Department of Environment, Land, Water and Planning
8 Nicholson St
MELBOURNE VIC 3000

31st March 2021

Submitted via e-mail to: REZDevelopment@delwp.vic.gov.au

Dear Sir/Madam,

Victorian Renewable Energy Zones Development Plan

The Australian Energy Council (the "**Energy Council**") welcomes the opportunity to make a submission in response to the Department of Environment, Land, Water and Planning's *Victorian Renewable Energy Zones Development Plan Directions Paper*.

The Energy Council is the industry body representing 21 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia, sell gas and electricity to over ten million homes and businesses, and are major investors in renewable energy generation.

Introduction

While willing to engage in the Department's consultation process, the Energy Council wishes to be clear that it believes the east coast power system, the National Electricity Market ("**NEM**"), is best developed from a holistic and national viewpoint, therefore existing frameworks, such as the Australian Energy Market Operator's ("**AEMO's**") Integrated System Plan, the Regulatory Investment Test for Transmission and the Australian Energy Regulator's regulatory processes should be used, rather than implementing state-specific mechanisms.

In particular, it is AEMO's role, as National Transmission Planner, to publish the Integrated System Plan and identify Renewable Energy Zones which are most efficient from a national perspective. The Energy Council supports that role and suggests that Victorian development should always be guided by AEMO and its rigorously developed system-wide transmission planning, and Victoria should not attempt to superimpose an additional REZ plan.

However the Energy Council accepts that states have the right to introduce their own specific regimes, and the Directions Paper has been responded to in that context. Careful consideration should be given to ensure that Victorian measures complement and enhance national frameworks, and any approaches that are inconsistent or duplicative are avoided.

The Energy Council is willing to assist in designing such measures.

Discussion

Developing the grid should always seek the lowest total cost

The Directions Paper appears to take as given that all, or almost all, future renewable energy development in Victoria will occur within the zones identified, and that the grid must therefore be invested to support these particular zones. It is not clear that this has been holistically considered. These may well be the locations of the most attractive renewable resources in Victoria, but, when considering the level of grid investment necessary to support their development, may well not be the cheapest option overall, since there is considerable and growing spare network capacity in other areas of Victoria. VicGrid should always seek to encourage the location of new renewable energy

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in locations where little or no reinforcement is necessary. This permits the fastest generation development, is less complex and risky, and will likely deliver the cheapest total overall cost (generator plus transmission).

VicGrid's remit should extend to the overall cost, and be permitted to look into options to support the desired growth in renewable energy in ways that don't oblige the large proposed network investments identified in the paper.

It is also important that the cost recovery mechanism is appropriate. As developments in Victoria will affect other jurisdictions, any cost recovery will need to consider inter-regional effects.

The Discrete Nature of a Renewable Energy Zone

While the concept of renewable energy zones ("**REZs**") as discrete geographic areas seems straightforward, in practice differentiation is not so distinct. Adjacent areas are likely to enjoy similar renewable resources, therefore any boundary will be nominal in nature, and a function of transmission availability. Furthermore, although the transmission system was initially developed in a linear fashion, current and future expansions are changing the power system's characteristics to be more meshed in nature. Accordingly the boundaries between the transmission system and putative REZs become even more blurred, and therefore the premise that they are contained in a discrete geographic area can't be upheld, and treating them as such compromises optimal planning.

In addition, for REZs close to state borders, such as the Murray River and Ovens Murray REZs, generation output is likely to flow interstate, and any intention to allocate renewable energy generation benefits to the local state would be purely nominal. Moreover, as part of the NEM, Victoria is electrically connected to three other states, therefore the statement, "The future reliability of Victoria's energy supply … is contingent on the development of a … *state-wide* generation portfolio" [emphasis added] does not seem to be justified.[1]

Speculative Investment

The Directions Paper asserts that the current national regulatory framework "does not encourage centrally coordinated scale efficient solutions and anticipatory investments that pave the way for the transformation required in Victoria by 2030 …"[2], ignoring the Scale Efficient Network Extension provisions of the National Electricity Rules.[3] The Energy Council agrees that the current framework discourages *speculative* investment, the cost for which is borne by consumers, and which may never be used if investors decide not to utilise the assets. Instead the current model limits wasted capital, by only constructing assets when an investor has committed to build a generator, and ensuring that additional transmission assets pass a rigorous market benefits test. In this way the current regulatory framework, which has been consistently refined and improved since its inception, acts to limit wastage and improve economic efficiency, by requiring the transmission network service provider ("**TNSP**") to consider alternatives (including non-network options) before committing to construct new transmission.

These non-network options are an important consideration for the efficient development of the transmission network, and fall within the responsibilities of the TNSP to consider and, if economically prudent, implement. In this vein, the Energy Council notes within the Stage 1 Projects table there are a number of minor ($1-3m) augmentation projects listed,[4] and the Energy Council questions why government money is required to support projects which could be so quick to implement, and are so small in nature that they could be undertaken, and incorporated in the regulatory asset base, with very little thought, given the demonstrable benefits identified.

[1] Directions Paper, p.3
[2] p.4
[3] National Electricity Rule 5.19
[4] p.9

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The Role of VicGrid

While reluctant to support further bureaucracy, the Energy Council is cautiously supportive of the role the proposed VicGrid authority will have to streamline planning processes and lead community engagement, but questions how it is intended to interact with AEMO, which has responsibility for planning the Victorian transmission network. To the Energy Council's mind VicGrid's role should be limited to local issues, with technical and economic planning remaining with AEMO.

Acknowledging that VicGrid will have a state-based focus, it will also be very important for the body to be cognisant of Victoria's role in the NEM, the National Electricity Objective,[5] and Victoria's interconnection with the other states, and how they may affect, and be affected, by Victorian initiatives. It is fundamental to the operation of the power system in other jurisdictions that any transmission planning conducted by VicGrid considers Victoria's role as the most interconnected of all the states.

In addition, as the Directions Paper points out,[6] VicGrid's work will interact with that of the Energy Security Board, the Australian Energy Market Commission, and AEMO, therefore it is critical that actions undertaken in Victoria will not be in conflict with, or compromise, broader national market and regulatory reforms. In particular, the Energy Security Board is engaged in the setting of a REZ development framework, which preferably VicGrid should adopt, or at the very least be highly compatible with this national framework.

It will also be important to ensure that just because VicGrid will have responsibility for planning REZs, it shouldn't regard transmission extensions to REZs as the sole solution, without considering the problems to be solved. While the premise of REZs is to facilitate the connections of solar and wind generation, transmission augmentation may not be the best means to assist this process. VicGrid should always first explore opportunities to encourage renewable energy to connect in locations where there is surplus existing network capacity, and therefore can avoid effectively burdening taxpayers, customers or generators with any new shared network costs. Secondly, VicGrid should consider opportunities where low-cost network and non-network solutions, may permit more connection. For example control schemes to exploit greater capacity on existing lines, and increasing local system strength, will be faster and much cheaper than developing new circuits.

To this end, it will also be valuable if REZ development is staged, as suggested in the Energy Security Board's *Renewable Energy Zones Consultation Paper*,[7] to ensure that the construction of transmission assets is neither premature nor excess to requirements. However caution will need to be exhibited to ensure that REZs built in anticipation of future transmission expansions don't cause such future transmission expansions to be themselves justified, since to do so would be circular.

While AEMO's Integrated System Plan sets out an optimal development path, it is a guide only, subject to revision every two years and when material changes occur, and the proposed transmission in later years may not develop, due to changes in circumstances. Thus while the development of a REZ can anticipate later transmission development, and perhaps make some limited allowance for connection to it, should it develop, it is important that the REZ assets are justified in their own right, and their justification remains valid, even when assets being built in anticipation of the future are taken into account.

[5] *National Electricity Law* – Section 7
[6] p.15
[7] Energy Security Board, *Renewable Energy Zones Consultation Paper*, January 2021

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Contestability

For 25 years Victoria has benefited from a transmission planning framework based on contestability wherever it is physically possible. The Energy Council supports maintaining this philosophy into the planning of REZs and in the operation of VicGrid.

The Paper anticipates very substantial investment in batteries and grid-connected synchronous condensers. These are discrete new assets and easily lend themselves to contestability. The Energy Council suggests the Department consider going further, and consider re-casting the requirements into the *services* it is seeking from these assets, rather than specifying these specific assets. Seeking offers for *services* rather than *assets* enables a greater range of technologies and innovations to emerge. It also permits VicGrid to purchase over shorter time-frames, and incrementally as the demand for the services actually emerges. This in turn reduces the planning risk being absorbed by the taxpayer or captive consumer.

Conclusion

It is clear that the development of REZs will need detailed thinking to plan what is required, and how it will interact with existing regulatory frameworks and jurisdictions. If it would assist, the Energy Council would be happy to participate in an industry working group to facilitate these matters.

Any questions about this submission should be addressed to the writer, by e-mail to Ben.Skinner@energycouncil.com.au.

Yours faithfully,

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