



Submission to AEMC's Transmission Planning and Investment Review Consultation Paper

Developed by RE-Alliance and cosigned with the Australia Institute, the Climate Council, Environment Victoria and Solar Citizens

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RE-Alliance works to deliver a renewable energy transformation in Australia filled with sustainable, long-term benefits for regional communities.

We do this by listening to the needs of communities most impacted by the transition, facilitating collaboration across the renewables industry to deliver social outcomes and advocating for meaningful benefits for regions at a policy level.

Introduction

Social licence at a local level for renewable projects is a critical pillar of the transition to clean energy. All new electricity infrastructure brings impacts for local communities. Engaging effectively and ensuring significant benefits accrue to impacted communities are essential first steps to securing social licence.

Poor planning and holes in communication with project neighbours can, and have had significant negative consequences. An example of how poorly this can play out can be seen recently in Germany, where interventions in the network have led to social licence issues and delays in meeting climate targets.

“The first thing that came to my mind when I saw the data in the (Integrated System Plan) ISP was Germany’s build-out of transmission infrastructure, and how it has drawn significant backlash. This backlash has made new German interconnection more expensive and badly delayed, and that has delayed the build-out of renewable energy and is impacting Germany’s ability to meet its climate targets”.¹

On 8 August 2021 RE-Alliance launched the report “[Building Trust for Transmission: Earning the social licence needed to plug in Australia’s Renewable Energy Zones](#)”. The report made 11 recommendations on how to improve the social licence for transmission infrastructure in Australia.

RE-Alliance notes that the Australian Energy Market Commission’s (AEMC’s) “*Transmission Planning and Investment Review Consultation Paper*” does not include discussion of social licence issues. We consider the importance of social licence as a foundational issue for the build out of new transmission lines and whilst we very much recognise the need for a timely process to approve transmission infrastructure and review of the mechanisms for funding new transmission infrastructure, we contend that without an adequate social licence these projects may not be built at all. Thus, the issues we raise are of at least as great an import as those identified for review in the paper.

RE-Alliance attended the stakeholder forum which the AEMC held on 2 September 2021 and noted that this was also one of the key issues raised by other stakeholders. We acknowledge that the AEMC stated that it was happy to consider other transmission related issues which stakeholders may wish to raise, so we will focus our submission primarily on social licence issues.

Recommendations based on our report

Local rural communities affected by new transmission infrastructure, and other stakeholders, deserve to be able to participate in how these projects are deployed and derive benefits from this new infrastructure and not just bear its costs and localised impacts. These communities have argued that consideration of social and environmental impacts of new transmission projects needs to be more robust and take place earlier in the planning process.

We recommend that engagement start early during the Regulatory Investment Test for Transmission (RIT-T) process and includes:

- landholders and asset owners along potential transmission line routes;

¹ How Australia’s energy transition might trip over the wires, RenewEconomy article, 26 June 2020 available at: <https://reneweconomy.com.au/how-australias-energy-transition-might-trip-over-the-wires-51857/>

- local community members and groups;
- local Councils and State Planning Departments; and
- First Nations, environment and other special interest groups.

Currently, the RIT-T does not include costs or benefits outside the electricity market. RE-Alliance recommends that the RIT-T cost benefit analysis is expanded to include consideration of social and environmental costs and benefits on local communities. Examples of costs include potential loss of amenity through the significant visual impact of these new transmission towers traversing landholder's properties, as well as possible disruption to farming activities undertaken under the transmission power lines. If costs such as these are included in the RIT-T it may influence route selection or technology selection e.g. a route through a large number of small holdings may be rejected and an alternate route may be chosen which affects less landholders, thereby improving the social licence for the project.

RE-Alliance made several recommendations to transmission companies, not all of which will be covered here. One recommendation we include is that transmission companies use community benefit sharing models pioneered by the wind industry to distribute financial benefits of new transmission developments into affected communities, ensuring that communities as a whole benefit.

We recommended that transmission companies substantially expand their existing community development and partnership programs to target communities impacted by their projects. While some of this could be funded from transmission company profits, the scale of the projects is likely to require additional funding. We therefore recommend that the RIT-T is expanded to include a social licence line item which could be used to pay for improved landholder compensation and community benefit sharing in affected communities.

RE-Alliance has met with both the AEMC and the Australian Energy Regulator (AER) seeking to clarify whether community benefit sharing can be funded under the current National Electricity Law (NEL) and National Electricity Rules (NER) including the RIT-T, and if not, whether they can advise on the changes that would be necessary to enable this.

RE-Alliance has not received clear advice as to whether a Rule Change would be required to facilitate increased landholder payments and benefit sharing or whether this can be done through a re-interpretation of the existing NER by the AER.

We formally request that the AEMC considers this matter and provides market participants with some advice in this regard.

Several Australian transmission companies have indicated their willingness to work with us on progressing a Rule Change through the AEMC or alternate arrangements with the AER, should that be necessary. This is a matter of significant importance for transmission companies.

The AER and the Australian Energy Infrastructure Commissioner are already undertaking work together on this matter.

Under one of our proposed models, electricity consumers could pay more through their electricity bills to cover the costs of increased landholder and neighbour compensation and community benefit sharing initiatives. While we are in the process of quantifying these costs in detail, we do not foresee they will be significant in projects of this size.

We consider that it is in the long-term interests of consumers that the proposed Renewable Energy Zones and their supporting transmission infrastructure in the Australian Energy Market Operator's (AEMO's) Integrated System Plan (ISP) are developed.

AEMO comments: "Provided that the transmission investments are timely and kept at an efficient level, the combined supply and network investments proposed in the ISP are expected to deliver \$11 billion in net benefits to the National Electricity Market (NEM)".

Some of these \$11 billion in savings could be used to pay for these increased landholder and neighbour compensation and community benefit sharing initiatives.

Without an adequate social licence, some of the ISP transmission projects may not be built, or not built in a timely way, or may be forced onto communities unwillingly. These are not desirable outcomes, nor are they desirable for consumers for whom ISP projects should be delivering long term savings. Community benefit sharing can alleviate many of these issues and make new transmission assets more welcome in rural communities.

Other recommendations

The inclusion of an environment or climate change objective in the NEO

Many stakeholders have previously raised the need for the inclusion of the environment and/or environmental sustainability in the National Electricity Objective.² We are aware that this would require a change to the National Electricity Law and the agreement of all energy ministers and note that at the recent meeting of Energy Ministers on 24 September 2021, governments agreed to the ACT Government leading work towards incorporating emissions reduction into the NEO. We continue our calls for the integration of climate and energy policy.

² Total Environment Centre (2013) Reforming the National Electricity Objective to improve environmental outcomes in the National Electricity Market Discussion Paper available at: https://www.academia.edu/7148822/Reforming_the_National_Electricity_Objective_to_improve_environmental_outcomes_in_the_National_Electricity_Market

Not including the environmental externalities of carbon and climate change makes certain generation technologies more financially attractive than they would otherwise be. It can also impact factors such as the cost benefit analysis for new transmission lines. If transmission lines are designed to connect new renewable energy zones, recognition of their ability to connect new renewables and lower both emissions and electricity prices could be factored into the cost benefit analysis, which may materially impact decisions as to which projects should proceed and within what timeframes. Additionally, the routes should seek to minimise biodiversity impact. Intersecting with social licence, stakeholders in areas with planned routes, or where routes may be considered, frequently voice concern over biodiversity impacts.

Expediting the transmission planning and approval process

The twin threats of global warming and our ageing network of coal-fired power stations are each alone justifications for the urgent prioritisation of essential transmission lines identified in the ISP.

The AEMC requests any advice or ideas on how the transmission planning and approval process could be expedited. The AEMC notes that “the current transmission development process can take six to seven years end-to-end. This requires approximately: two years for the RIT-T process to ensure the project is justified, followed by regulatory approval as a contingent project by the AER; two years for jurisdictional planning, development, environmental approvals for transmission corridors and associated infrastructure, along with engineering and design; and two years for construction”.³

We note the 2017 COAG Energy Council Review of the RIT-T which found *“that the RIT-T in its current form remains the appropriate mechanism to ensure that new transmission infrastructure in the NEM is built in the long term interests of consumers. Further, it remains an appropriate mechanism for the assessment of interconnection investments.....The review considered, but found no evidence to warrant, options to streamline the test by shortening consultation and/or lessening requirements around the cost-benefit analysis in certain circumstances. The underlying issues which have led to protracted processes, in some cases, appear to stem from contention between project proponents, interested stakeholders and proponents of competing options rather than the design of the test or its governance. Any paring back of current timeframes would compromise the ability of the test to effectively identify and assess all credible options. However, to the extent that delays relate to the complex task of assessing the relative costs and*

³ AEMC (2021), *Transmission Planning and investment Review, Consultation Paper*, p44 available at: https://www.aemc.gov.au/sites/default/files/documents/consultation_paper_-_transmission_planning_and_investment_review_1.pdf

*benefits of options, clearer guidelines and improved information should lead to a more efficient and streamlined RIT-T process”.*⁴

However, we note that Australia’s two most populous states, New South Wales and Victoria, have proposed moving away from the RIT-T. NSW proposes an independent regulator who may be the AER or the Independent Pricing and Regulatory Tribunal (IPART) but will use their own investment test.

The NSW Electricity Infrastructure Roadmap states:

“reforms will establish a bespoke NSW regime, similar to the RIT-T and National Electricity Rules cost recovery provisions for REZ transmission projects, to allow scale-efficient transmission investments to proceed. To do this, a Transmission Efficiency Test (‘the test’) will be introduced.”

These powers were confirmed in late November 2020 with the passage of the *Electricity Infrastructure Investment Act 2020*. No further details about the identity of the NSW regulator have been released yet and the NSW Department of Planning, Industry and Environment are understood to be in the process of developing Electricity Infrastructure Investment regulations.

In February 2020, the Victorian Government passed the *National Electricity (Victoria) Amendment Bill 2020* which allows the Victorian Government by order published in the Government Gazette to specify an alternative regulatory investment test. During her second reading speech Minister D’Ambrosio commented that:

“The Bill will enable the Minister for Energy, Environment and Climate ... to make Orders to facilitate urgent transmission projects ... An Order may modify or dis-apply parts of the national regulatory framework that have the potential to delay timely investment in the transmission network, including the regulatory investment test for transmission (RIT-T) and rules relating to contestable procurement for augmentations. The RIT-T can add years to a transmission project, frustrating investment to address Victoria’s urgent reliability needs. If appropriate, an Order may also specify an alternative test in place of the RIT-T”.

She also stated:

“This Bill is being introduced as a result of the inability of the current national regulatory framework to effectively address the pressing and unprecedented challenges affecting Victoria’s electricity system. The Victorian Government will continue to advocate for changes to the national framework to ensure that it is effective and fit for purpose”.

⁴ COAG Energy Council (2017) *Review of the Regulatory Investment Test for Transmission* p. 4, 5 & 6 available at: <https://energyministers.gov.au/sites/prod.energycouncil/files/publications/documents/RIT-T%20Review%20report%20%28final%206%20February%202017%29.pdf>

The fact that two of the largest jurisdictions in the NEM have publicly stated their intention to develop their own regulatory tests in place of the RIT-T indicates a lack of confidence in the existing arrangements. In Victoria's case, the Minister has stated the reason as being the inability of the current national regulatory framework to effectively address the pressing and unprecedented challenges affecting Victoria's electricity system.

We share these States' lack of confidence in the ability of the existing process to deliver large new transmission projects in a timely way. Market pressures on ageing coal generators and state decarbonisation policies leave all mainland States at the mercy of private generation companies' decisions on whether or not to continue to operate their coal and gas assets in market conditions that threaten their viability.⁵ This risk is untenable for all electricity consumers in those States. The ISP has identified the projects that need to be delivered to alleviate this risk and the urgency of their delivery is only increasing. We doubt that an inquiry similar to the 2017 COAG Energy Council's RIT-T Review would remain so sanguine about the efficacy of the RIT-T if it were held in 2021.

We do note, however, that the Australian Energy Regulator (AER) has recently developed new guidelines to make the ISP actionable. These include:

- a new cost benefit analysis guideline;
- a new forecasting best practice guideline; and
- updates to existing regulatory investment test for transmission (RIT-T) instrument and application guidelines.

The new Rules aim to streamline the transmission planning process while retaining rigorous cost benefit analysis. The new Rules are effective from 1 July 2020, however the new guidelines will come into effect through the 2022 ISP. We will be keen to see whether recent updates to the RIT-T process improve the timeliness of the RIT-T process. If updates to the RIT-T fail to satisfy the States by enabling the timely rollout of the transmission lines they need, then the NEM will continue to fragment and the current governance arrangements will become increasingly obsolete.

Funding mechanisms for new transmission investment

We note the AEMC's rejection of TransGrid and Electranet's Financeability Rule change requests. The Commission found that the current regulatory framework does not create a barrier to financing TransGrid's or Electranet's share of current ISP projects including Project EnergyConnect (PEC).

⁵ IEEFA Australia: Coal plant closures imminent as renewable energy surges available at: <https://ieefa.org/ieefa-australia-coal-plant-closures-imminent-as-renewable-energy-surges/> and Queensland budget forecasts coal power revenue will disappear amid influx of renewables available at: <https://www.theguardian.com/australia-news/2021/jun/15/queensland-budget-forecasts-coal-power-revenue-will-disappear-amid-influx-of-renewables>

However, we note that following the AEMC's rejection of the rule change, the company's Boards expressed significant concern that the projects might not be able to be funded and may not therefore be built.

The situation was solved when the Clean Energy Finance Commission stepped in with up to \$295 million in capital.

*"The CEFC investment, on behalf of the Australian Government, was made via an innovative subordinated note instrument which contributed to the crowding in of further private sector debt to this critical project. The CEFC investment in PEC will see TransGrid build the NSW portion of the new 330 kV interconnector connecting the energy grids of NSW and SA, with an additional link to North West Victoria".*⁶

Electranet also received funding from the Australian and South Australian Governments for their section of PEC. The Commonwealth and State Governments committed on a 50/50 basis, to fund up to \$100 million for PEC through joint underwriting of key early works.

Following the funding announcements from the Australian and South Australian Governments and the CEFC the Boards of both TransGrid and Electranet committed to progressing with the build of PEC.

Considering this history, we are not convinced that the financeability settings are currently correct. If they were, it would seem that there would be no need for the Australian and State Governments to step in and fund these projects. They could be funded commercially through the contingent project process.

We do not think it is appropriate for the AEMC to defer consideration of this matter to the AER's 2022 Rate of Return Instrument (RoRI). The AER is well placed to consider rate of return issues, but the Commission is well placed to consider the overall status of the financeability of major new transmission lines. Is the RIT-T still fit for purpose? Are refinements needed? The AEMC Chair commented recently that the RIT-T was largely designed to keep a lid on investment. Is this appropriate now that AEMO's ISP has foreshadowed the need for a massive roll-out of new transmission investment?

We also note the federal Labor Opposition's *Rewiring the Nation Policy* which will invest \$20 billion to rebuild and modernise the grid, in line with the projects outlined in the ISP. Labor plans to establish the Rewiring the Nation Corporation (RNC) which will partner with industry and provide low cost finance to build these ISP projects.

⁶ Historic CEFC investment to kickstart nation building Project EnergyConnect: available at: <https://www.cefc.com.au/media/media-release/historic-cefc-investment-to-kickstart-nation-building-project-energyconnect/>

In Victoria, the Government is developing Victoria's Renewable Energy Zones (REZs), supported by a \$540 million REZ Fund to invest in needed REZ network infrastructure and the establishment of a new co-ordinating body, VicGrid.

Thus it seems Governments, State and Federal, Liberal and Labor, seem united in their belief that there is a need for them to step in and fund new transmission infrastructure.

Government financial support would not be necessary if the RIT-T and contingent project approval process was working as intended. It is unclear how the RIT-T and contingent project process will work together with these potentially large Government contributions to the cost of new transmission infrastructure.

The AEMC questions whether introducing contestability into the transmission planning and delivery process may lead to more efficient outcomes for consumers. Transmission projects are already contestable in Victoria. The NSW Government has recently foreshadowed making transmission development contestable within NSW. Increased competition can lead to reduced expenditure requirements, so RE-Alliance would be in favour of this reform.

Recovering funding for transmission projects from electricity consumers is a regressive form of taxation. The provision of State and/or Federal government funding to support the roll out of this essential transmission infrastructure is progressive and would reduce the burden shouldered by energy consumers.

Renewable Energy Superpower

As Australia and the world move to act on climate change, renewable electricity, firmed by storage, will play a much larger role in our global energy system. Not only will renewable electricity be used to keep the lights on, but heat our homes, cook our food, power our transport, manufacture goods and produce renewable hydrogen which in turn will be used to power those processes that can't easily be directly electrified. As a result, Australia's electricity system will need to be several times larger than that required to decarbonise Australia's own energy needs.

If we want to become a renewable energy export superpower, growing our manufacturing base and exporting goods and commodities such as renewable hydrogen, ammonia, green steel, green aluminium and refined critical minerals we need to be considering growing the size of our electricity system by five to seven times nationally.

"In 2019, Darren Miller, CEO of the Australian Renewable Energy Agency (ARENA), was the first person to publicly raise the concept of 700% renewables for Australia, saying this achievable goal would deliver a similar amount of energy to what we currently export through Australia's LNG industry. WWF-Australia believes that Australia should

be aiming for a renewable industry at least as big as our LNG industry, if not bigger. Indeed, the analysis in this paper shows that if we move to 700% renewables and storage (or seven times the amount of electricity we currently generate across Australia) and invest in associated upstream and downstream manufacturing, we can more than replace all the jobs in and revenue from Australia's current fossil fuel export industries".⁷

While some of this increased renewable electricity capacity will be in the form of off-grid mega projects such as the Asian Renewable Energy Hub and Western Green Energy Hub, if Australian energy consumers are going to enjoy the benefits of an overbuilt renewable electricity system it is imperative that much of this increased capacity is grid connected. This means that our transmission needs are much greater than those outlined in the 2020 ISP. This in turn has a number of flow on implications.

Firstly, transmission should no longer just be thought of as a matter of providing cheap reliable power to electricity consumers, it must also be thought of as essential to climate action and as critical infrastructure in unlocking renewable exports – a nation building opportunity. Given that transmission is an investment in Australia's future economic prosperity and in climate action, the revenue model for transmission projects requires a fundamental re-think. Climate action and nation building are the responsibilities of government. As such, we believe there is a much greater role and need for government (taxpayer) funding for transmission projects. Due to our progressive tax system, this would be a more equitable approach to paying for infrastructure that is in the public good than on electricity consumers' bills.

Secondly, bottlenecks in transmission infrastructure are increasingly becoming a determining step in the rate at which Australia can decarbonise. The climate science is clear, that to avert the worst impacts of climate change we must much more rapidly decarbonise both Australia and globally. According to the World Resources Institute, globally we need to increase the build rate of renewables by six times by 2030.⁸ According to WWF-Australia, to achieve 700% renewables by 2050 we also need to increase the build rate of renewables in Australia by six times.⁹ However, as CEC analysis shows, we are going backwards with renewable deployment slowing.¹⁰ One of the main reasons for this slowing is a transmission system that is not fit for purpose. As such, it is essential that we speed up the transmission build rate.

⁷ Behind the Renewable Superpower scorecard - Technical Report March 2021 p. 27 available at: https://www.wwf.org.au/ArticleDocuments/825/WWF_Behind%20the%20Scorecard_Technical%20Report_2021.pdf.aspx?OverrideExpiry=Y

⁸ Climate Action Must Progress Far Faster to Achieve 1.5 C Goal World Resources Institute (2020) available at: <https://www.wri.org/insights/climate-action-must-progress-far-faster-achieve-15-c-goal>

⁹ Renewable Superpower Scorecard 2021 Australia's race to a renewable future (2021) available at: <https://www.wwf.org.au/what-we-do/climate/renewables#gs.cl7qvy>

¹⁰ Jobs, climate at risk as clean energy investment stalls, Clean Energy Council (August 2021) available at: <https://www.cleanenergycouncil.org.au/news/jobs-climate-at-risk-as-clean-energy-investment-stalls>

We suggest that one way to do this would be for governments to underwrite the pre-planning of all the proposed transmission lines in the ISP. By undertaking the pre-planning work immediately it would provide more time for community engagement and to get route selections right, while also reducing the timelines for transmission projects potentially by several years. With the pre-planning done, transmission investment decisions could then be accelerated when they are needed rather than the later dates given in the 2020 ISP. We note that the 2022 ISP will include a hydrogen superpower scenario. This in turn provides flexibility and the ability to more rapidly decarbonise and capture emerging renewable export opportunities.