

20 February 2023

Andrew Turley
General Manager Forecasting
Australian Energy Market Operator
530 Collins Street
Melbourne VIC 3000

Submitted by email: forecasting.planning@aemo.com.au

Dear Mr Turley,

RE: Inputs Assumptions and Scenarios Report 2023

ElectraNet welcomes the opportunity to provide feedback on the Australian Energy Market Operator's Draft 2023 Inputs, Assumptions and Scenarios Report.

As AEMO is aware, South Australia is a leader in the clean energy transition and continues to experience a rapid transformation of our electricity network. The pace of the transition to renewable energy and decarbonisation of the economy has consistently exceeded the industry's expectations. ElectraNet is actively supporting almost 3 GW of potential new connections enquiries and applications to our network spanning: BESS, renewable generators, and loads.

ElectraNet supports AEMO's role in developing the Integrated System Plan and recognises the IASR is a critical step in understanding the future needs of the power system.

Electrification

The 2022 IASR forecasts electrification (including Battery and Plug-in EVs) to increase electrical energy consumption in South Australia by 2050 across the various scenarios by between 3 TWh and 26 TWh (representing an increase in operational demand from 2022 of 26% and 212% respectively). The 'Step Change' scenario, considered the most likely, forecasts demand to increase by 19 TWh (154%).

The equivalent values in the draft 2023 IASR range across the four proposed scenarios from 9 TWh (67%) to 18 TWh (140%).

These figures significantly underestimate the potential impacts of electrification in South Australia. The latest information indicates electrification of the South Australian economy will occur faster than previously estimated, and with potentially much larger quantum. ElectraNet is actively working with customers on their plans to shift away from fossil fuel sources to renewable derived electrical energy.

Work commissioned by ElectraNet from Energeia has estimated that electrification could substantially exceed the levels proposed in the draft 2023 IASR and the 2022 ISP and occur faster. This may have a material impact on the speed and quantum of renewables required in South Australia and supporting transmission.

ElectraNet.com.au

A 52–55 East Terrace, Adelaide
P PO Box 7096, Hutt Street Post Office, Adelaide, South Australia, 5000
T +61 8 8404 7966 or 1800 243 853 (Toll Free) F +61 8 8404 7956
E enquiry@electranet.com.au

ElectraNet recommends AEMO review the demand forecasts with reference to the Department of Climate Change, Energy, the Environment and Water's Australian Energy Statistic.

Large Industrial Load (LIL)

South Australia is rich in the minerals the global economy requires as it decarbonises. This includes BHP's existing Olympic Dam facility, one of the world's most significant deposits of copper, gold and uranium, with other known copper and other mineral resources throughout the state.

South Australia also possesses the conditions required for the connection of other large flexible loads that benefit from connection to a renewable system, including data centres and hydrogen production.

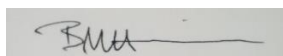
ElectraNet is actively engaged with a range of proponents from the mining sector, hydrogen industry, data centres and processing facilities to connect to the transmission network. This could equate to an additional 1 GW of peak demand and 5 TWh of additional load by 2030.

South Australia remains at the forefront of giga-watt scale zero emission electrical systems. Discussions with customers are highlighting the growing interest in South Australia and the importance of a renewable electrical grid in de-risking long-term investments. This can be expected to continue to drive demand in the years to come.

ElectraNet recommends that AEMO include in its input assumptions a potential increase in large industrial loads connecting to the South Australian electricity network, considers the location of these potential demands and how location may impact on the expansion of the transmission network.

ElectraNet looks forward to engaging further with AEMO in the development of the ISP through the joint planning process. Please contact Brad Harrison, Manager Network Planning on 0404 084 717 should you have any queries in the meantime in relation to this submission.

Yours sincerely



Brad Harrison
Manager Network Planning