



Project Update

Week ending 19 July 2019

JLL and Energy Estate appointed as financial advisors for EPS Energy's 1GW South Australia Portfolio

15 July

JLL and Energy Estate have been appointed by EPS Energy to advise on the development and funding of a large portfolio of solar and storage projects in South Australia. The portfolio is sized at over 1GW and includes:

- [Robertstown solar farm](#) – a 500MW solar farm coupled with 250MW/1000MWh of battery storage north-east of Adelaide. This project received its development consent from the South Australian government last week.
- [Bungama solar farm](#) – a 280MW PV and battery project proposed for land east of Port Pirie; and
- [Yoorndoo Ilga solar farm](#) – a 200-400MW PV and battery project planned for land north of Whyalla.

The EPS portfolio is one of the largest portfolios of renewable energy projects under development in Australia. EPS's track record includes the successful development of renewable energy projects in other regions of Australia.

The JLL team is led by Jordan Berryman and Thomas Madigan in Sydney and the Australian team is supported by JLL's market leading European team.

The Energy Estate team is led by Luke Panchal in the Sydney office with support from Simon Currie and Joe Doyle.



In 2019 Energy Estate has successfully advised on the sale of the several RE projects including 60MW Jemalong solar project sold by Vast Solar to Genex, the 120MW Bomen solar project sold by Renew Estate to Spark Infrastructure and the 700MW Winterbourne wind farm development by Walcha Energy to Vestas.

Source: Energy Estate

Terregra Renewables turns on 5MW solar farm in Murray Bridge

15 July

Terregra Renewables has successfully completed the construction and commissioning of its 5MW [Mobilong Solar Farm](#) in South Australia.

The Mobilong Solar Farm, located north of Murray Bridge, began fully operating in early July.

Consisting of over 15,600 PV modules and two inverters, the project will be owned and operated by Terregra Renewables for its 30-year life and will run on a fully merchant offtake arrangement.

“This is a great achievement for Terregra Renewables and is our first operating project in Australia,” said Graham Pearson, Director of Terregra Renewables.

Terregra Renewables began developing a pipeline of 5MW solar projects in early 2018.

“From the start, we wanted to develop high-quality projects, be good neighbours and bring positive benefits to the local community,” said Graham.

The Mobilong Solar Farm gave a healthy boost to the local economy with nearby suppliers engaged during construction and over 50 people working on site.

“It was pleasing to see so many high-quality local businesses involved in the project. This will continue during the operation phase with local tradespeople already contracted to provide maintenance services for the next few years.”

The start of operations at Mobilong Solar Farm is an important milestone for Terregra Renewables.

“Our focus is on developing and operating 5MW solar projects across Australia.”

“We have an exciting pipeline of projects and we look forward to bringing more into operation over the coming year,” said Graham.

Terregra Renewables is owned by the listed Indonesian company PT Terregra Asia Energy Tbk. In Indonesia, the company will develop, build and operate more than 500MW of hydro projects over the next 5 years.

Source: Terregra Renewables

New Energy Solar (ASX: NEW) negotiating PPA with Kellogg’s Australia

15 July

New Energy Solar (NEW) advises that it is negotiating a power purchase agreement (PPA) with Kellogg (Aust.) Pty. Ltd. (Kellogg’s Australia) for a proportion of energy and largescale generation certificates generated by its solar plant at [Beryl](#), New South Wales (Beryl).

This agreement would be in addition to the existing Beryl 15-year PPA described in NEW’s announcement dated 23 July 2018 which represents approximately 69% of Beryl’s generation. The Kellogg’s Australia PPA would further NEW’s strategy to achieve predictable, long-term, contracted cashflows from investment-grade counterparties.

Announcement at this stage has been precipitated by NEW being recently made aware of comments from Kellogg’s Australia in a media interview with Inside FMCG magazine, July 2019 issue, that the PPA had been finalised. New Energy Solar is optimistic the PPA will be signed very soon and will advise the market of the material terms of the agreement at that time, although it should be noted that there is no guarantee the agreement will proceed.

Source: New Energy Solar

Goldwind to supply wind turbines to BJCE Australia for Biala Wind Farm project

15 July

Goldwind has been awarded a contract for the supply and installation of Goldwind wind turbines for the [Biala Wind Farm](#) project in the Southern Tablelands of New South Wales. The wind farm, owned by *BJCE Australia, will consist of 31 x GW140/3.57MW Goldwind wind turbines at 110 metre hub height and 108.5 megawatts installed capacity.

Goldwind will provide turbine supply and installation services to the project, as well as long term Warranty Operations and Maintenance during the operations period. Goldwind currently provides operation and maintenance services at the nearby Gullen Range Wind Farm, also owned by BJCE Australia.

“Goldwind is pleased to continue its long-standing relationship with BJCE Australia in a partnership for the supply and installation of Goldwind wind turbines for the Biala Wind Farm project” said John Titchen, Managing Director Goldwind Australia.

Goldwind looks forward to working together with BJCE Australia and the local community during the construction and operation of Biala Wind Farm. The locally based Goldwind team, which has been in the area for over seven years, will be expanding to deliver the Biala project.” Titchen concluded.

Derek Powell, Deputy General Manager, BJCE Australia said, “Biala Wind Farm is a significant milestone for BJCE Australia. This project brings us one step closer to achieving our goal of 1GW of installed renewable generation in Australia by 2023. We are excited to share this renewable project and milestone with our long term partner, Goldwind.”

Detailed designs for the project are currently being prepared with construction expected to commence shortly. Goldwind are on track to power one million homes by 2020 using sustainable, clean energy provided by Goldwind’s advanced wind turbine technology.

Source: Goldwind Australia

South Fremantle solar farm gets environmental approval

15 July

A proposal to develop a [solar farm](#) on the former South Fremantle tip site has cleared its last major regulatory hurdle after the Department of Water and Environmental Regulation signed off on plans to manage the site.

The solar farm, to be built and operated by Australian renewable energy company Epuron, will cover approximately 8 hectares of the 19.4 hectare landfill site on Cockburn Road, which is registered as a contaminated site.

The development approval issued by Fremantle Council in April 2018 required Epuron to prepare a Construction Environment Management Plan and a Site Management Plan to ensure the solar farm could be built and operated safely.

The Department of Water and Environmental Regulation (DWER) has accepted a contaminated sites auditor’s recommendation that the site is suitable for use as a solar farm, provided the management plans are adhered to.

Fremantle Mayor Brad Pettitt said the environmental approval brought the solar farm one step closer to construction.

“Because the old South Fremantle tip is a contaminated site we have to be certain the solar farm can be built and operated safely, so the approval from DWER is great news,” Mayor Pettitt said.

“All that remains now is for the City to finalise the lease with Epuron in accordance with the business plan that was approved by the council in September last year.

“Provided Epuron can negotiate a power purchasing agreement with an electricity retailer, we expect construction to start in the first half of 2020 and be completed before the end of the year.

“The City and Epuron will shortly be arranging a community information session to help explain the next steps and answer any questions people may have on the site management requirements.”

The solar farm would make a significant contribution towards locally available renewable energy and a more sustainable city, consistent with the council’s One Planet strategy. The City has a preference to transition to locally-sourced green power rather than purchase carbon offsets.

The City of Fremantle has been investigating land use and management options for the South Fremantle landfill site since 1985.

Following an Expression of Interest process the City signed an exclusive working agreement with Epuron in 2015.

Source: City of Fremantle

Dan Muller joins Walcha Energy

16 July

Walcha Energy is delighted to welcome Dan Muller as Development Manager for the Walcha Energy Project.

Dan will be leading the local development processes for the wind, solar and pumped hydro stages of the project with a focus on engaging with landholders and the community. He will be the primary local contact for Walcha Energy and will establish its Walcha office where the wider community can go to obtain updates, sign up to be kept informed, or raise any questions about the project.

Dan will work closely with Vestas, Mark Waring (Director of Walcha Energy) and the broader project team.

Dan grew up near Ebor in North East of Walcha and began his career in the agricultural industry working for a

combination of private and corporate companies across Australia. Prior to joining the Walcha Energy team, Dan spent 15 years with the AAM Investment Group, a large agri-asset management and investment company, with more than \$300 million in assets under management. In his role as Operations and Business Transition Manager, he transitioned ownership of various assets and worked to establish large scale businesses between North Queensland and Southern Victoria. He also led the recruitment of over 280 full-time and casual employees.

“Dan’s experience gives him a sound understanding of large businesses, redevelopment and investment both regionally, nationally and internationally. He brings a great deal of experience to the Walcha Energy project with the added advantage of being a part of the local community. We’re excited to have Dan join our team.” said Mark Waring.

For the past 10 years, Dan and his wife Jordie have lived on a property near Walcha. They are both thrilled to be playing a key role in the delivering the best outcome for their local community through the Walcha Energy Project.

Source: Energy Estate

PROJECT NEWS

Dulacca Renewable Energy Project

The Federal Government’s Department of the Environment & Energy has declared RES Australia’s proposed [Dulacca Renewable Energy Project](#) in Queensland a controlled action that will require assessment and approval under the EPBC Act before it can proceed. The relevant controlling provisions are listed threatened species and communities (sections 18 & 18A) and listed migratory species (sections 20 & 20A). RES is proposing to construct a 240 MW wind farm on the site.

More flexible generation an important piece in the new energy market

16 July

With the energy market undergoing an unprecedented transition, last week's announcement of Federal funding to support Genex Power to build a pumped hydro power station in North Queensland represents a pragmatic step towards a more flexible and secure energy system. More flexible generation technologies like pumped hydro will play an increasingly important role in the energy mix sitting alongside renewable energy, emerging storage technologies and existing thermal generation.

"The increasing amount of variable energy in our grid puts pressure on other power stations to be more flexible," said Energy Users Association of Australia (EUAA) Chief Executive Officer, Mr Andrew Richards.

"We welcome this announcement and encourage governments to support technologies that are fit for purpose and that help manage the energy market transition."

While this announcement is welcomed, the absence of an overarching national plan is still concerning. Investors, power infrastructure owners and changes in consumer preference are all key drivers of the inevitable transformation of our energy system. This transition can be chaotic and costly or managed and efficient.

"The best way to manage the transition of our energy market and keep costs down is through a planned national approach that takes advantage of market trends," said Mr Richards.

"State and Federal governments must begin to coordinate this planned national approach as more chaos will only lead to higher energy bills and a less secure energy system."

The EUAA represents large energy users with energy bills in excess of \$1 million each year –

and some with bills of \$1 million per day. It has been calling for national energy policy for some time, supporting the National Energy Guarantee.

EUAA member companies manufacture and deliver essential goods and services used by the Australian community every day and include food, building materials, paper, plastics and health products. Their combined bills equate to billions of dollars a year. The trebling of energy costs in recent years has put enormous pressure on these businesses with some being forced to consider their future operations in Australia.

Source: Energy Users Association of Australia

Australia's first compressed air energy storage facility

17 July

South Australia's impressive range of renewable energy projects is set to increase with the news that a Canadian company has received development approval to build a \$30 million advanced compressed air energy storage (A-CAES) facility at the Angas Zinc Mine near Strathalbyn.

The Angas A-CAES facility is the first of its kind in Australia and will use excess electricity from wind and solar to run a compressor and produce heated, compressed air that can be stored underground. The compressed air is released to drive a generator and produce electricity when demand in the electricity grid is high.

Hydrostor will re-purpose the former Angas Zinc Mine at Strathalbyn into the 5MW / 10MWh facility by transforming the existing mine into an air-storage cavern 240 metres below ground using their innovative design to achieve emissions free energy storage.

The \$30 million project is supported by \$3 million in funding through the South Australian Government's Renewable Technology Fund and \$6 million in funding

from the Australian Renewable Energy Agency (ARENA).

Hydrostor is expecting around 40 jobs during the construction phase and a further four ongoing positions over the project's 30 year lifespan.

Energy and Mining Minister Dan van Holst Pellekaan said Hydrostor's facility is further evidence the Marshall Government's energy policies are helping deliver cheaper, cleaner and more reliable electricity to South Australians.

"This is another step in the transition of South Australia's energy system by the integration of renewable energy into the grid to deliver cheaper, more reliable and cleaner energy.

"A-CAES is a new energy storage technology for Australia that provides synchronous inertia, load shifting and frequency regulation to support grid security and reliability."

Trade Tourism and Investment Minister David Ridgway welcomed the benefits Hydrostor's investment will deliver to the state and the local community.

"Hydrostor is the latest in a line of high profile, international renewables companies to set up operations in this state," Mr Ridgway said.

"With 47% of South Australia's energy production now coming from renewable sources our state is without doubt a major global player, and this is reflected in the \$7 billion worth of investment we've attracted into the local industry."

Member for Heysen Josh Teague said the conversion of this brownfield site near Strathalbyn into an emission-free clean energy project will stimulate local economic activity, delivering jobs and investment in the local community.

"The Hills community is very supportive of the Marshall Government's efforts to decarbonise South Australia's electricity network whilst improving the reliability and affordability of our power system."

Hydrostor CEO Curtis VanWalleghem said the State Government approval enables them to now proceed into the construction phase of the Angas project.

"We're excited to demonstrate the significant benefits of adding our emission-free storage solution, creating jobs and helping South Australia develop a stronger electricity grid at lower cost to consumers," Mr VanWalleghem said.

Hydrostor Australia's Managing Director Greg Allen said the technology works by using electricity from the grid to produce compressed air, which is stored in a purpose-built underground cavern kept at constant pressure using hydrostatic head from a water column.

"During charging, heat from the compressed air is collected and stored before the cooled air displaces water out of the cavern up to a water reservoir on the surface.

To discharge, water flows back into the cavern forcing air to the surface under pressure where it is heated with the stored thermal energy and drives a turbine to generate electricity," Mr Allen said.

With support from the Department for Trade, Tourism and Investment, Hydrostor has now set up an office in Adelaide as a result of this project.

Source: SA Government

Delburn Wind Farm

The [Delburn Wind Farm](#) plan has been scaled down from the initial concept of 53 turbines to a proposed 35, in response to a number of factors such as additional technical inputs and community feedback on the initial concept design.

The design updates will be available at our series of community information sessions. We invite you to join us at one of three different locations in early August:

- Thursday 1 August, 1pm-8pm @ Yinnar Memorial Hall
- Friday 2 August, 1pm-8pm @ Boolarra Multipurpose Building
- Saturday 3 August, 9am-1pm @ Narracan Memorial Hall

We understand that community members have many questions. These sessions are one of the key opportunities to voice them. We have invited specialists along to ensure you can receive expert advice on any questions you have. Drop in at a time that is convenient for you and use the opportunity to speak with the following specialists:

- Hayden Burge, Jacobs (Landscape & Visual)
- Aaron Organ, Ecology & Heritage Partners (Ecology)
- Christophe Delaire, Marshall Day Acoustics (Noise)
- Graeme Taylor, Fire Risk Consultants (Bushfire)
- Taryn Lane, Akin Consulting (Community Investment)

There will also be representatives from OSMI Australia and HVP Plantations

RSVP to ruthharper@osmi.com.au

Source: OSMI Australia

Alinta Energy signs Power Purchase Agreement with the Solar River Project

17 July

Alinta Energy has signed a Power Purchase Agreement with [The Solar River Project](#). The agreement for the bulk of electricity generated by the Solar River Project over a 15-year term will help to secure cleaner and more affordable energy for South Australians.

The Solar River Project is one of the world's largest solar power projects and is located in South Australia's solar rich Mid North region, halfway between Burra and Morgan.

"This agreement symbolises Alinta Energy's determination to deliver cleaner and more affordable energy for South Australians," Alinta Energy MD & CEO, Jeff Dimery.

"We're committed to backing smart, high-quality renewables projects that support our growing customer base."

The project, a 200-megawatt array, includes more than 640,000 solar panels spanning a 3-kilometre area and one of the largest batteries in the Southern Hemisphere. Creating more than 350 regional jobs during construction the array will generate affordable, reliable, locally produced electricity for 90,000 South Australian homes. Construction on the solar array is due to start in Q4 2019 at the site near Robertstown. The Solar River Project received Crown Development Approval from the Minister for Planning in June 2018.

The Solar River Project CEO Mr Jason May said, "The signing of the 15-year agreement with Alinta Energy is a major milestone for The Solar River Project and we thank Alinta Energy for their ongoing support. The combined advantage of a lower-cost and lower emissions energy supply, along with community benefits will be enjoyed by South Australians for many years to come".

The community benefits include a Mid North Regional Community Fund and the Ngadjuri Nation Aboriginal Corporation Heritage Agreement for, community, employment, education, sport and arts programs over the next 25 years. A large nature park will also be established near the site for conservation purposes.

Stage 1 of the project will see the first electricity generated early 2021.

Source: Solar River Project

Sustainability of energy supply and resources in NSW

The inquiry is looking at the capacity and economic opportunities of renewable energy. It will also cover trends in energy supply and exports, including investment and other financial arrangements, and effects on regional communities, water security, the environment and public health. The Committee will also consider options to support sustainable economic development in communities affected by changing energy and resource markets, including the role of government policies.

Inquiry into sustainability of energy supply and resources in NSW

Terms of reference

That the Committee on Environment and Planning inquire into and report on the sustainability of energy supply and resources in NSW, including:

1. The capacity and economic opportunities of renewable energy.
2. Emerging trends in energy supply and exports, including investment and other financial arrangements.
3. The status of and forecasts for energy and resource markets.
4. Effects on regional communities, water security, the environment and public health.
5. Opportunities to support sustainable economic development in regional and other communities likely to be affected by changing

energy and resource markets, including the role of government policies.

6. Any other related matters.

More information and details on how to make submissions can be found [here](#).

Source: Parliament of NSW

Leveraging the power of demand to help reduce wholesale power prices

18 July

Wholesale demand response mechanism draft determination published for consultation

Comment by John Pierce AO, Chairman AEMC

The financial year that has just ended underlined a seismic shift in Australia's energy markets. In Victoria alone, the amount of energy being generated is now 30% less than it was a decade ago.

The closure of the Hazelwood power station in 2016-2017 was behind a large amount of that decline, but it's also worth noting that demand for electricity in Victoria had started falling long before that happened. This structural change is still continuing apace as older industries make way for less energy-intensive ones.

The situation in Victoria is a very simple example of why we shouldn't be looking at electricity supply in isolation of the demand it is there to meet.

Today we have published an historic draft rule on opening up the wholesale electricity market for competitive demand response – it's potentially an important turning point in helping to reduce wholesale prices, as well as making the system more reliable and keeping the lights on.

There are particular periods of time where the value some consumers obtain from using electricity during that period is less than the efficient costs of supplying it.

In these circumstances it is much more cost effective to offer these consumers a price to reduce demand than to add to supply.

And for the first time, that is exactly what we are proposing through this new draft rule.

Demand response has been around since we first started work on the power of choice reforms a decade ago. Today, consumers can access time of use pricing or allow their network to directly control their equipment and be rewarded for reducing their demand at peak times.

There is also emergency demand response, when big consumers 'power down' through the reliability and reserve trader (RERT) mechanism to maintain system reliability, and be paid for doing so.

Today's proposed rule change is another innovation that capitalises on technological change. It is different in that it puts demand response directly into the wholesale market to effectively 'compete' with generation to meet unserved demand. All day, every day, as long as consumers want to offer it up at a price they value.

Put simply, it means that if large energy users decide to sell their 'demand' into the market, they will be able to more easily and are likely to be rewarded more handsomely as new aggregators start to compete with retailers.

This puts demand response on equal footing to generated supply for the first time.

And because we are allowing demand response to set prices in the wholesale market – this means more expensive generation would be pushed to the back of the queue.

Demand response as an alternative to peak, high cost generation, should mean lower peak wholesale prices (which have been the biggest driver cost increases in the past couple of years). That benefits every energy consumer in the national electricity market.

Just as with the closure of Hazelwood, this change is largely the result of supply and demand. Supply in terms of new technology which now makes the proposed changes not only possible, but relatively uncomplicated - and demand in terms of growing numbers of large consumers indicating their desire to participate.

We expect both these trends to grow over the next several years to the point where a true two-sided market – one in which consumer demand interacts directly with supply to set real-time prices – is possible.

Technology isn't there yet, but it won't be long before households and businesses may be able to use digitally enabled devices to optimise consumption on all of their appliances.

This would allow thousands of very small changes in consumption to be aggregated in a way that significantly reduces the amount of generation and networks required to maintain a reliable and secure system. Such a future could result in significantly lower prices for consumers.

How much demand response enters the market will be a function of how attractive it is for consumers to participate, and the type of new technology they embrace.

But in a world where such options now exist, it simply makes sense for those consumers that can to actively manage their demand and thereby assist in delivering reliable energy at the least possible cost.

Source: AEMC

Minister Johnston opens ATCO's Clean Energy Innovation Hub

18 July

- ATCO officially opens its Clean Energy Innovation Hub in Jandakot
- Minister Johnston congratulates ATCO on the opening of its new research facility

Energy Minister Bill Johnston officially opened ATCO's \$3.6 million Clean Energy Innovation Hub in Jandakot today.

The research facility will investigate the potential role of hydrogen in the future energy mix, as natural gas provides a lower carbon alternative to other traditional energy sources.

It will also examine how renewable energy and natural gas technologies can successfully integrate and support the electricity grid in Western Australia.

ATCO's hub is equipped with solar panels to power its facility and utilises batteries to store excess energy when the sun is not shining.

Any remaining energy from the solar panels is used to power an electrolyser to produce hydrogen for use with natural gas.

Additionally, ATCO's Hybrid Modular Home at the Jandakot site will demonstrate the use of hydrogen for home use in gas appliances and to create backup electricity in a hydrogen fuel cell.

Comments attributed to Energy Minister Bill Johnston:

"Congratulations to ATCO and all its staff on developing this facility, I look forward to hearing the outcomes of the research undertaken here.

"It is very encouraging to see industry investing in new technologies and aiding research for a cleaner, greener energy future in Western Australia.

"The McGowan Government is moving forward with reforms to modernise the structure and design of Western Australia's energy market to deliver cleaner and more affordable energy to all consumers.

"Our Distributed Energy Resources Roadmap, will guide the integration of solar panels, battery storage systems, and microgrids and be ready by the end of 2019.

"The Government's Renewable Hydrogen Council is also looking at ways to foster the emerging renewable hydrogen industry in our State."

Source: WA Government

Course set for WA's renewable hydrogen future

18 July

- Renewable Hydrogen Strategy to position Western Australia as a frontrunner in the burgeoning global renewable hydrogen industry
- McGowan Government commits to \$10 million Renewable Hydrogen Fund
- The McGowan Government has launched its Renewable Hydrogen Strategy to position Western Australia as a major producer and exporter of renewable hydrogen.

The Government will support investment by establishing a \$10 million Renewable Hydrogen Fund to facilitate private sector investment in the renewable hydrogen industry.

WA features vast renewable energy sources including solar and wind, extensive land mass, a strong existing energy export sector and proximity to Asia where key markets such as Japan and Korea have signalled a shift towards low emissions hydrogen for the future.

The State strategy sets four strategic focus areas: export, applications in remotely located industries, hydrogen blending in natural gas

networks, and transport using fuel cell electric vehicles.

The WA Government will continue to work closely with the Federal Government and relevant bodies to support regulatory reform that will enable growth of the renewable hydrogen industry. A dedicated unit will coordinate the State's work on growing the industry, both domestically and for export.

The WA Renewable Hydrogen Strategy is available from <http://www.drd.wa.gov.au/projects/EnergyFeatures/Pages/default.aspx>

Comments attributed to Regional Development Minister Alannah MacTiernan: "As the world moves to a lower carbon future, our Renewable Hydrogen Strategy will put WA at the forefront of what will be a major new global energy industry.

"This strategy builds on WA's renewables potential and global reputation as a leading exporter to position Western Australia as a key player in the future energy mix.

"Hydrogen is a means to export our world-class solar and wind resources, helping our international trading partners to meet their emissions reduction goals, as well as supporting our industries to transition to a lower carbon future and driving a new job-creating industry for our State.

"This is a major opportunity for WA, however it will not occur without significant investment and lead times: this strategy and our Renewable Hydrogen Fund are the first steps down that path.

"We need to build our domestic hydrogen market and our skills base, to drive the transition for our existing industries and capitalise on this opportunity for WA's economy, supporting regional jobs and growth.

"We thank the Renewable Hydrogen Council and the CSIRO whose analysis and

recommendations have informed this landmark strategy. The Council will remain in place to provide strategic advice to the WA Government on the development of the industry."

Source: WA Government

FRV secures financing for Goonumbla Solar Farm in New South Wales, Australia

18 July

- The plant is expected to commence operations in 2020 and will produce energy to supply more than 45,000 Australian homes, while avoiding the emission of 140,000 tons of CO2 per year
- FRV signed a Power Purchase Agreement (PPA) for the project with Snowy Hydro in late 2018
- This is FRV's sixth's project in the country where the company has accumulated a total investment of approximately US \$700 million since 2012

Fotowatio Renewable Ventures (FRV), part of Abdul Latif Jameel Energy and a leading global developer of renewable utility-scale projects, has closed the financing agreement for the [Goonumbla](#) 67.8 MW AC solar farm, in New South Wales. The debt has been provided by ING and DZ Bank with ING taking the majority stake in the financing package. In 2018 FRV signed a Power Purchase Agreement (PPA) for the Project with Snowy Hydro after being awarded in Snowy's Renewable Energy Procurement Program.

Located approximately 10km west of the town of Parkes and 280km North West of Sydney in New South Wales, the plant will be connected to the national grid and produce approximately 195,000 MWh of clean energy per year. This power output is enough to supply energy to more than 45,000 Australian households and avoid the emission of around 140,000 tons of CO2 annually. Goonumbla Solar Farm is expected to start operations in 2020 and its construction and operation will

contribute to the economic development of the area. FRV foresees the creation of up to 150 jobs during the construction phase, 5 of which are expected to remain once operational.

FRV has developed and secured PPAs for a total of six solar projects in Australia, both operating and committed with an accumulated investment of approximately US \$700 million since 2012: Royalla (20 MW ac) in the Australian Capital Territory, Clare (100 MWac) and Lilyvale (100MW ac) in Queensland, Moree (56 MW ac) and Goonumbla (67.8 MWac) in New South Wales and Winton (85 MWac) in Victoria.

Carlo Frigerio, Managing Director of FRV in Australia, highlights FRV's consolidated market position in the country: "Goonumbla solar farm confirms FRV's positioning as one of the leaders in the Australian renewable market and our further reinforces FRV long-term commitment to Australia. We are delighted to move forward to the next phase of this project which will create significant benefit to the local economy and support Snowy Hydro in their electricity procurement strategy".

Fady Jameel, Deputy President & Vice Chairman of Abdul Latif Jameel, highlights "We are proud to be part of Australia's energy transition towards sustainability. Undoubtedly, this agreement is another important milestone for FRV. We remain highly committed to the country and we plan to further expand our investment in the country during the coming years, playing a leading role in the development of the renewable energy sector".

Snowy Hydro's CEO, Paul Broad, said "it was great to sign a solar offtake agreement with Goonumbla Solar Farm. Snowy Hydro's Renewable Energy Procurement Program was massively oversubscribed. More than 17,600 megawatts of projects were submitted through the competitive process and 888 megawatts of contracts were signed. Snowy Hydro selected those projects that offered

competitive pricing and had credible pathways to commissioning in the next few years and enabled Snowy Hydro to construct an optimal portfolio of renewable offtakes."

Source: FRV

Western Victoria to receive critical network investment as a first step to future-proof Victoria's energy resources

19 July

The Australian Energy Market Operator (AEMO) has today published its assessment of strategic investment in Western Victoria's transmission network, which is projected to deliver \$300 million of market benefits by unlocking future power system capabilities in the state, expanding the diversity and availability of energy supply, and reducing electricity costs for consumers over the long term.

The investment recommendation headlines AEMO's Project Assessment Conclusions Report (PACR), the third and final report in the Regulatory Investment Test for Transmission (RIT-T) process, which presents the findings of an economic cost-benefit test to determine the preferred investment option to address current limitations in the Western Victoria transmission network, in accordance with the National Electricity Rules (NER).

With a potential for up to 6,000 megawatts (MW) of large-scale wind and solar generation to enter the area by 2030, urgent transmission network investment is required to reduce constraints on anticipated new and existing generation in Western Victoria. Without adequate transmission capacity, generators connecting to this part of the network will become increasingly constrained, limiting the ability for existing and new generators to export power to the network, and impacting electricity costs over the long term.

The PACR recommends a combination of minor upgrades to existing infrastructure and major transmission works – including a new terminal station north of Ballarat and long-distance high voltage transmission lines between Bulgana and Sydenham terminal stations – staged over several years, with the final component expected to be in operation by 2025. This investment is estimated to cost \$370 million, and will produce a total return of \$670 million in market benefits, resulting in net benefits of \$300 million.

AEMO Managing Director and Chief Executive Officer Audrey Zibelman says this investment will deliver an increase in benefits to both energy consumers and energy producers, through significant reductions in the capital cost and dispatch cost of generation over the longer term.

“Under this proposal, for every dollar invested in the Western Victorian transmission network, the project is expected to deliver almost double that in benefits. This investment will future-orient Victoria’s power system capabilities and supply availability, and help achieve a lowest cost portfolio of resources and strategic transmission development to meet consumer needs today, and into the future,” said Ms Zibelman.

AEMO Chief System Design and Engineering Office Dr Alex Wonhas says that as the planner for the shared transmission network in Victoria, AEMO is recommending prudent and timely investment in the Western Victorian transmission network to maximise the economic use of existing resources and infrastructure, and pave the way for coordinated future generation and power system development in the long-term interest of consumers.

“Critically, this project in Western Victoria is underpinned by our [Integrated System Plan](#) (ISP), which seeks to optimise future generation and transmission development in the National Electricity Market (NEM) to ensure the ongoing reliability and security of the power system, at the least cost and risk to

consumers. This means making the most of existing resources and infrastructure while also planning for the full potential of new generation resources and technologies such as batteries, demand response and electric vehicles, so that we can enjoy a reliable, secure and affordable energy future,” said Dr Wonhas.

As outlined in AEMO’s [July 2019 ISP Insights Report](#) and June [2019 Victorian Annual Planning Report](#), this work is a first step in a series of planning studies and regulatory transmission investment tests underway to cost-effectively optimise transmission and infrastructure systems around the NEM.

Dr. Alex Wonhas says the recommendation to increase transmission capacity in Western Victoria, as considered through this RIT-T, supports the delivery of reduced network congestion and facilitates more efficient connection and dispatch of generation in the region.

“This transmission investment will support the development of major hubs for wind and solar energy in the region by strengthening transmission corridors to more efficiently transport large quantities of renewable energy to consumers. Key market benefits include fuel and capital cost savings as well as an improved capacity of the existing Victoria to New South Wales interconnector. This will help to ensure consumers don’t pay more than necessary for their electricity in the long term. Furthermore, this project provides additional benefits for communities in Western Victoria such as employment, economic growth, training and other regional development opportunities that have not been quantified in AEMO’s assessment,” said Dr Wonhas.

The PACR confirms the initial investment option proposed in AEMO’s [Project Assessment Draft Report](#) (PADR) published in December 2018. It is the culmination of more than two years’ investigation, including market modelling and broad stakeholder consultation, to identify the transmission

investment option that maximises the net economic benefit to all those who produce, consume or transport electricity in the market in accordance with the NER. Of each of the credible options assessed through this process, the option recommended in the PACR delivers the highest net economic benefits across all scenarios and sensitivities.

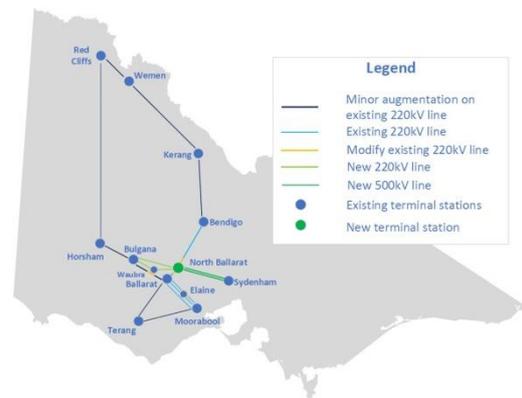
At this early stage, the design and location of the new infrastructure required to deliver this investment has not been determined. While AEMO is responsible for planning the Victorian shared transmission network, it does not own any transmission infrastructure. AEMO is undertaking a competitive process to appoint a successful tenderer to design, build, own and operate the new infrastructure. The successful tenderer will undertake extensive investigations, and further stakeholder and community engagement, before any routes or locations are approved, and will be responsible for securing the necessary planning and environmental approvals to deliver the infrastructure. AEMO will provide updates on the tender process in late 2019.

“AEMO would like to thank those who contributed to this undertaking and lodged submissions as part of the regulatory process – your feedback has enabled us to interrogate credible options and confidently determine an economic transmission investment solution that will make Victoria’s power system future ready,” said Dr Wonhas.

AEMO acknowledges the important environmental, amenity, cultural and community matters raised by stakeholders through the RIT-T consultation process. These matters will be considered and addressed by the successful transmission system operator in delivering the project.

Further details on the recommended transmission investment as outlined in the PACR executive summary is provided on the following page. The full PACR is available for [download](#). For more information and to view the reports published to date as part of the Western Victoria RIT-T, visit [AEMO’s](#)

[dedicated webpage](#) or contact us on 1800 845 044 or WestVicRITT@aemo.com.au



Source: AEMO

780MW of solar & storage projects approved in South Australia

19 July

The South Australian Government continues to drive renewable energy and energy storage for South Australia, with the granting of approval for [Bungama Solar Farm](#), the second EPS Energy large-scale solar and storage project for the State.

EPS Energy is developing the [Robertstown Solar Farm](#) and Bungama Solar projects, as part of a growing solar photovoltaic and battery storage portfolio in South Australia that is proposed to total 1GW+ in generation and storage capacity across three separate projects.

Bungama Solar is located just outside of Port Pirie (220km north of Adelaide), and proposes 280MW solar photovoltaic plant with 140MW integrated battery storage.

Robertstown Solar, a 500MW solar photovoltaic plant with 250MW integrated battery storage, was granted development consent on 25 June 2019 by the Minister for Planning, the Hon Stephan Knoll MP.

The EPS Energy solar and storage portfolio will contribute to improving South Australian

power grid reliability and has been strategically located in the transmission network particularly in relation to the proposed interconnector between SA and NSW.

As well as improving grid reliability, the portfolio will assist in meeting both South Australian and national renewable energy targets. Combined, the projects will generate clean energy sufficient to power the equivalent of 230,000 homes and displace 1.3M tonnes of greenhouse gas emissions annually.

Similar to Robertstown Solar, Bungama Solar has generated an extraordinary level of community and government support, including Port Pirie Council, the Minister for Energy and Mining, the Hon Dan van Holst Pellekaan MP, State Member for Frome, the Hon Geoff Brock MP and Regional Development Australia.

‘This planning approval has come on the back of the excellent community, local government and state government support that we have received for these projects’ says EPS Energy Director, Steve McCall. ‘EPS Energy consider the portfolio along with other projects throughout the state as significant for South Australia to continue as a transitional world leader in renewable energy and storage solutions.’

EPS Energy also has a third South Australian portfolio project, Yoorndoo Ilga, located near Whyalla, in the early stages of development. JLL and Energy Estate have been appointed by EPS Energy as financial advisors for the portfolio.

Source: EPS Energy