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Energy Transition Group

Lighter Footprints Energy Transition Group
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Submission to AEMO on the draft 2024 ISP

Background

On behalf of the Lighter Footprints Energy Transition Group, I would like to congratulate you on the draft 2024 ISP.

[Lighter Footprints](#) is a local climate group committed to leading effective climate action in the Eastern suburbs of Melbourne. For over a decade, we have educated, advocated, and brought people together to inform the community and promote a clean energy future.

While our group is passionate about the transition from fossil fuels to renewables, we understand the associated difficulties and believe that the 2024 draft ISP lays a large number of the foundations for an effective transition.

The Energy Transition Group is a group of individuals, many of whom have experience in the energy industry, who meet regularly to discuss the transition to renewable energy. We represent individuals with wide ranging skills covering gas network operations, regulation, and energy efficient appliances. We make submissions to governments and to regulatory bodies where we believe that we can add value.

In the section below we put forward some areas where we believe that further clarification could be warranted.

Comments

Nuclear energy

We can find no mention of nuclear power in the draft ISP although it has been considered in supporting documents. Although AEMO might not want to get into the political debate, it should make some authoritative statements on why nuclear power makes no sense for the Australian NEM.

Consumer Energy Resources (CER)

The model highlights the expectation that there will be a large amount of CER which we support but some mention of the main assumption, enablers and blockers that must be overcome to facilitate this growth would be valuable.

Likewise coordinated CER (especially storage) is huge. The ISP should identify the regulatory, economic, product, and market enablers that are required to reach the forecast numbers. In particular, we note the expectation of significant virtual power plant (VPP) and vehicle to grid (V2G)

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adoption by consumers although other measures that could manage demand, such as price signals are not taken into account.

We believe that there is a need for greater discussion around managing CER and would like the ISP to advance this debate. We have reviewed the Energy Security Board's recent "Consumer Energy Resources and the Transformation of the NEM", agree with the premise that "CER is central to the energy transition" and agree in principle with their 6 priorities. The establishment of a CER taskforce leading to an ongoing CER governing body with a mandate to accelerate a sustainable CER rollout is essential. However, like the ISP, there is no indication of how to overcome consumer barriers to mass adoption of VPPs or equivalent. Given the ISP is highly reliant on VPPs and V2G, scenario and sensitivity analysis of different options and uptake will be necessary. The trials assessed in the ESB paper articulate the likely issues but do little to identify solutions. The finalised ISP should aim to align the ESB recommendations.

Understanding the GPG / storage blend

We would like to see scenario and sensitivity analysis on gas power generation (GPG) vs utility storage vs coordinated CER storage blend. This is an area where we hope that storage may be able to replace GPG over time and understanding the sensitivities would be useful. As coordinated CER storage is critical but largely outside AEMO control, what is the fallback scenario if your forecasts are significantly overstated?

The optimal development path (ODP)

The ODP economics do not appear to include the cost to the economy of CER and distribution network investments. Transparently validating that inclusion of rough numbers for these (recognising that AEMO does not have detailed numbers) does not materially impact the ODP outcome would be comforting.

Coordinated CER to help control distribution network costs

There is an opportunity for CER to help reduce distribution network costs. Has this been considered when addressing coordinated CER requirements? If not, we further stress the need for debate around the role of CER in both the NEM and the distribution networks.

Pricing of GPG

Given the importance of low-capacity factor GPG in the model, it must be assumed that GPG will not bid at short-run marginal cost (SRMC) but closer to the market cap price. Can you confirm that this in the ISP modelling?

High-voltage direct current (HVDC) linkages

Can you state whether HVDC linkages between major renewable energy zones (REZs) and load centres has been considered in AEMO's analysis? Likewise, what other transmission technologies and techniques have been considered to enhance the capacity and reliability of existing assets.



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Submitted on behalf of the Lighter Footprints Energy Transition Group by:

A handwritten signature in black ink, appearing to read 'David Strang'.

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