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Advocating responsible planning and governance in Queensland

AEMO

By email to ISP@AEMO.com.au

Dear AEMO

Draft 2024 ISP - Submission by South east Queensland Community Alliance (SEQCA)

Please find attached a submission from the South East Queensland Community Alliance (SEQCA).

The Southeast Queensland Community Alliance (SEQCA) is a not-for-profit umbrella organisation formed by community, planning and environmental advocacy groups across Southeast Queensland (SEQ). Among other things, we advocate for achieving net zero (or better) in the built environment as soon as possible. We also seek more transparent forms of governance and meaningful participation to help realise our goals.

More information about SEQCA is available on our website at: <https://seqalliance.org/>

Yours sincerely

A handwritten signature in blue ink that reads 'C Walker'.

Chris Walker
President
South East Queensland Community Alliance (SEQCA)
Telephone: 0419 675 465

South East Queensland Community Alliance (SEQCA) submission about draft ISP

We have reviewed the draft ISP 2004 to the best of our ability and respectfully make this submission on the following questions you have posed for consultation:

1. Does the proposed optimal development path help to deliver reliable, secure and affordable electricity through the NEM, and reduce Australia's greenhouse gas emissions? If yes, what gives you that confidence? If not, what should be considered further, and why?
2. Does the proposed timing and treatment of actionable projects support a reliable, secure and affordable NEM? If yes, what gives you that confidence? If not, what should be considered further, and why?
3. Does the Draft 2024 ISP accurately reflect consumers' risk preferences? If yes, how so? If not, how else could consumers' risk preferences be included and what risks do you think are important to consider?
4. Do you have advice about how social licence can be further considered in the ISP, or advice on how to quantify the potential impact of social licence through social licence sensitivity analysis?

Our submission

1. Distributed /consumer energy resources are under represented

The draft ISP anticipates a slower uptake of distributed energy resources (DER) than is currently occurring.¹ It predicts an unnecessarily protracted trajectory for future adoption of rooftop solar and largely ignores the enormous untapped potential for rooftop solar in the business and commercial sectors.² Whilst we recognise it is not the business of AEMO to foreshadow potential changes in policy and regulatory settings, it seems remiss not to anticipate the Built Environment sectoral decarbonisation plan (due later this year) may or is likely to make recommendations for speeding up the uptake of distributed energy resources (also known as consumer energy resources) (DER /CER) as the most feasible pathway to net zero emissions in the built environment.³ By failing to acknowledge the likelihood of increasing ambition in significant sectors such as the built environment, AEMO is likely to be over-estimating the need for 'urgent' capacity building in the large-scale utility scale sector. This weakness is consequential and needs to be addressed.

The draft 2024 ISP also under estimates the potential for the uptake of household and small business batteries in a short time frame. It describes these resources as 'shallow' storage only capable of alleviating demand for about two hours in a 24 hour period.⁴ This is a misleading analysis – there is nothing, for example, to prevent home owners and small businesses acquiring two or more batteries to support their needs – and feed any excess into the grid throughout the night. The transition to more

¹ <https://onestepoffthegrid.com.au/rooftop-solar-has-second-coming-as-households-electrify-everything-including-the-car/> (30/01/2024). AEMO's 2024 step change prediction for roof top solar is an additional 50 GW by 2050 or just under 2 GW per annum. In 2022, Australian roof tops increased the supply of renewable energy to the grid by 2.7 GW and in 2023 the increase was 3.15 GW.

² CEFC, *How much rooftop solar can be installed in Australia?* 2019. This report estimated (taking into account pitch and shading constraints) the total potential for rooftop solar in Australia – as of 2019 - is 179 gigawatts producing an annual energy output of 245 terawatt-hours which is 56 terawatt hours over and above our *total* grid consumption in 2022.

³ <https://www.climatechangeauthority.gov.au/parliament-refers-sectoral-pathways-review-climate-change-authority>

⁴ Draft 2024 ISP, p 62.

time of use charging (especially if coupled with additional pricing incentives) could encourage this trend. In addition, electric vehicles typically carry a 60-100 kWh battery so, as bi-directional charging becomes an option, the battery capacity of DER /CER will be enormously extended.⁵

The draft 2024 ISP assumes a massive upswing in the demand for electricity from EVs.⁶ Most homeowners will want to charge their cars during daylight hours using spare capacity in their own solar arrays.⁷ We endorse any policy settings which encourage daytime charging.

Many regional and remote industrial sites are already adopting onsite renewable energy systems (non-scheduled resources).⁸ Non-scheduled resources are classed as part and parcel of distributed energy resources including rooftop solar.⁹ This amalgamation further diminishes the forecast for rooftop solar whilst also failing to identify any clear trend, ambition or modelling for uptake of larger non-scheduled systems.¹⁰

All in all, it appears to us the draft report significantly under-estimates the likely trajectory for DER/ CER and adopts the lowest possible level of ambition for its uptake. This is despite DER/ CER being readily available; easy to install and service; cost effective (consumers have demonstrated their willingness to pay a large proportion of the cost) with a ready and growing market.¹¹

2. The timing, planning and scale of utility scale wind generation

The draft ISP argues there is an urgent need to increase utility scale wind generation and that cheap wind generation complements solar generation (whether at distributed or utility scale).¹² We make the following observations:

1. It is not clear whether the assertion that wind energy is cheap to build considers the whole costs – including planning, licensing and landholder compensation costs as well as costs for transmission (including the vulnerability of transmission networks to extreme weather events and insurance cover for increasing fire risk in rural areas) and the cost of underwriting development through the Capacity Investment Scheme. We find the budget for utility scale wind needs to be better justified to the community. More transparency is warranted.
2. AEMO recognises ongoing risks and challenges - including community backlash, supply constraints and processing hurdles - are delaying the delivery of utility wind projects and further adding to their cost.¹³

⁵ ARENA, *V2X Summary Report*, 2023, p 3. ARENA estimates the useable storage in the nation's fleet will be four times the NEM required storage capacity by 2050.

⁶ AEMO, *2023 Inputs, Assumptions and Scenarios Report*, p 54.

⁷ <https://onestepoffthegrid.com.au/rooftop-solar-has-second-coming-as-households-electrify-everything-including-the-car/> (30/01/2024).

⁸ <https://www.mpirecruitment.au/news/how-the-mining-industry-is-using-solar-power#:~:text=In%202015%2C%20Rio%20Tinto%20commissioned,Cape%20York%20Peninsula%20in%20Queensland>

⁹ Draft ISP 2024, p 85.

¹⁰ Draft ISP 2024, pp 30, 45.

¹¹ <https://onestepoffthegrid.com.au/rooftop-solar-has-second-coming-as-households-electrify-everything-including-the-car/> (30/01/2024).

¹² Draft 2024 ISP, pp 49, 70. Wind is forecast to provide 77% of new utility scale generation through to 2030.

¹³ Draft 2024 ISP, p 14.

3. Regional communities – or some members of them - are sceptical, confused or antagonistic to the pace and scale of the roll out.¹⁴
4. There are examples of poorly planned projects with adverse environmental impacts being proposed and apparently advanced.¹⁵
5. Annual operational electricity consumption in the NEM is forecast to grow less than 6% through to 2036 (in the Neutral scenario).¹⁶
6. Strong solar radiation is available across the NEM throughout the year with bountiful winter sunshine in Queensland and strong summer time sunshine in the southern states.¹⁷ Should batteries at all scales quickly become the norm – and we believe there is huge untapped market for them – solar (the cheapest and quickest form of generation to install) may be able to shoulder an even greater share of the overall supply.
7. To the extent the Government’s goal of 82% renewable energy by 2030 may fall short, the 2023 Nexa report on distributed energy has convincingly argued that DER/CER can “take up the slack” to ensure we stay on track to realise the goal of 82% renewable energy by 2030.¹⁸

In short, if we focus on expanding the uptake of DER/ CER in the near term, we can buy time to deliver the utility scale power we really need allowing for more rigorous selection criteria and careful, more inclusive planning that better caters for the concerns of impacted communities. This strategy presents a win for urban and rural communities alike.

3. Social licence

Whilst SEQCA’s area of interest lies mostly in the impact of development in the South East Queensland region, we stand in solidarity with communities across Australia in their endeavour to ensure integrity, respectful and transparent planning and development processes. In this respect, we support all the recommendations of the Dyer Community Engagement Review (2024) and humbly add these additional ideas for building social licence in impacted communities:

1. Provide immediate, tangible benefits from day one – free or low cost renewable energy being the obvious example. Start small and grow over time. This is important to bring communities on side early on and to counter disinformation.
2. Adopt a clear order of priority for particular projects and a projected time frame for their development to help deal more realistically with expectations.
3. Provide community ownership of local DER/ CER and provide information about opportunities to feed into the grid where that is a realistic option.
4. Provide a consistent, transparent and national rate for landholders who will be required to host transmission networks. Offer them opportunities to feed into the grid and ensure their compensation is on a par with that being offered to other facility hosts.
5. Ensure environmentally significant regions and sites are no-go areas for renewable energy generation.

¹⁴ Dyer Review of Community Engagement.

¹⁵ <https://reneweconomy.com.au/queensland-wind-farm-delay-raises-red-flags-with-green-groups-as-lines-blur-over-environment/>

¹⁶ <https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/nem-forecasting-and-planning/forecasting-and-planning-data/nem-electricity-demand-forecasts/2017-electricity-forecasting-insights/summary-forecasts>

¹⁷ IASR 2023, p 122. See also: <http://www.bom.gov.au/climate/maps/averages/solar-exposure/?period=an>

¹⁸ Nexa Report, 2023, p 5.