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Dear Ms Hicks

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**Issues Paper on Central–West Orana Renewable Energy Zone
Access Scheme – 22 March 2021**

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EnergyAustralia is one of Australia's largest energy companies with around 2.5 million electricity and gas accounts across eastern Australia. We also own, operate and contract a diversified energy generation portfolio across Australia, including coal, gas, battery storage, demand response, wind and solar assets, with control of over 4,500MW of generation capacity.

We appreciate the opportunity to provide feedback on the Department's issues paper and note the NSW Government's intention to have the Central West Orana (CWO) Renewable Energy Zone (REZ) Transmission 'shovel ready' by the end of 2022.

We understand that the Department intends to release more details of the access options it has canvassed, including financial modelling of how each option would deal with key factors affecting investment and customer risk. This will be important as having transparency and certainty on the allocation of costs and risk will be critical in providing investor confidence over the short term where large priority investment is required.

We support arrangements that maximise total value and result in least cost outcomes for consumers. This should be reflected as an explicit evaluation criterion that applies to each access option as well as having no REZ access regime. We expect the Government's timeframes may lead it towards selecting what might seem to be less ambitious arrangements for CWO. The AEMC's experience in considering access regimes and ongoing deliberations by the ESB illustrate the difficulties in agreeing on arrangements that best deliver economic efficiency, including whether anything beyond the current open access model is likely to be an improvement. It may also be that the least cost regulatory pathway is to maintain the option to transition to a more elaborate national arrangement rather than lock the CWO REZ into an incompatible bespoke regime.

If you would like to discuss this submission, please contact me on [REDACTED] or [REDACTED]

Regards

Lawrence Irlam
Regulatory Affairs Lead

Where further detail is required

To guide the Department on its further work, and noting some matters have been explicitly listed as 'out of scope' in its issues paper, we consider the following needs to be explored further and discussed with stakeholders prior to progressing with evaluation of any REZ access option:

- Clarity on how any CWO REZ access regime will be decided given concurrent ESB recommendations and potential ministerial decisions — the Department may wish to provide certainty that the regime operating in the CWO REZ will be determined independently and rights will prevail irrespective of national developments. Alternatively, it may be in the long-term interest of consumers to allow the CWO regime to transition to any NEM-wide arrangement, with some sort of right for developers to opt in. Ideally there should be one nationally-applicable access regime and that navigating multiple arrangements is likely to have detrimental impacts on investment and ultimately costs faced by consumers.
- The interaction between any access regime and Long-Term Energy Service Agreements (LTESAs) — this includes the different financial flows and associated incentives on developers, as well as process by which access rights and LTESAs are awarded. We assume this would be done jointly as amounts bid by developers for access rights and supply agreements will be interdependent, and this interdependence will complicate determining overall value for money for consumers.
- How different types of congestion are separated and treated under the financial access options, and how causation is determined — exploring examples and the likelihood of congestion due to causes arising both inside and outside of the REZ boundary (i.e. as the surrounding NSW grid is developed) will also be useful, including under the physical access option. This would assist in evaluating different options as well as in comparison to the status quo, particularly since access is only provided to the REZ boundary point.
- Further definition of hosting capacity — we understand the REZ is intended to have 3,000MW of capacity although consider there may be a need for flexibility in this e.g. if further detailed planning studies suggest different optimal sizing or staged development, and if so at what point the engineering design is complete and therefore when the REZ size and configuration is "locked in".
- How DCAs or IUSAs will be integrated — DCAs would in effect create a 'nested' access regime with added complexities for developers. Although not an issue of REZ design, this complexity may have an impact on total REZ investment or the ability of developers to commit in a timely fashion. As it relates to the REZ engineering design, the location and number of hubs within the REZ will also be an important factor affecting the value of access rights.
- Whether access rights are overridden or reopened for Ministerial determinations — this includes design parameters like REZ boundaries, designation of additional REZs, approving or vetoing developments inside the REZ (as well as outside) that impact on intra-REZ power flows.

- Sequencing and timing of access payments and effects on business case cash flows — for example requiring at risk or refundable payment prior to a project's final investment decision or practical completion/commissioning may disadvantage smaller developers and processes for refunds would need to be made clear. As discussed further below the ability of developers to appropriately value access rights and congestion risk depends on having visibility of other connecting parties, with different tiers and timing intervals of financial rights.

The Department's commitment to REZ transmission being 'shovel ready' by end 2022 should be subject to appropriate resolution of these and other matters, such as the requirements of the proposed Transmission Efficiency Test, arising from the Roadmap. Prior consultation on COGATI (and its forerunners), as well as concurrent development of the ESB's REZ framework, may provide a solid basis for the Department in progressing with the CWO REZ. However these consultations also highlight the likely difficulties in developing a solution that will credibly deliver net benefits. We consider the Department needs to reach a threshold decision that any specific REZ access regime will be worth the effort in ensuring optimal coordinated investment and in efficiently allocating risk between developers and customers.

The Department's criteria should include costs and risks to consumers

The evaluation criteria listed in the issues paper includes efficient investment in, and use of, REZ assets and lowering the cost of capital to generators, which should generally capture customer benefits as they contribute to a lower overall system cost. We consider, however, that an additional criterion be added that explicitly measures the overall cost and risk to consumers.

Some factors that will potentially, but perhaps not explicitly, be captured in the current evaluation criteria will be how different access regimes result in different combinations and amounts of technologies, with different impacts on congestion and other risks. In turn, these will affect the market's total willingness to pay for a given amount of hosting capacity, and thus any residual funding that needs to be recovered from consumers. Design features that apply across all access types, and flagged to be canvassed in later consultation, will also have a bearing on customers' cost exposure, including whether access payments arise via an auction or reflect pre-determined fee arrangements.

At this stage it is apparent that there will be various financial flows to and from the Scheme Financial Vehicle. The issues paper identifies that access fees may cover contributions to community and employment purposes.¹ The ability to monitor and inform customers of these different payments may also be a relevant consideration in demonstrating net customer benefits, and will therefore be integral to the proposed Transmission Efficiency Test.

The evaluation methodology should be clear on the counterfactual

The Department is aiming to institute a set of arrangements that improves upon the status quo. The analysis in the issues paper applies the evaluation criteria to different access options, with the implicit assumption that the status quo already fails against many or enough of these criteria to not warrant its own evaluation.

¹ NSW DPIE, *Issues Paper on Central–West Orana Renewable Energy Zone Access Scheme*, March 2021, p. 9.

As the Department progresses with its modelling of options, defining the counterfactual will be critical. All of the access options involve various shortcomings, or potentially overlap with other policy interventions that also incentivise investment and reduce risk. Some considerations here include:

- LTESAs are likely to be awarded on the basis of the value of different technology combinations e.g. the 3000MW capacity will not be awarded entirely to coincident generators, and individual VRE developers will likely partner with storage to offer better 'shape' or firmness in their supply arrangements.
 - The access options involve different approaches to 'capping' generation capacity, however any payments under LTESAs should naturally decline as available capacity is exhausted, to the point where developers will seek to connect elsewhere (assuming the administration of LTESAs appropriately ensures that government incentives match underlying value of incremental investment).
 - The societal value of applying an access regime on top of these planned outcomes may therefore be minimal (and see further discussion below on capping investment under physical and financial access rights).
 - The marginal benefits to non-firm generators under option 2 are likely to be small relative to non-REZ access as investment approaches and exceeds REZ hosting capacity.
- More generally, LTESAs will significantly reduce a range of risks to developers relative to the status quo and will require careful treatment in any counterfactual.
- No REZ access regime will address congestion risk arising from outside the REZ. As noted above we expect further studies to be released that explore how congestion may arise inside the CWO REZ as well as from the REZ boundary to the regional reference node under a range of plausible system normal and outage scenarios.
- There will be added complexities in overlaying any access regime, particularly those involving financial access rights and within-REZ congestion, which are likely to result in increased costs of capital relative to the current situation of open access. Physical access will also involve a new connections process and developers wanting to connect and contribute to costs of augmentation once hosting capacity is exhausted may face delays relative to the status quo.
- The form of any eventual NEM-wide access regime will be critical and counterfactual assessments might include scenarios where a national regime does and does not exist. These regimes should be based on options arising in the ESB's post 2025 consultation, noting that the ESB recommendations are unlikely to have been accepted by Ministers in time for the final CWO REZ design decision.

Reflections on the different options in terms of risk, cost and feasibility

All of the options involve shortcomings however we support the shortlisting to options 1 and 2. We do not support changes to existing market processes such as bidding and dispatch processes as this unfairly impacts existing market participants across the NEM and well removed from the NSW REZs, and we do not consider it realistic that reforms involving locational pricing as proposed (and almost universally opposed) under COGATI could be adopted for the CWO REZ. We agree with the issues paper's reflections on implementation risks associated with the Limited NEM bidding model and the LMP model in light of recent experiences in implementing system changes for 5-minute settlement, which will impact all participants and customers across the NEM.

Of the shortlisted options, we prefer option 1 on the basis of practicality and investor certainty. We doubt that a financial access regime can be developed in time to coincide with a 'shovel ready' REZ by the end of 2022. A physical access regime also provides option value given current uncertainties on how any access design will integrate with new market processes. That is, a physical access regime is likely to involve less complications if financial rights are brought in via NEM-wide reforms at a later stage (if this is desired).

These timing issues aside, the key distinction between the physical and firm access options outlined in the issues paper relates to allocating and minimising the risk of underutilisation:

- the physical access option places a cap on connecting generation capacity, hence the process of allocating (maximising) access and utilisation of that capacity is critical but still likely to result in underutilisation compared to financial access options. The issues paper discusses setting the cap above the REZ's export capacity — the introduction of congestion risk will bring with it a decline in the value of access rights, hence while there will be optimal combinations of technologies under any cap that minimises this risk, it is not clear (without detailed technical studies) if there would be an optimal ratio of hosting to export capacity such that the aggregated value of access rights (and hence funding contributions) is maximised.
- The process for allocating firm access does not seem to be as critical in the financial access options as any spare capacity would be utilised by, in theory, unlimited numbers of developers who only seek non-firm financial access. We also agree that more firm access rights could be sold under option 2B leading to better network utilisation. However, a central planner would still need to decide how much firm access is sold in total or across different time intervals, again requiring consideration of the optimal mix of technologies as would arise under the physical access option.
- The effect of maximising REZ utilisation under the financial access options puts congestion risk onto developers, requiring all parties connecting to the REZ to understand this risk when determining whether to seek firm or non-firm access and their willingness to pay for either. The Department should explore this further, including whether and how each connecting party will have foresight of others and the rights being allocated to each. As noted above, this information

should be released alongside more detail of how causation would be determined when constraints bind within the REZ.

The cost or payments required of developers seeking access will also need to be compared to the reduced cost of capital from having greater certainty around within-REZ congestion. For example, parties that have 'guaranteed' access under the physical access model or with tier one financial rights essentially avoid all congestion risk inside the REZ. This might give rise to a lower cost of capital, but with an expectation (or willingness) to pay more for access. Generally, any attempts to maximise developer contributions to REZ construction costs will work to neutralise the benefits of connecting inside the REZ relative to outside of it. The available pool of funds to offset the cost of REZ development, and thus the financial exposure of consumers, will also depend on the number of connecting parties, which in turn impacts on willingness to pay e.g. infinite tier two financial rights could be allocated but with virtually zero value or customer benefit.

The issues paper also highlights credit and other financial risks arising under the financial access models. The mitigation options listed presume that all payment flows are isolated within the compensation/ settlement mechanism. That is, there does not appear to be any intention for the REZ Administrator to be backed by any other government-established entity, which may be worth exploring. The requirement for access holders to provide security to the REZ Administrator and maintain credit requirements (which seems standard in this sort of arrangement) will add to the total cost of investment and affect the desirability of acquiring access rights (and locating within the REZ generally). If post-settlement compensation is embedded within AEMO's existing processes, additional prudential requirements could similarly be managed by AEMO to minimise administrative burden.

Notions of 'use it or lose it' conditions and the trading of financial access rights go to the risk of speculative purchases. Restricting first round purchases to approved developers would address this, however with the potential drawback of not reaching a market price/ full willingness to pay for financial rights, to the potential detriment of consumers in paying for residual costs. The subsequent trading of rights may also need to be restricted to operators of REZ generation/ storage. Provided rights are tradable amongst appropriate parties (and divisible) or can be refunded at any time if projects do not proceed, it is not clear whether there need to be regulated requirements including sunset provisions or forced sale of underutilised rights.

We also question whether the timing intervals for access under option 2B will be tailored for different generation plant, for example, it is not clear how wind developers would be accommodated or otherwise if intervals are based on average dispatch profiles.

In summary, there are numerous complexities yet to be explored with the financial access models presented. Having more complex administrative arrangements will need to be balanced against the scale of potential benefits in maximising REZ utilisation and importantly the extent to which customers must 'top up' funds that are contributed by developers.

Other issues

With respect to some other design issues:

- Treatment of storage — it seems appropriate that storage be assigned non-firm access rights to discourage it from discharging at times that coincide with (firm) generator dispatch. We presume that hybrid storage/ renewable plants are treated the same as all other generators i.e. operators are able to acquire firm access rights if they wish.
- Treatment of load — further work should be done to examine the likely benefits of introducing new incentives for load, either as part of the REZ access arrangements or within market settlements. The sufficiency of existing locational incentives arising from network pricing should also be considered. That is, the same approach in signalling the value of alleviating congestion should apply irrespective of any 'administrative' REZ boundary.
- Term of access rights — alignment with the life of LTESAs seems appropriate, otherwise a fixed period in line with the average economic life of generation assets or recovery of transmission costs e.g. 20 years. Further consideration should be given to any obligations on the network operator to maintain transfer capacity as physical conditions change over the term of access, including in response to unforeseen events. This might include integration with mechanisms like the AER's service target performance incentive scheme.
- Preferential treatment — the Department should consider whether it is appropriate that connections outside of the REZ be given assurances of not being disadvantaged in terms of available processes or costs, and otherwise consider potential anti-competitive outcomes arising from preferential treatment for connections inside the REZ. In providing investor certainty, it should also confirm that national frameworks will equally apply, such as system strength obligations and payments.