



8 September 2020

Dr Kerry Schott AO
Chair
Energy Security Board

Dear Dr Schott,

The Australia Institute and University of Sydney Response to Consultation Paper and Draft Rules – Interim REZ framework

Thank you for the opportunity to make this submission to your consultation on an interim framework for the planning of renewable energy zones (REZ) within state jurisdictions in the National Electricity Market (NEM). Our general view is that REZ and other large-scale renewable energy projects could make a very substantial and broad contribution to regional communities but that this requires a development process far more comprehensive than would be possible within the narrow remit of the National Electricity Rules (NER) and we encourage the ESB to make recommendations that go wider than the NER.

This submission is informed by an ongoing research project titled *Rural Communities and Renewable Energy: A Socio-economic Study in NSW*, conducted by University of Sydney Environment Institute, Australian National University and the Australia Institute. On 17 June 2020 the project team met with DPIE's REZ team and shared key insights from our research. In 2019 we made a submission to the NSW LC inquiry into Inquiry into sustainability of energy supply and resources in NSW. Our report will be published in late 2020.

In the *Consultation paper*, the ESB writes that REZ developments 'require more granular local knowledge' than transmission planning does.¹ The aim of our research project is to provide that granular knowledge.

We conceived of our project in 2018 because we were concerned that the Integrated System Plan (ISP) process that was creating REZs was necessarily focused on energy economics and system engineering and did not investigate local community needs, perspectives and potential impacts.

¹ COAG Energy Council (2020) *Energy Security Board Renewable Energy Zones Planning: Consultation paper and draft Rules*, p.9

This is not a criticism of the approach taken by the Australian Energy Market Operator (AEMO) with the ISP. AEMO's institutional function and mandate does not include local social and economic impacts of energy developments. The ESB's *Consultation paper and draft rules* are a positive step to a broader planning approach, which addresses many of the concerns which gave rise to our research project.

In 2019 we conducted field trips in the two most advanced REZs – Central West Orana and New England – and will soon publish the 'granular knowledge' we obtained. Our report will also propose recommendations and a framework for future research into communities' attitudes and socio-economic processes in REZs around Australia.

Our perspective is that the ISP is critically important. Australia has international climate policy obligations under the Paris Agreement and these require us to redesign our electricity system to facilitate the retirement of coal fired generation and its replacement by renewable energy. REZs are a rational way of facilitating that buildout. The ISP will benefit consumers and the environment and the spatial shift in generation to the REZs can support development and new opportunities in new regions, particularly smaller rural towns.

We will respond to the questions from the *Consultation paper* below, but first we present some general comments on the planning challenge created by REZs and the rules and design approach proposed by the ESB.

General comments on maximizing the benefits of REZs for regional communities

1. The ESB review is timely. How can we maximise social and economic benefit to regions?

The Covid-19 pandemic has sent the world into a recession. This will have lasting effects in Australia's regions. Multi-billion dollar REZs can bring significant benefits to rural and regional communities including new infrastructure and transmission upgrades, economic diversification, an upskilled labour force and youth training.

However if planning oversight is largely left at the individual project level or with transmission network service providers (TNSPs) then many benefits will fail to materialize and there could be side effects that are undesirable. There needs to be policies to steer the pace and nature of development to make it sustainable and equitable, and cultivate social licence that is necessary for a successful energy transition.

It would be best if REZ development was broader and fine-grained and coordinated at the national level. However NSW has taken the lead and it is consistent with planning law that states take charge of REZ planning. We would encourage the ESB and jurisdictions to work on appropriate policies to effectively steer the REZ planning and development process and optimise it with regard

to socio-economic and environmental benefits for local communities, not just the NER-based network planning function.

The ESB provides a summary of its proposed approach in the *Consultation paper*²;

To achieve co-ordinated outcomes, the ESB proposes to amend the transmission planning framework to support the preparation of REZ design reports that take into account technical, economic and social factors. The ESB proposes that these planning arrangements should apply to all REZs, not just those developed in accordance with the potential interim (Step 2) framework.

The ESB's statement accords with the central finding uncovered in our research in the Central West Orana and New England REZs, which is that the lack of a process for local engagement and planning is likely to reduce the potential benefits of REZ development and risks creating conflict in rural communities.

Our research validates many of the concerns expressed by the ESB in the *Consultation paper*. For example, the ESB wrote that a REZ 'needs to have...community support'. It noted that in addition to the visual amenity impacts of transmission infrastructure, generation projects have 'impacts on land use, as well as an economic impact on affected communities.'³

We agree with the ESB that '[s]ocial licence, and the ability to obtain the required permits, is critical' and 'can have just as big an impact on developer costs as network connection issues.'⁴

We commend the ESB for initiating this new planning regime. It aims to integrate REZ development with a real commitment to beneficial social and economic change for the rural communities most directly impacted by the clean energy transition.

The ESB's idea of design principles and parameters in relation to REZs is a new idea in the current energy transition debate, that is very valuable. Planning is often reactive and narrowly conceived within a sector, but design thinking moves beyond uncoordinated and reactive planning towards a more holistic, creative, responsive approach.

2. The scale of REZ and other large energy development justifies special rules

The scale of REZ development envisaged in the ISP is significant enough to justify the creation of special planning rules. The 2020 ISP's key scenarios predict that by 2040 Australia may need to build \$10 billion worth of transmission infrastructure and REZs to host 26 to 50 GW of new grid-

² Ibid, p.10.

³ Ibid, p.9.

⁴ Ibid.

scale renewable energy as well as 6 to 19 GW of dispatchable resources which includes batteries, pumped-hydro and gas-fired ‘peakers’.⁵

The new renewable buildout in the ISP would be around two to five times as large as Australia’s current renewable energy capacity.⁶ If 50 GW of new generation is built, that is equivalent to 356 of the 80 MW Sapphire Wind Farm in New England REZ **plus** 72 of the proposed 300 MW Wellington North Solar Farm in Central West Orana REZ. The projects built would differ in size but the calculation gives a sense of the scale of the REZ planning challenge under the ISP.

3. The REZ scheme is scalable beyond the ISP, to include green hydrogen and electricity export and this will require new planning and community engagement approaches

The ESB should give consideration to ensuring that sensible design principles and protections built into the REZ planning regime are not ignored by large export-oriented private development zones. This is particularly important for large projects on Aboriginal and TSI Lands, which we discuss below.

The cost of wind and solar continues to reduce towards the level where it is economically viable to export the energy. This could be in the form of electricity exported through international cables or converted into ‘green’ hydrogen or other liquid fuels. There are large commercial proposals for renewable energy export. Professor Ross Garnaut has proposed that Australia could be a renewable energy export superpower in his latest book *Superpower: Australia’s Opportunity*.

The CEO of the Australian Renewable Energy Agency (ARENA), Darren Miller has suggested that Australia’s clean energy export opportunity could justify a generation capacity equivalent to the NEM going 200% to 700% renewables.⁷ This is the equivalent of several ISP’s worth of REZ buildouts.

If we embrace this economic opportunity, then innovation in governance and community engagement would have to match the scale of export renewable energy developments. The REZ design principles and parameters developed through the ESB are a foundation for governing energy transition. But it will need to be adapted to the particular demands of the new export industry if social licence is to be created.

Our view is that all Australian communities deserve the same quality of consultation and to get maximum local benefits from large energy projects. Export-oriented renewable energy developments are concentrated in rural and remote Northern Territory and Western Australia. Approaches to planning and consultation will require sensitivity to the particular interests and issues for communities in those locales.

⁵ Australian Energy Market Operator (2020) *2020 Integrated System Plan*, AEMO, p.12.

⁶ COAG Energy Council, p.6.

⁷ Parkinson (2019) *Australia could aim for 700 per cent renewables, ARENA boss*, <https://reneweconomy.com.au/australia-could-aim-for-700-per-cent-renewables-arena-boss-11594/>

In particular, we note the likelihood that land-intensive projects in remote parts of Australia will likely be located on Aboriginal land. There are both opportunities and challenges to ensure we do not repeat the poor treatment of the past with regard to coal mining where heritage protections and land/native title rights have often been compromised. We also note that large export industries have strong influence over government policy and regulation. Special provisions are needed to ensure social licence achieves sustained socioeconomic benefits for Aboriginal communities, including heritage protection which is a paramount concern. The current weak regulatory provisions and lax corporate accountability for Indigenous heritage protection in many state planning regimes require overhaul to engage full community participation and empowerment.

4. Need for economic development policy beyond National Electricity Rules

The ESB's authority is not specified in statute. While this presents some limitations, it also enables the Board to deploy its advisory function on a case by case basis. In the case of the REZ, we believe that it would be appropriate for the ESB to do two things. Firstly, it should make recommendations for changes to the National Electricity Rules (NER), as proposed.

However NER rules and processes are unlikely to be able to capture the broader economic impacts and potential benefits of REZs. One example from our research project is that renewable energy projects, like other resource and infrastructure developments, can bring their own workforce to town. This is sometimes justified on the basis that the skills required are not present in the local workforce. However, even where this is true, investment activity should at least provide training opportunities. In order to maximise skills benefits for a community, there needs to be engagement from the TAFE sector, local chambers of commerce, businesses, unions and governments.

This skills example demonstrates that good REZ planning should go beyond the remit of the NER. The ESB REZ design should extend to engaging with and being influenced by existing processes of regional economic planning. Because of the significance of REZ for the national energy transition, our recommendation is that the ESB can provide advice to the National Cabinet Energy Committee that states should create planning policies and empower relevant planning bodies to ensure that REZs are developed in ways that create lasting and broad benefits for communities.

5. Agreements and benefit sharing with Indigenous peoples

National REZ development rules and guidelines must respect Aboriginal and TSI heritage, Native Title rights and claims, and state based Land Rights. This includes protection of artefacts and sites but also strong consultation and culturally appropriate negotiation processes with Aboriginal and TSI Land Councils, Corporations and related bodies. This regime extends to non-REZ clean energy megaprojects built for export.

Native Title law is a complex legal regime and there are different Native Title, Land Rights and Aboriginal and TSI heritage legislative arrangements in different jurisdictions. It would not be

possible or appropriate for NER rules to cut across these. The ESB should consult relevant department and Indigenous bodies and make recommendations to states and the commonwealth to ensure REZ development supports Aboriginal and TSI rights, heritage protection and economic development.

The ESB should give careful consideration to the lessons learned from extractive industry experience in negotiating access and benefit sharing agreements with traditional owners to identify best practice to date. The ANU Centre of Aboriginal Economic Policy Research has developed relevant resources for this with regard to best practice in renewable energy developments on Indigenous lands. In these cases, renewable energy companies will have to enter into partnership arrangements with Indigenous peoples.⁸ CAEPR research demonstrates possibilities for renewable energy companies to enter into agreements that allow indigenous groups access to energy, financial compensation for land use, or hold a stake in ownership.⁹

Benefit sharing with indigenous peoples should extend beyond agreements instigated by native title and land rights. There is an opportunity for REZ and related developments to stimulate Aboriginal community-ownership and other forms of social enterprise in energy developments – such as the vast Navajo Power project in America¹⁰. Governance and network planning that facilitates smaller scale and dispersed projects could potentially assist with this aim. Or utility-scale developments could allow external investors to have equity in projects (e.g. the CWP Sapphire Wind Farm in New England REZ) that could prioritise indigenous land councils and other local investors.

Responses to Consultation Paper questions

Question 1 If implemented, should the REZ planning arrangements outlined in Chapter 3 be a permanent feature of the regulatory framework or only apply on an interim basis?

The new REZ planning arrangements should be permanent. There is already considerable uncertainty in Australian energy and climate policy and there is no compelling reason to create a coherent planning regime that has a sunset clause.

Long term or permanent arrangements are desirable because REZ developments will affect the lives of thousands of residents in most states of Australia. Critical decisions need a coordinated planning approach. Coal generators will continue to retire, creating ever intensifying

⁸ O'Neill, L, Thorburn, K & Hunt, J (2019), *Ensuring Indigenous benefit from large-scale renewable energy projects: Drawing on experience from extractive industry agreement making*, Working Paper No. 127/2019, Canberra: Centre for Aboriginal Economic Policy Research, ANU.

⁹ Thorburn, K, O'Neill, L, Hunt, J & Riley, B (2019), *Renewable energy projects on the Indigenous estate: Identifying risks and opportunities of utility-scale and dispersed models*, Working Paper No. 130/2019, Canberra: Centre for Aboriginal Economic Policy Research, ANU.

¹⁰ (n.d.) *Navajo Power*, <https://navajopower.com/>

requirements for energy security and stability which mean there is no justification for returning to piecemeal, uncoordinated arrangements of the past.

Question 2 Should the REZ planning framework promote a staged approach to REZ development?

Yes, but we would refer to it as an iterative rather than a staged approach. Energy generation and transmission is a dynamic integrated system that will shape but also be subject to technological change, decommissioning and renewal of installations, shifts in demography and regional economic production, market vicissitudes, and profound environmental and climatic change that the future will bring.

REZ development priorities and even boundaries should be flexible enough to adapt as conditions change. Different REZs will have different patterns of development and implementation. It is a foundational design principle to allow a scheme to adapt to significant changes in circumstances. REZs should be adapted to changing conditions and improved over time.

Question 3 Should the Jurisdictional Planning Body (JPB) be responsible for designing REZs?

In 2019 we made a submission to the NSW Legislative Assembly's *Inquiry into sustainability of energy supply and resources in NSW* in which we proposed a national mechanism for comprehensive planning of REZs. The goal of this would be to achieve a nationally consistent REZ development framework to deliver broad economic and social benefits for regions, which requires a deeper process of consultation and design than would take place in transmission planning.

Since that time, NSW has cemented its role as the lead jurisdiction in REZ planning. The Central West Orana REZ is the national pilot and was a key element of the Memorandum of Understanding signed in January 2020 by Prime Minister Scott Morrison and NSW Premier Gladys Berejiklian.¹¹

A state statutory body, the Energy Corporation of NSW, will be formed to lead the process, coordinating both transmission and generation development in the REZ. The Energy Corporation was created under legislation in the 1980s and has broad powers under the *Energy and Utilities Administration Act 1987 (NSW)*.

¹¹ (n.d.) *Memorandum of Understanding - NSW Energy Package*, p.5.

According to the NSW Government the Corporation will have these functions:¹²

1. Leading community and stakeholder engagement
2. Contributing to strategic planning for each REZ, including an optimal land use strategy
3. Designing and implementing a commercial framework to support investment
4. Administering an access framework for the REZ that delivers benefit to generators
5. Administering a competitive process to coordinate generation in the REZ
6. Coordinating technical design of the REZ in consultation with program partners and generators
7. Promoting local development opportunities, engaging with local community and industry.

Given that the NSW REZs are underway, and the commonwealth has not stepped up and created a national coordinating function, the Energy Corporation of NSW could play a vital role in steering energy transition plans and roll-out in the states. This could be a very good outcome if other states draw from the NSW lead and create dedicated agencies.

Our research project in Central West Orana and New England REZs has highlighted the particular difficulty and importance of the last of these functions listed above (no. 7). We recommend that the ESB should encourage states to create appropriate coordination functions.

We suggest that the three priority issues are:

1. Deliver adequate community consultation
2. Include embedded professional expertise in community-based, applied social research and economic development
3. Appropriate funding and mandate

There should also be an appropriate review process for REZ development. States have authority over both planning and electricity and there are specific planning regimes for large scale renewable energy. Since 2015 there has also been a National Wind Farm Commissioner and in our NSW parliamentary submission last year we also proposed that this role could deliver oversight of REZ development.

The ESB could give consideration to recommending the Federal Minister for Energy and Emissions Reduction update the Terms of Reference of the National Wind Farm Commissioner to have a broader, technology-agnostic role, as the 'National Energy Infrastructure Commissioner'.

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| Question 4 | Should the ISP be the primary vehicle for triggering a REZ design report? Should there be other ways to trigger a REZ design report? |
| Question 5 | Are the proposed criteria for selecting REZs for planned development appropriate? Are there other criteria that should be taken into account? |
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¹² (n.d.) *Renewable Energy Zones*, <https://energy.nsw.gov.au/renewables/renewable-energy-zones>

The design report process should be mandatory for all REZs. We disagree with the *Consultation paper* on page 12 where it says, the ‘ESB’s expectation is that if a REZ was already actionable in an ISP it would move straight to the RIT-T stage and would not be subject to the REZ design report process.’

Question 4: A design report is not needed until there is a prospect that a REZ is going to be developed. Ideally decisions about REZs and major non-REZ developments will be well integrated with the ISP process. However, it could be the case that a jurisdiction decides to proceed rapidly with a REZ. For example, if a coal-fired power station has a catastrophic failure and its owners indicate they will not repair it then that jurisdiction needs REZ fast. It seems prudent that jurisdictions can trigger a REZ design report in appropriate circumstances.

Question 5: It defeats the purpose of the process to have the proposed narrow criteria proposed. The incorporation of social, economic and environmental and natural resource criteria are important if the outcomes of the Rules change are to be achieved, and this is a blind spot in the ESB document . The NSW submission to the AEMO ISP in 2018 had a set of 25 data layers for selecting REZs, and these need to be incorporated in some way to the ESB criteria at the **selection phase**, not just downstream.

Question 6 Do the REZ design principles require amendments or additions?

Question 7 Do the REZ design parameters require amendments or additions?

Question 6: An overarching principle that should be included, to meet the proposed outcomes of draft Rules is something like: ‘contributes to a just energy transition with minimal environmental disturbance and sustained economic and social benefits for REZ communities’.

Question 6: If the design report is to be the broader planning and regional economic development tool that we propose it should be, then at a minimum there should be an additional parameter, ‘mechanisms for optimal achievement of social licence in REZ communities’.

Question 8 Is the proposed content of the REZ design report appropriate?

Question 9 Is the proposed process for preparing a REZ design report appropriate?

Question 8: The design report content needs to explicitly include a ‘community impact report’ on social, economic and environmental impacts for REZ residents, outlining key issues raised in consultation with local organisations. The design report should also include a section reporting on the consultation and coordination with local planning authorities and other sectors relevant

to regional development such as education and skills training. These 2 sections need to be considered as a holistic overview of REZ views and impacts.

Question 9: Whether or not the design report process is energy planning under the NER or the broader state-based planning tool we recommend, the best practice way of generating the final report with regard to local social and planning inputs would be an iterative consultation along the following lines:

1. Initial organisational/institutional mapping
2. Initial local consultation processes through community organisations
3. Draft report released, with invitation for submissions
4. 2nd local consultation process with community organisations for feedback on draft and discussion of written submission
5. Final report released

Each consultation period should probably be longer than the four weeks proposed in the *Consultation paper*.

Question 10 Do the draft Rules effectively integrate both local and system-wide considerations?

At this point the draft Rules fall short on principles and procedures to integrate community level with system-wide considerations in REZ selection and design.

The problem in the consultation process for these rules is that the NER has limited scope and is not the appropriate vehicle to achieve all the objectives for REZ planning that ESB has raised.

We are proposing the design of REZs must include matters that fall beyond the NER. For example, economic and Aboriginal heritage matters are very important and should be fully considered in the planning process even though this is beyond the remit of energy law as we indicated above. The same goes for industry training and skills development, which would require engagement with the TAFE system.

Question 11 Do the proposed funding arrangements support the delivery of the REZ planning framework?

We have argued in our answer to question 3 and the preamble section above that REZs could make a significant and broad contribution to regional communities but that this requires an appropriate planning and development process.

If states create dedicated agencies in order to deliver the range of REZ planning functions given to the Energy Corporation of NSW, then those agencies would have their own independent

funding. The federal government could support those agencies through funding agreements such as the MOU with NSW.

Within this broad function, it could be appropriate for JPB/TNSP's to do engineering design work and this would be funded through AER revenue determination processes as described in the *Consultation paper*.

Question 12 What, if any, transitional arrangements are required to give effect to the REZ planning framework?

NSW is taking the lead with its REZ pilot in Central West Orana. We propose that NSW should develop its own process for that REZ as it is already underway. That process is likely to be more comprehensive than the more limited NER-based planning envisaged in the *Consultation paper*.

We suggest there should be an early review of the Central West Orana process conducted for the ESB and this used to inform the final NER rules and broader economic and regional development guidelines.

As there has been little consultation at the community level on social, economic and environmental impacts, we recommend that some local organisational mapping and consultation should take place in actionable REZ projects and perhaps future REZ projects.

In conclusion, the ESB is a welcome initiative with potential to enhance the speed and social impacts of renewable energy transition.

Regional communities have been on the receiving end of uncoordinated energy development, from coal, gas and transmission developments and more recently from renewable energy projects. A more coherent and communicative planning process could create valuable opportunities to shape energy system innovation so that it strengthens the economic and social life of rural communities.

We are happy to provide further detail if required.

Yours sincerely,



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