5 February 2024

Energy Corporation of NSW (EnergyCo)
New South Wales Treasury
52 Martin Place
Sydney, NSW 2000
Via email: roadmap.communications@dpie.nsw.gov.au

RE: Consultation on supplementary position paper on South West REZ Access Scheme

Dear Mr Hay,

Squadron Energy welcomes the opportunity to respond to the supplementary position paper to the South West REZ Access Scheme.

Squadron Energy is Australia's leading renewable energy company that develops, operates and owns renewable energy assets in Australia. We have 1.1 gigawatts (GW) of renewable energy in operation and an Australian development pipeline of 20GW. Our development pipeline has projects at differing stages of development and includes wind, solar and firming capacity such as batteries and gas peaking plants with dual fuel capability.

We are developing the Koorakee Energy Park near the western end of the South West REZ (SW REZ) consisting of up to 1 GW wind, 1 GW solar, and up to 12 GWh of storage. We have commenced wind monitoring, engaging with the Western Division on land leases, and have a supportive landowner group. We are also active on further projects in the SW REZ.

The application of the TNECL to Buronga Substation should be reconsidered to maximise the capacity of SW REZ

We welcome the increase of the Target Transmission Curtailment Level (TTCL) to 3.86 per cent and initial aggregate maximum capacity cap to 3,980 MW for 2,500MW transfer to support higher utilisation of the network infrastructure.

However, a Target Network Element Curtailment Level (TNECL) of 3.86% to the Buronga network elements, resulting in an initial network element capacity cap of 1,270 MW, requires further consideration.

This is on the basis that connection capacity of the Buronga Substation could be different from the connection capacity of the adjacent transmission line (Buronga to Dianawan) for the following reasons:

- Buronga substation offers more flow paths as a key node in the local network topology.
- There is greater potential for BESS at the substation to unlock further hosting capacity than the line. This can potentially be achieved by a combination of the following operating models:
    - BESS as transmission asset
    - BESS as market facing asset
    - BESS as provider of grid services (such as grid-forming)

Therefore, it is suggested that the TNECL for the Buronga substation is reconsidered separate to the line between Buronga and Dinawan. Applying a greater TNECL to the transfer capacity of the substation allows potential opportunities to increase the transfer capacity to the REZ region as whole through the connection

of additional storage or generation to the substation. This will improve the ability, not only to manage the power flow through the REZ, but also to manage power flow through the interconnectors to South Australia and Victoria. Similar to the utilisation of the Waratah Super Battery (WSB) under the System Integrity Protection Scheme, there is the potential to ensure the SW REZ is capable of operating to its full capacity in the event that there is a sudden shock to the system or one of it's lines is out of service.

In a more general sense, there is the potential to uplift the overall transfer capacity of the REZ through utilising batteries as a form of virtual transmission. This would enable the system to be designed to meet N-1 contingency, supporting flows of up to 2,500MW, in addition to any storage capacity. To enable this utilisation and maximise the transfer capacity, it is important to clarify how storage will be viewed as part of any tendering process for the SW REZ access scheme.

Extension of access scheme term to align with asset life is crucial to support investment certainty

The draft access scheme declaration has been amended to reduce the initial access scheme term from 20 years to 15 years. A 15 year term does not provide adequate investment certainty as it does not align with the asset life of most generation projects. Subsequently, a 15 year term will present projects with less favourable financing options leading to higher unit price per MWh required to develop a project. At a minimum, we suggest that the term of access rights for the SWE REZ should be extended to align with an asset life of +25 years.

Further, the rationale for the proposed change is to mitigate potential consequences if the TTCL results in inefficient network utilisation. Addressing network utilisation by shortening the length of an access scheme term is not commensurate to the approach deployed in other REZ. Aligning with the CWO REZ approach and/or using it as basis to develop a staged approach for the strategic release of network capacity would be more suitable. Beyond the proposed aggregate maximum capacity cap of 3,980 MW for 2,500MW transfer, we strongly support SW REZ - Stage 2 to releases additional capacity as soon as possible.

A broader range of power flow scenarios between NSW – Victorian load centres should be considered given the potential implications for hosting capacity

As suggest in our previous submission, we understand that the export of power to Victoria was not considered in detail in the initial assessment off the access scheme. Instead, it was assumed that South-West REZ generation would correlate strongly with generation in Northern Victoria and therefore flows in each state would go towards their respective load centres.

However, we consider there are scenarios where this may not be the case and where there is the potential for the South-West REZ to export to Victorian load centres. For example, where there is a higher population density in Northern Victoria and therefore wind and solar development may be more constrained.

Therefore, the South- West REZ's impact across the whole of the NEM and the implications for hosting capacity in the South-West REZ should be considered and explained in more detail.

We look forward to the opportunity to continue to engage in work to support the rapid uptake of renewable generation in NSW. If you would like to discuss this submission, please contact Gordon Huang Senior Renewables Engineer – Origination Lead at Gordon.Huang@squadronenergy.com

SQUADRON ENERGY

Yours sincerely,

Thomas Behrendt
Head of Project Origination - Development
For and behalf of Squadron Renewables Pty Ltd (ACN 127 205 645)

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