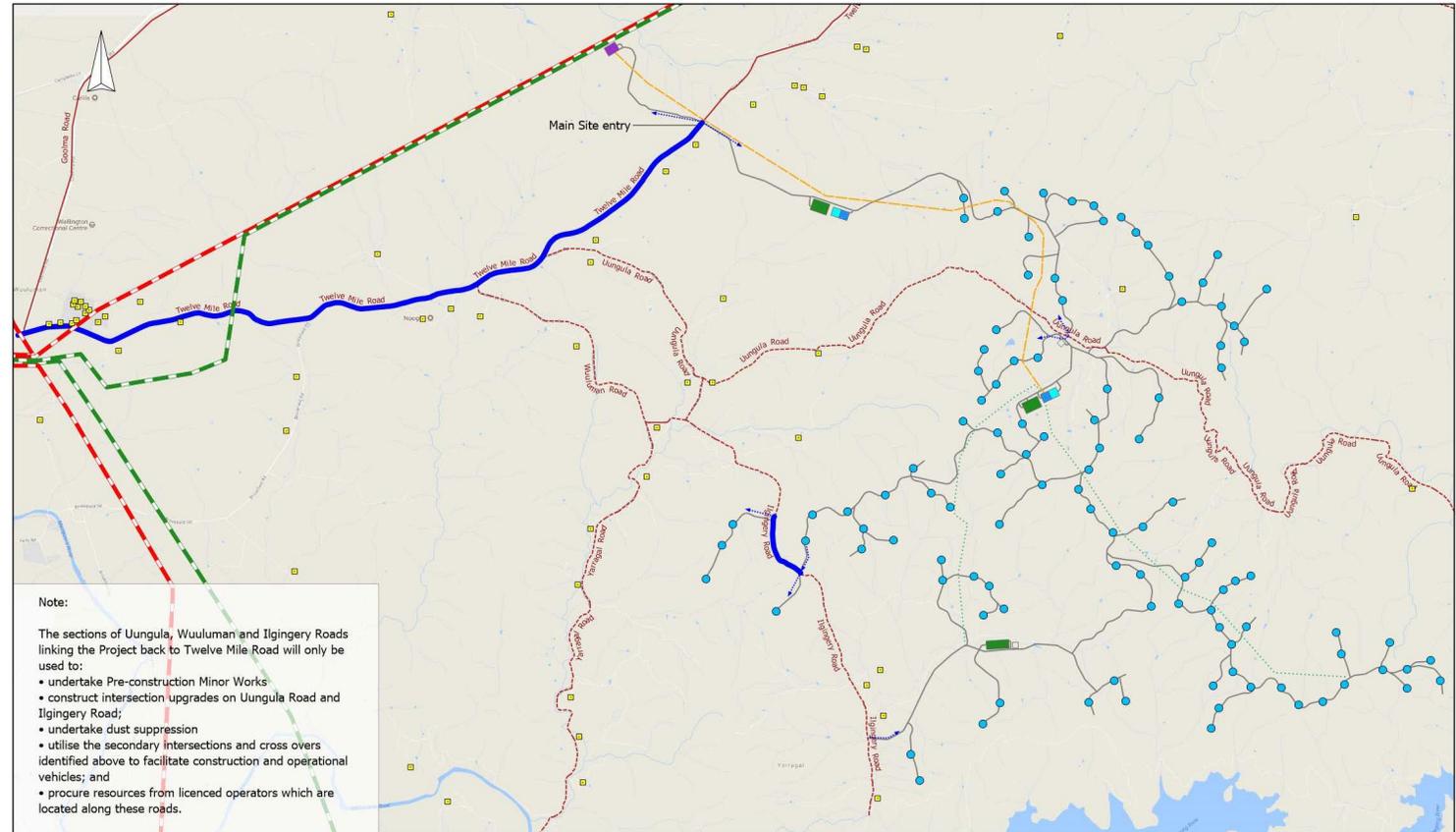
Uungula Wind Farm



Project Update

Key activities since last CCC meeting has been a focus on preparing the Environmental Impact Statement.

- Layout largely as per previous CCC meeting - 109 turbine locations (up to 250m in height and 170m in diameter).
- Considering impact assessments.
- Neighbour consultation (including face to face meetings and letters to residents regarding main transport access route).
- Continued engagement with Council stakeholders: Emergency Preparedness Officer and Mayor Ben Shields.



LEGEND		Existing roads:		Existing powerlines:	
●	Wind turbine locations	---	Existing Unsealed Road	---	Existing 132kV
■	Dwellings	---	Existing Sealed Road	---	Existing 330kV
■	Site Compound	---	Proposed transport route:	---	Proposed Powerlines:
■	Switching Station	---	Primary Access Route	---	External Overhead
■	Collector Substation	---	Wind Farm access tracks	---	Internal Overhead
■	Energy Storage Facility				

SCALE BAR					
0 5 km					
COMPANY		UUNGULA WIND FARM PTY LTD			
TITLE					
Proposed construction transport route					
DATE	02/12/2019	SCALE	1:79000	DWG NO	UWF-35
REV	C	VER	1	SHEET	1 OF 1
DRAWN BY	J PETERSEN	CHECKED BY	M FLOWER	JOB NO	110247
SIZE	A3				

Twelve Mile Road

The project proposes to minimise impacts to residents through measures including upgrading the road to both the standard required for our equipment to come to site, and that which is mindful of other road users. Being a council road, the upgrades will have to be done in agreement with Dubbo Regional Council.

A letter was circulated to the residents of Wuuluman regarding the Project's use of Twelve Mile Road.

We have been invited to a meeting held by the National Farmers Federation in Wellington on 13th February. Company representatives will be in attendance to present and answer questions.

Some important points to note:

- There is no proposal, or intention, to close the road. Only temporary restrictions while the road is upgraded.
- During our upgrade of the road there may be some stop/go controls on the road (as with any road which is upgraded) but short term and necessary to upgrade the road.
- We will propose that all the over-size over-mass equipment will have escort vehicles and oncoming traffic will be free to pass where the road is wide enough, or would need to slow down or stop for a very short period of time while the vehicles pass – a method called a 'rolling stoppage' which is used regularly on many roads large and small in NSW when any large equipment is being hauled.



Planning and Approvals

Environmental Impact Statement (EIS) is in preparation.

The EIS is expected to be lodged in February 2020.

Exhibition for 30 days – ca. March 2020. Hard copies in local public buildings (e.g. council) and at this website: <https://www.planningportal.nsw.gov.au/major-projects>

The public will be invited to make submissions on the Project application, directly to the Department of Planning, Industry and Environment

The Proponent reviews the submissions and prepares a response.

The Project website will provide updates on the planning and approvals process: <https://uungulawindfarm.com.au/planning-and-approvals/>



Technical studies include:

- Aviation
- Biodiversity
- Bushfire
- Economic benefits
- Hazard screening
- Heritage
- Hydrology
- Landscape and Visual
- Noise and vibration
- Telecommunications
- Transport

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD 6687
Project Name	Ungula Wind Farm which includes the construction, operation and decommissioning of a wind farm with: <ul style="list-style-type: none">- a maximum of 109 turbines and maximum height of 250 metres (to blade tip); and- ancillary infrastructure including access tracks, road upgrades, battery storage, electricity cabling, substations and grid connection.
Location	Approximately 20 km east of Wellington and 25 km west of Mudgee, within the Dubbo Regional local government area.
Applicant	Ungula Wind Farm Pty Ltd
Date of Issue	11/11/2019
General Requirements	The environmental impact statement (EIS) must be prepared in accordance with the requirements in Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation).

Next steps



Timeline



Key next steps:

- Community Enhancement Fund discussions are ongoing
- Engagement with Council regarding road upgrades
- EIS is in preparation
- Public Open Day to be held coincident with EIS exhibition
- Public Exhibition of the EIS

Economics of Renewables (in general)

Levelized Cost of Electricity (LCOE)

CSIRO GenCost report analyses relative predicted costs of electricity generation.

- “The inaugural GenCost report, prepared collaboratively with a range of industry stakeholders, updates estimates of the cost to generate electricity from new power plants in Australia; GenCost 2018 found solar and wind technologies to be lowest cost.”
- Year 2020 estimates of coal (brown and black) and gas are in the range of (approx.) \$70/MWh-\$120/MWh, while wind and solar are in the range of (approx.) \$45/MWh-\$60/MWh (from Figure 4.2 of GenCost 2018, Graham *et al.*, 2018).

CSIRO, 2018, <https://www.csiro.au/en/News/News-releases/2018/Annual-update-finds-renewables-are-cheapest-new-build-power>

Graham, P.W., Hayward, J, Foster, J., Story, O. 1 and Havas, L. 2018, GenCost 2018. CSIRO, Australia.

The Renewable Energy Target

The Renewable Energy Target (RET) (established through the *Renewable Energy (Electricity) Act 2000*) has the objectives of encouraging the additional generation of electricity from renewable sources, reducing emissions of greenhouse gases in the electricity sector, and ensuring that renewable energy sources are ecologically sustainable. This was achieved by mandating a certain amount of electricity that retailers had to source from renewable electricity. This drove a market mechanism which encouraged renewables into the generation mix. The RET is now fully subscribed with uncertainty about what will replace it.

<https://www.cleanenergycouncil.org.au/consumers/electricity-prices>

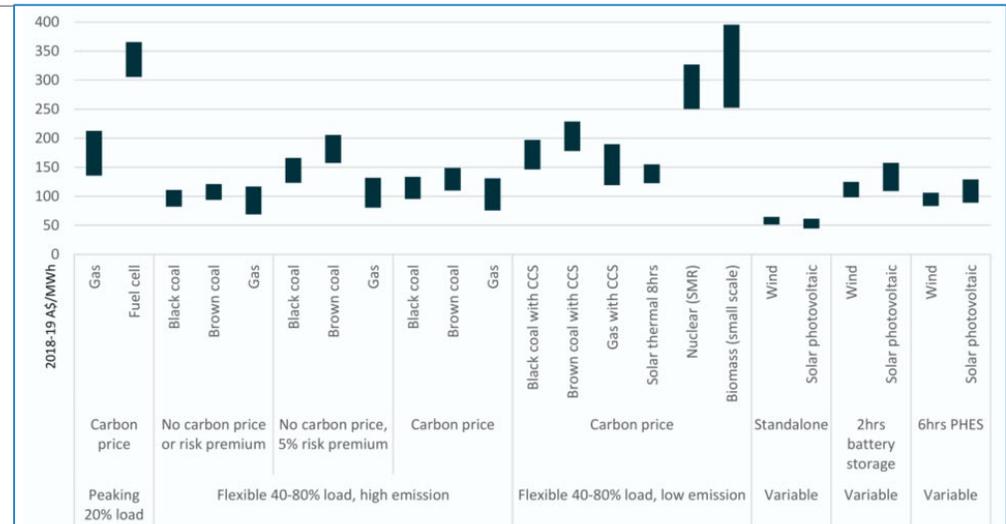
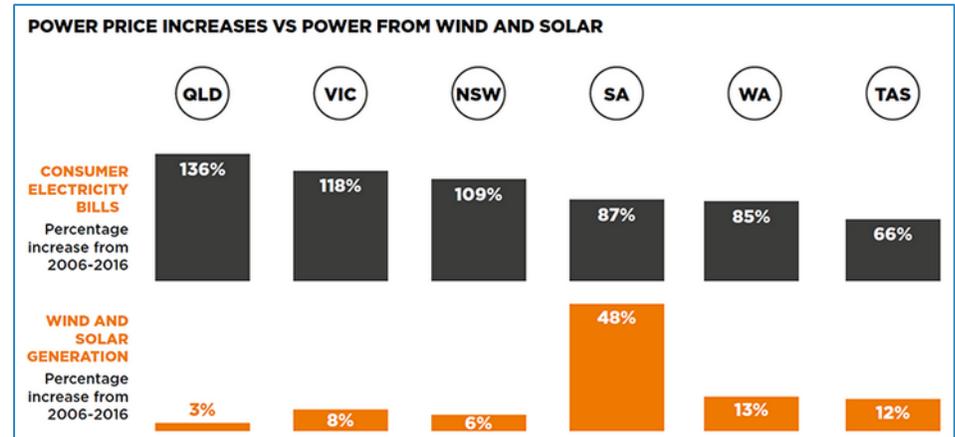


Figure 4-2: Calculated LCOE by technology and category for 2020.



Contact details

For further information please contact:

Matthew Flower

Development Manager

M: 0414 136 476

Matthew.Flower@cwprenewables.com

Jessica Petersen

Development Officer

Jessica.Petersen@cwprenewables.com

CWP Renewables Pty Ltd

PO Box 1708

Newcastle, NSW, 2300

T: 02 4013 4640

