

Reach Solar energy Co Pty Ltd c/o Fordham Business Advisors Level 29, Rialto South Tower 525 Collins Street Melbourne Victoria 3000

5 November 2021

TransGrid 180 Thomas Street Sydney NSW 2000

## Regulatory.consultation@transgrid.com.au

Dear Sir/ Madam,

## PADR - Improving stability in south-western NSW project

Reach Solar energy (**Reach**) is pleased to respond to the Regulatory Investment Test for Transmission (**RIT-T**) issued by TransGrid on 23<sup>rd</sup> September 2021 and titled "**Improving stability in south-western NSW, RIT-T Project Specification draft report**".

By way of background, Reach is a developer of large-scale solar photovoltaic (PV) and energy storage in Australia. Reach developed the 300MWac Bungala solar project near Port Augusta. The first two phases (2 x 110MWac) raised \$500 million of project finance debt and equity without any government grants.

Reach is developing a 900MWac solar PV project site in NSW called Yarrabee Solar. The first stage is 450MW (2 x 225MWac) and is located circa 40km East of Darlington Point (**DP**) and will connect to the existing 330kV called Line 63. The first stage (450MW) expects to achieve financial close soon.

Reach is pleased to provide the following comments on the RIT-T identified above:

- Reach supports the "identified need" and the preferred Option 1A by TransGrid, and suggests
  the work is done by the Project Energy Connect (PEC) contractor to save time and leverage from
  synergies between the PEC and SW RIT projects. The RIT-T scope for Option 1A is relatively
  modest (50-70km) and Reach suggest be completed in parallel with PEC by mid 2024. This in
  turn is likely to produce a least cost solution and also intuitively increase the net benefits of the
  Project;
- 2. The recent announcement by TransGrid and the Commonwealth Government to fund circa \$180m for an upgrade to 500kV for the PEC transmission line from Dinawan to Wagga Wagga underscores the benefit from extracting synergies mentioned in 1 above. The project is important for the Riverina grid system to remedy the identified need. In addition:
  - a. The RIT-T enables low cost renewable generation to the NEM to flow East to demand (Sydney) in readiness for the planned exit and/or increasing breakdown of coal generation.
     It also reduces the linkage of NSW electricity prices with cyclical global thermal coal, oil and LNG commodity prices;



- b. Provides a strong message to investors and banks for projects in the Riverina that the transmission system operational constraints (a TNSP responsibility) will be addressed so that the grid system is able to operate in a stable manner and maximise the flow of electricity of the existing transmission infrastructure; and
- c. Provides additional non-monetised benefits such as renewables integration and system security. Enables sharing of energy and services between NSW, SA and Victoria;
- 3. The RIT-T Options 4 and 5 do not provide cost estimates and based on review by our technical advisors is not likely to provide a complete solution to the "identified need". .

The economic and risk assessment analysis should also consider the transmission line solutions versus non network solutions (NNS) on a "like-for like" basis i.e:

- a. The NNS energy storage system should be evaluated at the energy storage (MWh) required to restore Line 63 from an expected outage. Recent actual transmission line outages in Victoria and South Australia suggest a minimum of two to three weeks to install temporary towers which equates to 900MW x 24hrs x 14 to 21days = a battery storage of 302,400 to 453,600 MWh. This renders NNS prohibitive and not comparable to a transmission line solution;
- b. The NNS asset life should also reflect the transmission line solution asset life of over 40 years (which equates to multiple BESS cell replacements over the project life); and
- A transmission line has very high reliability and BESS consists of various sensitive components that will fail over the course of its life. Including operational costs, reliability and required redundancy, the BESS solution would be very expensive and not comparable to a transmission line solution;
- 4. The 2018-2023 review period submitted by TransGrid and approved by the AER, flagged a contingent project was required to support the South West section of NSW for renewables. This should expedite the TransGrid/AER process.

This is an important RIT-T for the Riverina region, intuitively it will release material near-term market benefits to NSW and the NEM and will attract more investment to the region. A letter of support is attached from Narrandera Council for the 2 x 450MW Yarrabee solar project.

In summary, Reach support the preferred TransGrid option, and consider the RIT-T process should be concluded on an urgent basis. Please do not hesitate to contact me if there are any questions on the above matter.

Yours faithfully,

Julian Dichiera
EPC and Technical Manager
Reach Solar Energy

Our ref: GC/AC: F- 5476 & D- 582141



12 October 2021

Yarrabee Holding Co Pty Ltd as trustee for the Yarrabee Holding Trust Registered Office Level 35, Rialto South Tower 525 Collins Street Melbourne, VIC 3000

Attention Mr Tony Concannon

Dear Tony

## **Transmission Network Stability in South-Western NSW**

The Narrandera Shire Council (**Council**) wishes to provide its ongoing support to Reach Solar energy (**Reach**) in its endeavours to develop the 900MWac Yarrabee Solar project. Council has supported this development from its beginning and see it providing both direct and indirect benefits via local employment and engagement with businesses throughout the region.

We wish to offer our support to Reach in its response to the RIT-T process being undertaken by Transgrid for the stabilisation of the transmission network between the existing substation at Darlington Point to the proposed Dinawan substation as part of the new EnergyConnect Project.

This new transmission facility, whilst being beneficial for the Yarrabee project, will also create the stimulus for the ongoing development of renewable energy projects in the Region offering local farmers the opportunity to diversify their income e.g. land rent, and increase community benefits to the townships within the Riverina District.

Further, with the proposed transmission facility being located in a designated renewable energy zone, by following the existing transmission line corridor (i.e. Line 63), substantial additional land easements should not be required, and as a such, no additional impact on existing agricultural operations should result.

Council is also aware of the current operational constraints on the existing transmission line, and that the expansion of the transmission as proposed will provide the ability to export more renewable energy to the east coast. This would allow the Riverina District to materially contribute to electricity generation in preparation for the exit of coal from the current NEM.

We wish you well in your submission and the ensuing development of the Yarrabee Solar project.

I can be contacted on T \_\_\_\_ or E

Yours faithfully



**General Manager** 

Enc: Nil