

23/6/2025

ISP Team
AEMO
Via email

Subject: AEMO Electricity Networks Options Report Consultation

To whom it may concern,

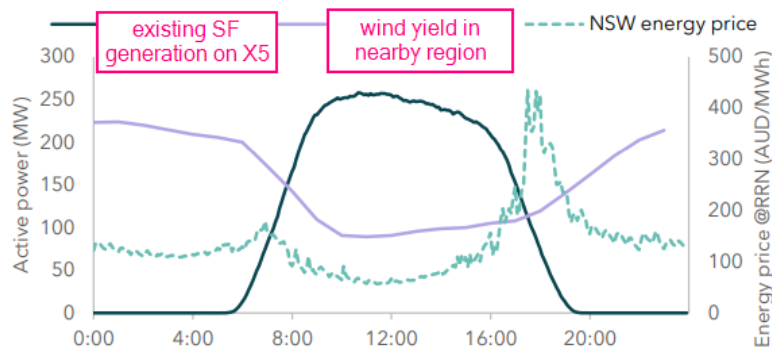
Goldwind is a great supporter of AEMO's continued and productive engagements to ensure delivery of the technical details and grid operation according to NEM rules in alignment with the NEO. The assumptions used and published by AEMO play a large role in enabling lower carbon solutions to efficiently and effectively transform the Australian energy supply mix.

Goldwind manufactures and supplies wind turbines to Australia as an Original Equipment Manufacturer (OEM) and also develops generation projects within Australia. We have a long history in this country in developing, operating and supporting wind farms over the last fifteen years from an early non-scheduled generator to delivering our latest grid forming wind-turbines. Goldwind has continuously and actively engaged with prominent rule changes such as the 5.2.5.5 Iq injection requirements for renewables, which brought wind farms into a physically achievable range of grid performance.

Background

Goldwind is writing in support of the submission by the Clean Energy Council (CEC) to the draft Electricity Networks Options Report (ENOR). In particular, the comments in that submission around the South West Renewable Energy Zone are an area where important updates to AEMO's assumptions should be made.

As a wind turbine OEM, Goldwind has been approached by several customers in the South West REZ region indicating that there is a significantly better wind resource in that location than has been considered in AEMO's assumption data. From our own wind monitoring we also view the area shows an excellent, consistent wind yield – especially at night which will complement solar generation (see the simple plot below contrasting the nocturnal wind resource with the daytime solar resource). Additionally, the region is characterised by a flat terrain suitable for construction and ease of access.



Transmission Options

Goldwind notes that there are some ideas proposed in the draft ENOR that are unlikely to be considered realistically achievable. One such option is the Broken Hill to Sydney connection, which would be improved "meshing" of the grid to better support Broken Hill, however this is unlikely to be an efficient use of resources in comparison to the many other more optimal solutions.

In the CEC's response to the ENOR, Option 5 and Option 6 enhances the transmission route in the SW REZ in an easement similar to the PEC build. We expect that this will strengthen the region's stability and transfer capacities. Given that NSPs must procure sufficient system strength at respective nodes, it may also be interesting to consider these concepts in the Buronga node review.

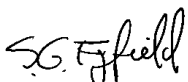
The local 220kV lines were installed in the 1970s with the intent of taking generation from the thermal generating regions out to regional areas. With the change to renewable based generation for the NEM, flows are being changed significantly. This has led to those lines being labelled as the "West Murray Zone" or "Rhombus of Regret" while renewable generators have battled to connect in the area.

The wind resource in the SW REZ area is significantly greater than predicted by meso-scale data. Improving the transmission in the region is likely to bring positive outcomes to local communities during the energy transition journey. We urge for AEMO to consider the actual wind resource expectations, not just the meso-scale data, when considering the transmission infrastructure required to facilitate maximising access to high quality renewable resources.

The PEC works in this region may make further developments easier as camps have been set up and experiences from PEC can be leveraged and improved on. Intangible efficiencies that may not be so directly included in economic forecasts should not be neglected lightly. From our experiences on BOP and site construction, we've seen much larger increases in build prices recently (due to many aspects including lack of workforce), and we encourage leveraging existing experiences and any efficiencies to ensure safe, reliable and timely outcomes for every dollar spent.

Should you have any queries please feel free to contact me directly per details in the signature below. We are happy to join any discussions AEMO hosts on this topic.

Sincerely,



Sam Fyfield
General Manager Grid
Goldwind Australia Pty Ltd
E: samfyfield@goldwindaustralia.com