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7 Nov 2019

Mr John Pierce AO
Chairman
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Lodged Via AEMC Website

Dear Mr Pierce,

Coordination of Generation and Transmission Investment – Access Reform (EPR0073): Proposed Access Model and Renewable Energy Zones Discussion Papers

Windlab Limited (ASX:WND) is a global renewable energy development company. It was established to commercialise world leading atmospheric modelling and wind energy assessment technology, developed by Australia's premier scientific research institute, the CSIRO. Based on this technology, Windlab has been identifying and developing high quality renewable energy projects for well over a decade. We have completed nearly 1,100 MW of capacity and are working on some 7,000 MW of development projects, well over half of that in Australia. Windlab develop, finance, construct and operate wind farms around the world; our key markets are Australia, Southern and Eastern Africa. Australian projects include Coonooer Bridge, Kiata, Coopers Gap and Kennedy Energy Park.

Windlab welcomes the opportunity to make this submission on the Coordination of Generation and Transmission Investment ("CoGATI") Proposed Access Model Discussion Paper and Renewable Energy Zones (REZ) Discussion Paper (together, Discussion Papers) released by the Australian Energy Market Commission ("AEMC").

Addressing investment risk is a priority

Windlab strongly believe that creating a robust investment environment that will enable the efficient investment in new generation, storage and transmission capacity is imperative to achieving the long-term customer outcomes as set out in the National Electricity Objective ("NEO"). To create this investment environment, it is important that the regulatory reform process is undertaken in a coordinated manner that avoids unnecessary complexity and volatility and the associated risk premiums.

From an investor perspective, escalating uncertainty has already, and will likely continue to, lead to a material reduction in existing asset values and therefore require an additional risk premium to be applied to any new investments. This additional risk premium could be applied by both equity and debt investors. This is expected to increase the cost of capital associated with the future investment required to fund the 54GW of new capacity needed in the NEM by 2040, which will ultimately be passed on to customers through higher wholesale prices.

Need for Reform

Windlab agree with the AEMC that there is need for access reform and appreciates the opportunity to work constructively with the AEMC, Australian Energy Market Operator ("AEMO"), Energy Security Board ("ESB") and other stakeholders to deliver the important market reforms required to enable the energy transition.

Critical issues for generation investment

In reviewing the Discussion Papers and participating in the AEMC Public Workshop on 18 October we note that the scope of the CoGATI Review has been amended to exclude transmission planning and operation. The issues the CoGATI Review is intended to address are a function of the physical network and the removal of transmission planning and operation from the revised scope significantly limits the ability of the review to achieve its objectives.

We understand the intent of the AEMC's Locational Marginal Pricing ("LMP") and Financial Transmission Right ("FTR") proposals,but believe that on their own they do not address the objectives of the CoGATI Review and are better considered as part of the broader NEM 2025 Market Review.

Notwithstanding the revised scope of the CoGATI Review and the limitations of this approach Windlab provide the following observations for the AEMC's consideration:

- **Proposed approach increases complexity and investment risk**

The introduction of LMP and FTRs increases the complexity of the market and consequently the investment risk associated with investment in new generation and storage projects. The AEMC present FTRs as a risk management tool; however, Windlab believe the introduction of complex, short-term non-firm instrument significantly increases the cost and complexity of participating in the NEM without providing any additional long-term investor certainty.

Extending the tenor of the FTRs is not expected to address the issue as it would be impossible to effectively price a long-term FTR given the uncertainty surrounding the timing and location of the forecast 54GW of new capacity and associated transmission upgrades.

The complexity of pricing FTRs and participating in the FTR auction process places an additional burden on developers and owners of generation projects which is expected to disproportionately impact smaller market participants, many of which currently form the renewable energy independent power producers, and create an additional barrier to entry for new competitors seeking to enter the market.

The AEMC reference a number of international markets that have full nodal pricing and FTR arrangements; however, Windlab believe any review of international market experience should give regard to the energy transition the NEM will be undergoing over the next 20 years. For example the Access Reform Discussion Paper refers to the New Zealand market which has both full nodal pricing and FTRs[1]; however, it does not acknowledge that in 2018 84% of New Zealand's electricity generation was from renewable energy resources (i.e. New Zealand is not in the process of an energy transition) that form part of a mature transmission system that was built to connect the significant but somewhat remote and distributed hydro generation resources in the South Island with load centres. New Zealand introduced short-term FTR instruments at a small number of selected nodes to enhance retail competition[2] not as a risk management tool for long-term generation investments.

It is Windlab's view that the introduction of LMP and FTRs does not address long-term investment uncertainty and will increase the cost of capital for future generation and storage investment and reduce competition through increased barriers to entry.

- **Crucial to coordinate and prioritise reforms**

Windlab is committed to working with the AEMC and other key stakeholders on the important reform agenda. Given the interaction of a number of the market review and rule change processes and the scale of reform being contemplated it is important to coordinate and prioritise these activities.

Windlab believe the priority should be implementing marginal loss factor ("MLF") reform followed by putting in place a framework that will deliver the transmission network required to facilitate the energy transition. Windlab believe the renewable energy zone reforms should be consolidated with the actioning of the ISP consultation process given the inextricable link between renewable energy zones and transmission planning and operation. Wholesale market reform should be considered more holistically as part of the broader reform packages rather than being developed independently.

Windlab recommend an interim change to Average Loss Factors ("ALF") whilst the completion of CoGATI's mandates (first transmission planning, then access pricing, then financial hedging) and the ESB post 2025 review are completed. The change to ALF now improves certainty for investors, keeps energy prices lower for consumers and is a "no regrets" decision between now and an industry agreed framework for making the ISP a reality.

- **Timetable and Transition Arrangements**

The proposed July 2022 timetable for the implementation of the LMP and FTRs does not reflect the current status of the proposal including the level of detail, analysis and consultation, the complexity of the proposed reform and the transitional arrangements that will be required. Proceeding with the proposed reform on this timetable is going to further increase investment uncertainty and put at risk future investment in new generation at precisely the time that it is required.

[1] Discussion Paper - CoGATI access reform 14 October 2019, Page iii
[2] New Zealand Electricity Authority https://ea.govt.nz/operations/wholesale/hedges/ftr-market/ accessed 31 October 2019.

Amongst other things the AEMC do not appear to have considered how LMP and Volume Weighted Average Price ("VWAP") will impact existing power purchase arrangements, the changes required to AEMO's systems and implementation of grandfathering arrangements.

Given the structural changes proposed Windlab does not agree with the AEMC's conclusion that the proposed access reforms represent a no regrets step that is suitable for any post-2025 design of the market.

Windlab believe, further work is required to define the detail of the proposed reform including transition arrangements and interaction with other reform processes and rule changes before setting the implementation timetable.

- **Achievement of the National Electricity Objective ("NEO")**

The AEMC have proposed the introduction of LMP as the recommended access model without assessing the costs and benefits of the reform relative to the current framework or alternative access models. It is not clear from the information provided by the AEMC to date that the proposed reform delivers the long-term customer benefits required to satisfy the NEO.

Windlab believe a more detailed analysis of the costs and benefits of LMP versus both the current framework and alternative models is required before selecting a preferred access model that represents a structural change to the wholesale electricity market.

Implications for Marginal Loss Factors

Under the LMP proposal MLFs will be replaced with loss factors determined through dispatch which the AEMC acknowledge could potentially increase the volatility of loss factors[3]. The recent volatility of MLFs is already having a material impact on investment with any increase in volatility expected to be detrimental to generation investment. The AEMC cite the introduction of FTRs as a mechanism to hedge the risk associated with loss factor volatility. The non-firm 4 year FTR product proposed by the AEMC fails to hedge the long-term uncertainty facing investors considering 30 year investment decisions while at the same time increases the cost and complexity of future investments.

The proposed LPM and FTR frameworks do not address MLF risk and will potentially increase MLF volatility. This is expected to result in an increase in the cost of capital for new generation investment and ultimately higher customer electricity prices

Recommended Approach

Summarising, to create an investment environment that will enable an efficient cost of capital and ultimately the desired long-term customer outcomes Windlab recommend the AEMC prioritise following activities

1. Implement the Average Loss Factor rule change proposal

[3] Discussion Paper - CoGATI access reform 14 October 2019, Page 22

The proposed change from MLF to ALF provides a no-regrets solution that will reduce the level of loss factor volatility, improve investment certainty and restore investor confidence – all of which will keep consumer prices lower than in the current situation, while the broader reform program progresses.

2. Actioning the Integrated System Plan including the renewable energy zone framework

The design, development and delivery of the new transmission network associated with the ISP needs to draw on the best of the coordinated planning methods that delivered our current network, as well as the market-based mechanisms that delivered operational efficiency to that network after completion. Whether it is sending signals for investment in the REZ's or investment in augmentation of the existing network there is broad industry agreement and learnt experience from around the work that dynamic pricing and transmission do not send the coordinated or certain enough signals required for delivering these monopoly regulated assets.

3. Broader Market Reform Program (including potential wholesale market reform)

The ESB has commenced the process of the NEM 2025 Review which has been on the reform agenda for some time. The NEM 2025 Review will be critical to defining the future of the market as we progress through the energy transition and will hopefully establish a clear objective that market participants and stakeholders can work together towards. Windlab believe this is the logical forum for any review of the structure of the wholesale electricity market.

Windlab Limited is committed to collaborating with industry, the ESB and the AEMC to deliver best in class solutions for the CoGATI reform.

Please do not hesitate to contact me should you have any queries.

Yours sincerely,

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