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Australian Energy Market Operator - AEMO
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Dear ISP Team,

WestWind Energy appreciates the opportunity to provide this submission on the Draft 2020 ISP. The draft is a step in the right direction and provides comprehensive information on the likely scenarios of the future NEM and how the industry should plan for it. Our comments and queries are aimed at gaining a better understanding of the matters detailed in the ISP. As such, we would appreciate AEMO's comments on the following points.

Inertia and other system services-

Section C1.1 mentions "*..., which means less inertia and other critical system services from traditional supply, which must also be replaced*". How does AEMO see this transition happening and how will these services be procured in the future? Will this trigger any NER changes? If so, it would appear prudent to us that AEMO consider initiating this process well in advance of major thermal generators retiring. In addition, how does AEMO see the potential for batteries providing synthetic inertia on a broader scale in the future (i.e. during and following the renewables transition)?

Section C 2.2 mentions the potential for unnecessary and costly enhancement to system strength. It also states that the lack of system strength has been inhibiting connection of renewable energy. We agree with AEMO's view on the need for coordination between new transmission and related system services. However, to date, it seems like these costs are being solely borne by new projects seeking to connect to the NEM. In some cases, this may significantly affect these projects' viability and thus hinder the renewable integration described in the ISP. What measures is AEMO taking to facilitate this necessary coordination?

Increases in DER-

It seems to us that the uptake of residential batteries is independent of the scenarios in the ISP because the decision is made by several individuals, who seek to manage their risks independently. Assuming this is the case and considering that the uptake in Australia has been quite significant, we would like to understand how this uptake has been modelled for all scenarios. In our view, the uptake of residential batteries should be considered exponentially (except for the Slow Change scenario), as opposed to linearly.

Box 1, 5th bullet point states "*... Energy storage costs are slightly higher than 2018*". This sounds counterintuitive to us, as it is broadly expected that batteries are being increasingly deployed, and their cost is rapidly falling.

Integration pace-

Section C2.1 mentions additional 34GW of capacity connected by 2040 in the Central Scenario. This equates to a theoretical 141MW project being commissioned per month during the next 20 years, assuming linear progression. This is obviously unprecedented and very likely to put significant pressure on AEMO's resources. In addition, it has been widely reported that difficulties in agreeing on Generator Performance Standards (GPS)

have been a serious issue, putting several projects on hold. How is AEMO planning to manage the matters above, particularly the timely management of generator connection applications and commissioning?

Marginal Loss Factors (MLF)-

The ISP describes a path of least regret for network augmentations, which we consider very appropriate. However, the most recent MLFs put renewable projects' (under commissioning, construction or development) revenue at significant risk, and developers may seek to defer or avoid investing until more favourable MLFs are achievable. In our view, MLFs provide a crucial market signal that should be used for prospective market participants to assess their financial risk. Therefore, it would be of great benefit to developers and prospective investors to have an idea of MLFs estimates for the path of least regret. Would AEMO consider publishing MLF estimates or forecasts for Committed and Priority 1 projects, for example?

We look forward to hearing from AEMO and remain at your disposal for any queries you may have in the meantime.

Yours sincerely,



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