



12 February 2021

Dr Kerry Schott AO  
Chair  
Energy Security Board

Via email: [info@esb.org.au](mailto:info@esb.org.au)

Dear Dr Schott

**Re: Response to Consultation Paper on interim REZ framework**

CitiPower, Powercor and United Energy welcome the opportunity to respond to the Energy Security Board's (ESB) stage 2 consultation paper on renewable energy zones (REZ).

The ESB acknowledges that "transmission is only one part of the puzzle". Indeed, any geographical area defined as a REZ would, and in many cases already does, involve both transmission and distribution network with generators connected at different network levels.

In Victoria's proposed REZs, we estimate that we could unlock an additional 1.5GW of network capacity for renewable energy through upgrades in a relatively short period of time. This would be at a lower cost per GW compared to current transmission options. We have a large number of renewable generators seeking to connect in these areas, and they will rely on the constrained distribution and transmission networks to deliver their energy to end customers.

For renewable energy zones, we:

- support the creation of the REZ coordinator role to be undertaken either by the Australian Energy Market Operator (AEMO) or a specialist government entity within the relevant state government
- encourage further consideration on the potential impacts on existing and future embedded generators on distribution networks
- recommend finding a model that could readily and equitably apply across both transmission and distribution levels in the National Electricity Market (NEM).

These matters are discussed below.

**Support the creation of the REZ coordinator role**

Coordinating generators and electricity infrastructure investment in REZs allows for the efficient investment in network infrastructure to benefit a large number of generators, reducing connection costs and mitigates the pitfalls of the 'last-in worst-dressed approach' to sequential connections on the network.

In Victoria, AEMO is the jurisdictional planner for transmission and is also responsible for approving performance standards for registered embedded generators. AEMO is acutely aware of system stability issues in Victoria and would have the independence to ensure these are addressed via the most efficient means.

Given the contestable connections regime in Victoria, the incumbent transmission network service provider (TNSP) should be conflicted out of the role of REZ coordinator.

**Further consideration on the potential impacts on existing and future distribution-connected generators**

Transmission-level capacity is not solely used by transmission-connected generators. The growth in distributed energy resources and other embedded generators means at some times of the day, the distribution network

exports energy onto the transmission network in some locations. This can be from DER level generators or embedded generators that are actively scheduled in the market. Transmission level constraints already result in these scheduled and semi-scheduled embedded generators being constrained in market systems.

Inside the REZ, the ESB proposes there is a “cap” on hosting capacity provided to generators competing in the auction or tender process, with access rights to the capacity maintained on an ongoing basis.

The ESB’s preferred financial access protection model entails the REZ generator being financially compensated for not being dispatched due to congestion by subsequent entrant generators within the REZ that do not have access rights but who were dispatched.

The ESB acknowledges that further consideration of the impacts on pre-existing generators within the REZ areas is required. The initial thinking is they remain subject to the open access regime. Presumably, this will apply to existing embedded generators as well.

The concern is that prospective embedded generators will also be subject to the financial access protection model. It is unclear how this would translate into the business models for prospective embedded generators. It is possible that it may further encourage connection under the Chapter 5A regime, where participants are automatically exempted from market registration with AEMO.

On this basis, we encourage further consideration on the potential impacts on the ESB’s preferred financial access protection model. If there are negative impacts, we support finding a model that could apply across both transmission and distribution levels in the NEM.

### **The role of distributors**

The discussion addressing the transition to a renewables-based future appears to be based on the transmission level of the NEM. The focus appears linked to AEMO’s Integrated System Plan (ISP) concentrating exclusively on transmission.

As the ESB is aware, transmission options are often large scale, highly expensive and involve very long delivery times. The uncertainty and costs of transmission options is evidenced in the recent Rule change request by TransGrid to recover revenue from its actionable ISP projects through a nominal rate of return allowance and depreciation as incurred. While the Australian Energy Markets Commission found the regulatory framework is not a barrier to financing ISP projects in its draft determination, it is clear that TNSPs are concerned about the significant cost and uncertainty to deliver projects of that size.

Smaller diversified projects connected to the distribution network, rather than one single large project at transmission, provide a range of benefits, including faster completion times and lower connection costs and risk, closer positioning to energy users, and improved distribution loss factors and marginal loss factors. Small-scale generation projects may also provide more localised economic and social community benefits for a greater number of communities, such as ongoing operational and maintenance support of the solar, wind or storage project.

Distribution can be more cost-effective and unlock greater export capacity relatively quickly while upgrades are made to the transmission network. Deploying our assets does not entail large easements through sensitive sites which can result in project delays as a result of extended community engagement. Our assets can run alongside existing roads.

Where new transmission lines are constructed, distribution networks will also be required to meet the needs of new load customers in those areas. That is, distribution level investments will be required to complement the new transmission infrastructure.

We therefore encourage the ESB in their current deliberations to more closely examine the feasibility including distribution into the REZs framework as a complementary solution to transmission REZs to resolve current

capacity constraints and develop a framework that can apply equitably to either transmission or distribution networks in the development of REZs.

Should you have any queries, please contact Elizabeth Carlile on (03) 9683 4886 or [ecarlile@powercor.com.au](mailto:ecarlile@powercor.com.au).

Yours sincerely

A handwritten signature in blue ink that reads "Renate Vogt". The signature is written in a cursive style with a large initial 'R' and a distinct 'V'.

Renate Vogt  
**General Manger Regulation**  
**CitiPower, Powercor and United Energy**