



Dr Kerry Schott AO
Chair, Energy Security Board
By email: info@esb.org.au

12 February 2021

Dear Dr Schott,

Response to Consultation Paper – Interim REZ framework

The Clean Energy Investor Group (CEIG) welcomes the opportunity to provide feedback on the Energy Security Board (ESB)'s Consultation Paper published on 5 January 2021 on the *Renewable Energy Zones (REZ) framework* (the Paper).

CEIG represents domestic and global renewable energy developers and investors, with around 5GW of installed renewable energy capacity across 49 power stations and a combined portfolio value of over \$9 billion. CEIG strongly advocates for an efficient transition to a clean energy system from the perspective of the stakeholders who will provide the low cost capital needed to achieve it.

KEY POINTS

- CEIG supports the ESB's decision to focus on REZ development in the short term and its intent to establish a REZ framework that can fit with State-based REZ policies.
- CEIG welcomes the ESB's decision to push back on the implementation of the Australian Energy Market Commission (AEMC)'s Coordination of generation and transmission investment (COGATI) Proposal in the near future but is concerned about the lack of long-term policy certainty. Withdrawing a REZ framework and implementing an alternative solution in a few years' time would create unnecessary uncertainty for investors, ultimately increasing the risks of a more volatile, costlier and less reliable energy transition.
- CEIG is interested in working with the market bodies to explore alternative rules and policies that can deliver an investable and reliable NEM at least cost to consumers and looks forward to considering any alternative proposals to COGATI that are put forward by the ESB in its March 2021 Post-2025 Market Design Consultation Paper.

- CEIG does not agree with the ESB that REZs do not provide a sufficient long-term locational signal. REZs provide an effective way to prioritise and coordinate where generation investment should occur, allow to focus on the build-out of all required infrastructure in a planned and considered manner and will provide a strong signal to investors.
- CEIG agrees with the ESB that a REZ Framework is not sufficient to solve the problems caused by the open access regime and that a review of the existing open access regime – with some form(s) of access restriction to apply outside REZs – should be considered to protect the expected benefits of REZ policies and to preserve the technical integrity of the network.
- CEIG supports the proposed frameworks for REZ coordination, planning, development and connection but notes that the assumed benefits are contingent on appropriate design and implementation by the market bodies.
- CEIG supports capping the hosting capacity in a REZ and selecting participants through competitive auctions.
- CEIG supports generators paying for part of the cost of transmission network investment but does not support using the PIAC model to determine the generators’ share of transmission network investment costs. A well-designed auction - by promoting competitive tension between proponents - should deliver lower prices and enable more efficient price discovery than a regulated process.
- To maintain access within a REZ, CEIG’s preference is for the ‘Connection access protection model’ to be implemented. In principle, CEIG also supports the ‘Financial access protection model’ but acknowledges AEMO’s ISP Reports which outline the need for future physical investment in the transmission network to deliver an optimal grid at least cost to consumers. CEIG does not support the introduction of the ‘REZ as a region’ or ‘Early allocation of financial transmission rights’ options.

CEIG SUPPORTS THE ESTABLISHMENT OF THE ESB’S REZ FRAMEWORK

CEIG supports the ESB’s decision to focus on REZ development in the short term

CEIG is overall supportive of the principles outlined in the ESB’s REZ Framework as they have the potential to provide an appropriate locational signal for investors and deliver stability and certainty for investors to unlock low cost capital and deliver the energy transition.

The Australian Energy Market Operator (AEMO)’s 2020 Integrated System Plan (ISP), the result of an 18 month consultation and modelling exercise, has found 26-50 GW of new utility-scale wind and solar capacity is needed in the National Electricity Market (NEM) by 2040 for the optimal development of the power system at lowest cost to consumers, much of it to be built in REZs. Considering the scale of investment required, the introduction of the ESB’s REZ Framework is a welcome development.

The successful development of REZs over the next decade is critical to a successful energy transition in Australia and to the decarbonisation of the economy. With the election of President Biden and

recent commitments by key trade partners to achieve net zero emissions by 2050, pressure will continue to mount on Australia to intensify its emission reduction efforts. A stable REZ Framework can enable the electricity sector to make a significant contribution to those efforts.

CEIG commends the ESB's intent to establish a REZ framework that can fit with State-based REZ policies

CEIG notes the potential for divergence in how REZ policies are developed and implemented at jurisdictional and national level. This has been most recently highlighted through the release of the *NSW Electricity Infrastructure Roadmap* and *NSW Energy Infrastructure Investment Act 2020*. Although CEIG welcomes the approach taken by the NSW Government to accelerate the development and implementation of a REZ framework, CEIG notes that it also represents a 'planned displacement' of parts of the National Electricity Rules (NER) and replacement with NSW-specific regulatory and market requirements which could go against a more integrated NEM.

Although investors accept that REZ development will be driven by State-specific policies (which will implicitly create some level of divergence across the NEM), CEIG encourages the energy market bodies and all jurisdictions' governments to coordinate and communicate on an ongoing basis to ensure that sufficient clarity and certainty can be provided to investors across the NEM.

The ESB's approach to establish a framework that can fit with State-based REZ policies is commendable. CEIG encourages State governments who are designing their own REZ policies to consider incorporating some of the ESB's REZ principles to foster consistency across the NEM.

CEIG overall supports the ESB's proposed frameworks for REZ coordination, planning, development and connection processes

CEIG overall supports the high level principles outlined in the ESB's REZ Framework as they have the potential to fix some of the current issues as well as outline a clearer and more efficient process going forward.

This is particularly true for the connections process where the coordination of generation investment can potentially unlock significant benefits around the timing of connections and economies of scale around the sizing of required connection assets. CEIG however notes that further details need to be worked through and that the outlined benefits are contingent on the improved connection process being appropriately designed and implemented by the market bodies, including giving due consideration to lessons learnt in recent years.

CEIG provides below more detailed feedback on specific features of the Paper's chapters 4 and 5.

REZ DEVELOPMENT IS A SUFFICIENT MECHANISM WITHOUT NEEDING TO IMPLEMENT COGATI CEIG welcomes the ESB's decision to push back on the implementation of COGATI in the near future but is concerned about the lack of long-term policy certainty

CEIG welcomes the ESB's decision to focus on REZs and not implement the AEMC's COGATI Proposal in the near future. However, CEIG is worried about the ESB's statements that COGATI could be implemented at a later stage:

"For these reasons, the ESB is considering how to build on the REZ model in order to provide a stepping-stone towards the long-term, whole of system access solution. This work is designed to

mitigate the elements of the LMP/FTR model that stakeholders found concerning, namely, the risks in transition and the impact on existing contracts.”

It is worth re-iterating that CEIG’s concerns around the COGATI Proposal go well beyond those summarised by the ESB in its Paper (namely the implications for the period of transition and for existing contracts including power purchase agreements).

In its [submissions](#) to the ESB and the AEMC, CEIG highlighted the results of modelling commissioned by Baringa Partners that found that the introduction of COGATI would jeopardise the transition to a clean energy system by increasing the cost of capital, triggering negative flow-on impacts on the level of investment in clean energy and wholesale electricity prices ultimately paid by consumers.

Market modelling found that the implementation of COGATI would have material negative impacts:

- increased consumer costs of \$3.4 billion (in present value terms) over the 2021-2050 period across the NEM:
 - \$2.5 billion through increased electricity bills (due to an average 3.5% increase in wholesale electricity prices under COGATI);
 - \$0.9 billion through additional payments required to achieve State-based renewable energy targets (RETs) under COGATI. This cost is ultimately borne by electricity consumers within those States. Without these payments, State-based RETs would not be achieved;
- installed capacity is around 3GW lower under COGATI as a higher cost of capital impacts the economics of utility-scale battery storage. Across the NEM, the magnitude of reduced volumes of new-entrant capacity under COGATI becomes progressively larger from the mid-2030s as that new-entrant capacity is most needed from a price and affordability perspective to replace retiring coal plants.
- CO₂-e emissions rise across the NEM under COGATI cumulatively by 18% over the period. This equates to a \$0.5 billion increase in social costs using a social cost of carbon of \$15/tonne.

With the market bodies continuing to consider the implementation of the COGATI Proposal (even if it is at a later stage), CEIG is concerned that investors will continue to invest under an uncertain policy framework. Having certainty around the level of revenue for a project at the time of financial investment decision is crucial for investors. In CEIG’s opinion, withdrawing a REZ framework and implementing an alternative solution in a few years’ time (or in any case, well before the end of a power plant’s lifecycle) would create unnecessary uncertainty for investors, ultimately increasing the risks of a more volatile, costlier and less reliable energy transition.

CEIG does not believe that the COGATI Proposal is the solution to designing a fit-for-purpose NEM.

Despite REZ development - which can be expected to facilitate the vast majority of 26-50GW of new investment in utility-scale generation over the next two decades - offering various special access regimes, the AEMC’s COGATI Proposal has continued to assume that the open access regime would remain in use in the NEM. That is despite none of the REZ Frameworks that have been put forward so far by the ESB, the AEMC (through the DNA Framework for radial REZs) and the NSW government (through the NSW Electricity Infrastructure Roadmap) proposing to use an open access regime within their REZs.

CEIG also believes that Locational Marginal Prices (LMPs), as outlined in the COGATI Proposal, do not provide a strong locational signal for future investment. An LMP provides a signal for where to locate in that specific five-minute interval. The pattern of historical LMPs is not sufficient to provide a robust long-term locational signal as it does not incorporate sufficient high quality long-term information and does not allow for effective predictions of future LMPs.

CEIG agrees with the ESB in its assessment that some NEM design features are no longer fit-for-purpose and welcomes the ESB's recognition of the problems associated with the open access regime:

“While the current access arrangements may have been adequate in the past with only incremental investment occurring, they are not fit for the future transformational change to the system.”

However, CEIG believes that the COGATI Proposal is not a suitable long-term solution to those problems. CEIG is interested in working with the market bodies to explore alternative rules and policies that can deliver an investable and reliable NEM at least cost to consumers and looks forward to considering any alternative proposals to COGATI that are put forward by the ESB in its March 2021 Post-2025 Market Design Consultation Paper.

REZs are a way to provide a locational signal

CEIG does not agree with the ESB that REZs do not provide a sufficient long-term locational signal. REZs are the product of robust modelling conducted by AEMO for its regular ISP Reports which aim to define the optimal pathway to develop the NEM and optimise net market benefits by minimising the system's long-term cost to consumers.

By providing a recommendation for how to develop the system at least cost to consumers, AEMO's ISPs and the associated REZs effectively provide generators and investors with underlying economic information that will drive siting choices for new generation capacity.

REZs will provide an effective way (combined with government and AEMO action) to prioritise and coordinate where generation investment should occur and allow to focus on the build-out of all required infrastructure in a planned and considered manner. The REZs' success will depend on the careful design of regulatory processes (e.g. improved connections process) and market incentives (e.g. design of government auctions and contracts) but overall, they will deliver a strong investment signal for generators and investors.

REZs will also allow for transmission investment to consider all potential generation in an area and to be sized at once, enabling the delivery of associated economies of scale.

A REZ Framework, coupled with actionable ISPs, will deliver the necessary coordination of transmission and generation investment and will offer solutions to some key problems identified by the AEMC in its early COGATI papers:

- likely future congestion on transmission networks as generators seek to connect to parts of the network that have little or no spare capacity; and
- increasing share of low emissions generation needing to locate at the edges of the existing network.

Quick NEM decarbonisation should be the key objective, not the pursuit of theoretically perfect markets and pure market efficiency

One of the key drivers of the energy transition is the need to decarbonise the electricity grid and REZ development provides an effective way to do so when accompanied by relevant safeguards to ensure that consumers only pay for their fair share of the costs, as proposed by the ESB in its Paper and already partly implemented by the Australian Energy Regulator (AER) through the Regulatory investment test for transmission (RIT-T).

To meet the fast pace of decarbonisation, the NEM needs a strong coordination mechanism. This can be most effectively achieved by strengthening existing centralised mechanisms such as the ISP and the REZ Framework rather than building a new market mechanism through the COGATI Proposal which would be time-consuming and place unnecessary uncertainty while that mechanism was being designed.

A key driver for designing the REZ Framework - which builds on elements of current NEM design - is the need to enable a fast and effective decarbonisation of the grid. The pursuit of theoretically perfect markets and pure market efficiency whilst ignoring practical operations and investment decision-making should not be the main driver for the design of future market mechanisms

Grid development over the next decade will be driven by centralised decision-making

The electricity grid is evolving to be more influenced by forms of centralised decision-making. A higher level of centralised planning has already been in place through the introduction of regular ISP reports and through the ISP actionable rules, effectively giving strong signals to generators as to where to locate in the grid. Multiple NEM State governments have also flagged that they would put in place (or already have in the case of NSW) specific REZ policies to incentivise investment in renewable energy generation at locations and in quantum favourable to their objectives (such as economic development in regional areas). States may also wish to decarbonise their economies faster and REZ development will be an effective way to do so.

CEIG believes that although market-based mechanisms can efficiently allocate limited resources, central planning and government decisions also have a strong role to play to meet a broader set of objectives. The selection of successful proponents in an auction will not be simply guided by consideration of the lowest pricing or most efficient location but will also incorporate other parameters that are critical to a successful grid. For example, when selecting successful proponents, it is appropriate that governments set specific parameters around obtaining a social licence from local communities.

CEIG does not believe that this trend towards greater centralisation will reverse soon. The location of generation and transmission resources that in the next two decades will result from those more centralised processes is therefore unlikely to neatly align with what a pure locational market signal (such as an LMP) would have delivered. Choosing to then impose a theoretically perfect locational signal such as COGATI and apply it to this 'centrally-designed future grid' would likely punish the majority of existing generators whose choice of location was guided by centralised decisions that followed broader objectives than purely seeking market efficiency.

CEIG however agrees with the ESB that the REZ Framework is geographically limited in its application and does not solve problems that occur outside of REZs such as problems linked to the open access regime. CEIG believes that broader reform is indeed warranted (as outlined throughout this submission) but resolving those issues outside of REZs does not need to rest on the application of the COGATI Proposal.

REZs, CURTAILMENT RISK AND VIABILITY OF OPEN ACCESS REGIME OUTSIDE REZs

CEIG agrees with the ESB that a REZ Framework is not sufficient to solve the problems caused by the open access regime

CEIG welcomes the application of a special access regime for REZs as it encourages the clustering of projects to deliver maximum benefits from the development of a REZ. CEIG acknowledges the positive intent behind policies that seek to provide some form of ‘firm’ access within a REZ as they (somewhat) protect connecting parties’ investments to a REZ. However, since the open access regime continues to apply to the wider network beyond the REZ, the protection provided by the REZ ‘firm’ access regime is very limited.

Although CEIG agrees that the optimal grid would at times be subject to some level of congestion, without commensurate investment in the transmission infrastructure ‘backbone’ between REZs and network loads, REZ policies will not provide sufficient certainty that a REZ output will not be unreasonably congested due to other generators establishing their plants between a REZ and a load. It is likely that this would be reflected in generators’ bids in auctions that seek to allocate a REZ’s hosting capacity.

Opportunity to reconsider the open access regime

A review of the existing open access regime is required to protect the expected benefits of REZ policies and to preserve the technical integrity of the network. In its Paper, the ESB acknowledges the issues that can be expected from the continued application of the open access regime outside REZs. A modified open access regime in the rest of the NEM - with some form(s) of access restriction – will be needed and should be considered to ensure that the benefits of REZ policy development are not eroded away. This would support the integrity of REZ investments that are about to be undertaken for the ultimate benefit of consumers.

The increasing penetration of variable renewable energy in weak and/or congested areas of the grid is already testing the limits of the open access regime. Rather than continuing to lay most of the associated uncertainty and risks onto generators and investors - at the risk of continuing to deter investment and working against the delivery of AEMO’s 2020 ISP and REZ policies at lowest cost to consumers - a holistic review of the open access regime could give investors renewed confidence.

A broad review of Chapter 5 and part of Chapter 4 of the NER could more holistically capture consideration of changes to the access regime both inside and outside of REZs. Although CEIG acknowledges that this would be a significant undertaking, it could generate material benefits considering the scale of investment required over the next two decades to ensure the security and reliability of the power system as envisaged in AEMO’s 2020 ISP.

REZ FRAMEWORK RETAINS ISSUES CAUSED BY CURRENT MLF METHODOLOGY

Some features of the REZ Framework can help to mitigate MLF issues. For example, REZs can promote development in areas that are less sensitive to MLFs, a REZ allows for the level of generation to be known and capped, and upgrades to the transmission network are likely to be part of the REZ build-out. However, many generators will continue to suffer from volatile revenue streams due to volatile and uncertain MLFs, particularly in regional areas that are further from regional reference nodes (RRNs).

Having a REZ Framework and an upgraded transmission network will not guarantee that MLFs will not be volatile and/or that they will be closer to 1 as MLFs are constantly impacted by:

- the level of generation from neighbouring generators; and
- the flows towards or away from the RRN. Those flows can be impacted by elements outside of the generators' control such as changes in the quantum and direction of imports/ exports from a region and the location and quantum of neighbouring generation as new entrants are encouraged by State governments' policies and programs.

Fundamental concerns remain around the risks to investment in clean energy brought on by the current MLF methodology, the volatility of MLFs and the increasing difficulty of forecasting revenue for generators. CEIG believes that MLF reform remains a key issue to enable an efficient energy transition and that there is still a need to address it through a change in the NER.

CHAPTER 4 - COORDINATED PROCESS TO ESTABLISH A REZ

CEIG supports the coordinated connections process

CEIG supports grid access reform that creates a robust investment environment to enable the efficient investment in new generation, storage and transmission capacity imperative to achieving the long-term customer outcomes set out in the National Electricity Objective. 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.

CEIG supports the proposed coordinated connections process whereby a proponent would participate in an auction or tender process in order to compete for the right to be a foundation generator within the REZ. CEIG agrees that the proposed process would likely deliver material benefits around a lower cost of connections due to economies of scale and improved coordination, increased certainty during the connection and approvals process and improved investment certainty from the receipt of access rights within the REZ.

CEIG however notes that further details need to be worked through and that the benefits are contingent on the improved connection process being appropriately designed and implemented by the market bodies, including giving due consideration to lessons learnt in recent years.

CEIG supports the introduction of the proposed REZ Coordinator role to facilitate the coordination of the connection process and the allocation of REZ access rights.

CEIG supports capping the hosting capacity in a REZ and selecting participants through auctions

The ESB proposes that

“A ‘cap’ would need to be established specifying the hosting capacity of a REZ or stage of a REZ. Generators could then participate in an auction or tender process to compete for the right to connect to a REZ as part of that capped capacity. In return, they receive benefits in terms of cheaper connections due to scale economies, and increased certainty during the connections and approvals process. The cap on capacity would then need to be maintained through some form of access right to the REZ’s transmission network.”

CEIG agrees with the ESB’s assessment that its proposal would provide REZ investors with improved investment certainty. The ESB’s proposal achieves a balanced mix of market-based mechanisms through the auction or tendering processes, alongside central coordination for the selection, sizing, timing and staging of REZs.

CEIG supports the use of auctions to select REZ participants. When well-designed and communicated effectively (preferably by outlining consistent rules, being based on regular schedules and being transparent about eligibility and assessment criteria), auctions help to maximise competitive tension and lower costs.

It is critical that auction coordinators consult with stakeholders to ensure that their proposed auction design is fit-for-purpose and will be acceptable for investors (both debt and equity providers). CEIG welcomes opportunities to provide feedback on proposed auction parameters and draft contractual agreements, particularly around the potential appeal to investors of a particular program.

CEIG supports the minimum eligibility criteria outlined by the ESB. Incorporating a ‘project finance’ criterion will ensure that only proponents with sufficient financial capability to deliver a project would be able to bid into an auction for REZ capacity rights. This criterion will prevent projects with poor prospects of being built bidding unrealistically and winning capacity, only to subsequently fail and cause the REZ potential to fall short and require re-auctioning of capacity.

The ESB may also wish to consider whether proponents should be required to submit a refundable bond in order to be eligible to participate in the auction, with auction winners having to submit a larger bond once successful.

Governments can help unlock the quicker development of REZs

The ESB acknowledges that as the application of its REZ Framework is subject to the completion of a RIT-T, it might be misaligned with the optimal timing of project development (particularly from the perspective of seeking to achieve faster decarbonisation objectives).

The ESB points out that project lead times for renewable generators are now lower than 2 years whereas transmission project lead times are between 6-7 years. CEIG believes that State and Territory governments can have a role to play to take on this timing risk and support the timely development of transmission infrastructure to ultimately leverage the deployment of private sector capital.

Governments taking an upfront role in the funding (or guaranteeing) of transmission infrastructure investment could help unlock the necessary capacity in the transmission network to leverage investment in generation that can be ready to be delivered with shorter lead times.

This could deliver substantial decarbonisation benefits, alongside other investment benefits traditionally valuable to governments such as promotion of regional and local economic development, job creation, strengthening of supply chains and ability to maintain reliability of supply. Government would then be able to recoup costs once a project has passed a thorough RIT-T process.

CEIG supports generators paying for part of the cost of transmission network investment

Overall, CEIG supports the costs of investment in the transmission network being shared between generators, consumers and other REZ proponents (e.g. governments or commercial REZ proponents, as required), with oversight from the Australian Energy Regulator to ensure consumers only pay for the costs that are demonstrated to deliver net market benefits to them.

CEIG supports that net auction revenue be returned to consumers (that is, effectively generators would be paying for part of the transmission network investment) in return for access rights to the network. In the proposed REZ Framework, generators benefit from an improved connection process (subject to appropriate design and implementation) and from a cap on hosting capacity in a REZ (subject to the hosting cap being appropriately designed and managed so that access can be maintained over time).

CEIG does not support using the PIAC model to determine the generators' share of transmission network investment costs

CEIG believes that a well-designed auction - by promoting competitive tension between proponents - should deliver lower prices and enable a more efficient price discovery process than a regulated process.

The PIAC model's view that

"direct recovery of capex up to the 'efficient' capacity (as specified in the ISP) [is] to be apportioned between generators and consumers"

is sound in principle and appears to provide more certainty to consumers upfront but CEIG believes that in practice, it would be difficult to get the split of costs right and that this methodology may not deliver all the promised benefits.

The private sector, investors and generators are the best placed parties to assess the value of the proposed 'firm' access in the REZ and they will bid their price accordingly in a competitive auction. Governments and market bodies will not have access to generators' private information to assess the benefits of 'firm' access in the REZ. They are therefore not best placed to determine the amount of benefits that accrue to generators from investment in transmission infrastructure and how much they should pay for those benefits.

If the portion of generators' costs is not determined accurately, there is a risk that the REZ could be over or under-subscribed or that generators pass on any additional costs through wholesale prices, with consumers or taxpayers ultimately paying for the regulator's pricing errors.

The uncertainty and potential lack of transparency around what level of costs might be allocated to generators could also increase the cost of capital compared to a competitive process.

Investors may not be neutral between the Designated Network Asset (DNA) and REZ Frameworks as they are not based on the same transmission investment cost recovery principles

In its discussion of the AEMC's proposed DNA Framework, the ESB states that its preference is to

“develop a REZ model that can also support meshed network solutions. Ideally, the two frameworks should be broadly aligned so that investors are neutral, and there is no incentive to distort efficient transmission development in order to receive a particular regulatory treatment.”

CEIG agrees that investors being neutral between the two Frameworks is a desirable feature.

In its Draft Determination, the AEMC proposes that a DNA does not form part of the shared transmission network and that

“the assets forming a DNA are not provided by the Primary Transmission Network Service Provider as a prescribed transmission service, as they are not subject to revenue regulation or funded by consumers through prescribed Transmission Use of System charges.”

CEIG is concerned that this principle appears to exclude any form of cost recovery from parties other than generators (such as governments, consumers or other commercial parties) who may benefit from a DNA. This is despite the fact that those other parties could derive net market benefits from a REZ developed using the DNA Framework, which would in turn justify some element of cost recovery for part of the transmission infrastructure investment in the DNA.

Through the AEMC's rule change proposal, DNAs have the potential not just for clarifying the principles behind large Dedicated Connection Assets (DCAs) (the subject of AEMO's rule change request), but also for supporting the development of REZs whose scale could be well beyond that of current large DCAs. The AEMC also notes that the DNA Framework could be used to support

“radial ‘spokes’ to collect generation and feed this into larger REZs”.

In this scenario, a large REZ could include some areas subject to the DNA Framework while other areas would be subject to the ESB REZ Framework. This could create discrepancies around who ultimately pays for the costs of investment in transmission infrastructure to facilitate that REZ – with those discrepancies in cost recovery treatment seemingly due to part of a REZ being developed in a radial formation rather than being meshed as part of the shared network and occurring despite the benefits generated by the overall REZ.

Because of the potential application of the DNA Framework to REZs, CEIG believes that cost recovery from other parties should not be ruled out where there are demonstrable benefits, and it is not sufficient to assume that the cost recovery principles that were applicable to large DCAs should also apply to DNAs.

CHAPTER 5 - OPTIONS FOR ACCESS WITHIN A REZ

Evaluation criteria

CEIG broadly supports the evaluation criteria outlined by the ESB on page 37 of its Paper.

Regarding the criteria *“The extent to which the REZ option is consistent with actioning the ISP and the long term move towards an enduring access reform solution”*, CEIG's preference is that options for long-term access reform remain broad, rather than assume that a version of the COGATI Proposal with LMPs and Financial Transmission Rights (FTRs) would be put in place.

CEIG does not believe that the introduction of LMPs and FTRs is a necessary step. Since the COGATI Proposal was first discussed, the NEM has changed considerably and it is not clear that LMPs and FTRs are the optimal solution.

Further analysis is required to assess the impacts of new information and events:

- the current and future pace of the energy transition, and an update on what its success will require from a technical, social and financial perspective;
- other reforms and programs that have been in put place or suggested (e.g. State-based REZ programs; opportunity to review the open access regime); and
- how much the transitioned NEM will be the result of ‘centralised’ decisions (and questions around the fairness of then imposing a pure market-based mechanism, potentially punishing the vast majority of existing generators).

CEIG supports the consideration of two options: ‘Connection access protection model’ (preferred) and ‘Financial access protection model’

In principle, CEIG supports both the ‘Connection access protection model’ and ‘Financial access protection model’, with a preference for the implementation of the ‘Connection access protection model’, subject to AEMO’s advice on the easiest and least cost implementation methodology.

CEIG agrees with the ESB that there is an efficiently sized transmission network, and that the system should not be expected to never be congested

“Congestion is likely to be a normal, everyday feature of efficiently sized transmission infrastructure to accommodate variable renewable generation – not an anomaly. This is because the cost of building the incremental transmission infrastructure to allow for the dispatch of variable renewable generation for the sunniest or windiest of times exceeds the benefits to reducing the cost of dispatch or reducing emissions at those times.”

AEMO’s 2018 and 2022 ISP Reports clearly demonstrate that the current transmission network will not be sufficient to enable a low-carbon grid in 2040 and that investment in transmission infrastructure is required to deliver the optimal grid at least cost. In its 2020 ISP, AEMO states that:

“The transmission grid itself requires targeted augmentation to support the change in generation mix. As long as augmentation costs are kept to an efficient level, strategically placed interconnectors and REZs, coupled with energy storage, will be the most cost-effective way to add capacity and balance variable resources across the whole NEM. Without adequate investment in transmission infrastructure, new VRE will be struggling to connect. This could in turn lead to the private sector under-investing in the new generation capacity needed ahead of the planned or unplanned retirement of existing generators.”¹

That investment in the transmission network also needs to occur to meet the power sector’s decarbonisation goals. As Australia heads into a critical decade to achieve its energy transition, sufficient low-carbon power generation capacity needs to be built within the next 5-10 years ahead of fossil-fuel generators exiting the market (including accounting for potential earlier closures than expected). Enabling the transition to low-carbon power generation will require physical investment in

¹ AEMO, 2020 ISP, p.13

the transmission network to be completed before fossil-fuel generators retire. Not proceeding with this investment in the transmission network would result in an inefficient amount of congestion and higher long-term prices for consumers. The risk of an inefficient build-out of transmission infrastructure is expected to be mitigated through the AER's RIT-T process.

The protection of consumers' and generators' investments in a REZ in the proposed 'Connection access protection model' rests on careful design and implementation of key model features. It is critical that the proposed assessment of 'doing no harm' is designed and implemented carefully or the REZ assets may not deliver as many benefits as initially expected.

The REZ access rights also need to be designed in a way that deters short-term opportunistic bidding whereby a proponent who does not intend to operate an asset may bid a low price for short-term access rights and not consider the longer-term access issues that may arise. There is a risk that such projects might struggle to find debt and equity investors, with their REZ capacity having to be re-auctioned if the project fails. CEIG's preference is therefore for long-term REZ access rights (15 years or more) to be auctioned.

CEIG suggests that the ESB consults widely with industry on how to define and implement the 'do no harm' assessment and how to design REZ access rights. Combined with well-defined auction eligibility criteria, this will provide safeguards to ensure that the projects with the best technical and financial capability participate in auctions for REZ access rights.

CEIG does not support the introduction of the 'REZ as a region' or 'Early allocation of financial transmission rights' options

Both options assume the introduction of the COGATI Proposal at a future stage which CEIG does not support. As acknowledged by the ESB, both options are also complex, do not meet the ESB's criteria for easy short-term implementation and would generate uncertainty for investors. Implementing either of those options would attract a premium on the cost of capital which would go against the success of developing REZ policies.

CEIG thanks the ESB for the opportunity to provide feedback on the ESB's proposed REZ Framework and looks forward to continued engagement with the ESB on this issue. Please contact us at secretariat@ceig.org.au if you would like to discuss any elements of this submission.

Yours sincerely,

Simon Corbell
Chairperson
Clean Energy Investor Group