31 August 2018 ElectraNet 52-55 East Terrace, Adelaide SA 5000



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Dear Sir or Madam,

## Re: South Australian Energy Transformation - Invitation for Feedback

Renew Estate is an Australian company that develops medium to large scale renewable energy projects which will create long term and enduring benefits for Australia.

Wirsol Energy (Wirsol) is part of the WIRCON Group and is Renew Estate's major shareholder. The WIRCON Group is a globally operating group of companies that specialise in the development, construction and operation of photovoltaic systems (ground & rooftop mounted) and wind farms. Wirsol and Wircon are one of Australia's largest solar farm constructors and asset owners.

Together Wirsol and Renew Estate have five solar farm sites under construction / in early operations, totalling approximately 400 MW which will be commissioned during 2018. Drawing upon the pipeline of solar projects developed by Renew Estate, Wirsol aims to have over 1 GW of solar farms in Australia under operation by 2020.

Renew Estate and Wirsol Energy are pleased to submit this feedback on ElectraNet's Project Assessment Draft Report.

## Additional benefits to implementing Option C3i

Through the RIT-T process, the preferable option for investment is one that delivers the highest net market benefit, where net market benefit is outlined in the PADR to exceed the cost of the network development.

It is our view that there are further benefits to the Option C3i than those already outlined in the PADR. The new transmission link will help support a significant increase in renewable generation and falls within AEMO's ISP Option 2 Development plan and therefore supports the development of Renewable Energy Zones (REZ) along the route corridor. The REZ 13 (Murray River) from the ISP follows the route of the proposed Riverlink and the ISP states there is already 2000MW of solar generation proposed for this area. This anticipated growth in this region will be enabled and supported by the proposed transmission route.

This would include Renew Estate's proposed major renewable energy generation project near the existing TransGrid Buronga Switching Station; the Buronga Energy Station. The project is just one of many potential renewable energy projects that would be supported by this new transmission investment. Other projects along the proposed route include the Riverland Solar Storage project from Lyon Group (250MW/400MWh), the Solar River project from Sun River (440MW/270MWh) and the Darlington Point Solar Farm from Edify (275MW).

The Buronga Energy Station is a proposed renewable energy project near Wentworth New South Wales (NSW) which would consist of a solar photovoltaic farm and a battery energy storage system. Pending the detailed assessment of site constraints, the capacity of the proposed solar farm would be up to 400 MWac (500 MWp), and the capacity of the proposed energy storage system is currently planned be up to approximately 250 MW / 500 MWh.





This proposal will have major benefits including; adding generation capacity, potentially increasing the interconnector capability and promoting regional employment and investment.

The new solar farm component proposed at the Buronga Energy Station will add up to 400MW of generation and battery energy storage capacity to flow into the NSW, SA or Victorian markets, adding additional energy supply across the regions with the benefit of placing further downward pressure on regional energy prices.

Additionally, new battery storage system can have multiple benefits. It can be used to shift this project energy supply to demand periods during peak times and be used on the Frequency Control Ancillary Services (FCAS) market or contracted for Network Support Control Ancillary Services. In addition, it may be able to firm other renewable generation energy sources or provide "dispatchable" services to the market. As stated in Section 3.3 of the Network Technical Assumptions document, where transient stability sets the import limits on the interconnector, adding rapid battery injection capability to the grid can increase the overall combined transfer limits. We would look to partner with relevant stakeholders in the development of a battery and work with them to determine the optimal use and size of a battery for grid services. This has the potential to unlock more capability on the interconnector, increasing the existing modelled transfer capacity and associated benefits.

The proposal will bring significant economic activity to the region in a manner which diversifies the economic base and paves the way for long-term, resilient growth. It will provide substantial local employment opportunities during the construction of the project, essential infrastructure to support the growth and longevity of Wentworth Shire. The estimated project budget subject to finalising the solar farm constraints and battery sizing is approximately \$700 million.

We believe that it is important for the assessment of the proposed grid investment opportunities to give further consideration to the additional benefits generated by the proposed Buronga Energy Station project and other similar projects. A significant benefit would be to provide opportunities for South Australian generators to have an alternative connection to the remainder of the National Electricity Market (NEM) as well as increasing the security of supply to South Australian consumers.

We would conclude that the benefit-cost ratio for the preferred option C3i should be further reviewed to properly quantify these benefits. We look forward to participating in the future consultations to progress the development of the South Australian Energy Transformation and would welcome the opportunity to work closely with Electranet, TransGrid and others to help inform the future development options to improve the benefits and reduce the costs of the infrastructure.

For more details on the proposed Buronga Energy Station project, please visit the Major Projects Register on the NSW Department of Planning and Environment website.

http://majorprojects.planning.nsw.gov.au/index.pl?action=view\_job&job\_id=9474

If you require any clarification of this submission please feel free to contact the undersigned.

Yours faithfully,

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