

12 November 2021

NSW Department of Planning, Industry and Environment

Lodged via email: Electricity.Roadmap@dpie.nsw.gov.au

Dear Sir/Madam,

Network Infrastructure Projects (EII Act 2020 Part 5) Policy Paper

The Clean Energy Council (**CEC**) is the peak body for the clean energy industry in Australia. We represent over 900 of the leading businesses operating in renewable energy, energy storage and renewable hydrogen. We are committed to accelerating Australia's clean energy transformation.

The CEC welcomes the opportunity to comment on the NSW Department of Planning, Industry and Environment's Policy Paper on Network Infrastructure Projects (EII Act 2020 Part 5) as part of the Electricity Infrastructure Roadmap. The CEC strongly supports the Department's work to manage the infrastructure buildout to facilitate the 12GW of network capacity across five Renewable Energy Zones (REZ)¹, as part of the wider Roadmap development.

There are significant changes from the national planning framework proposed in this paper, namely the introduction of contestability and tendering of Network Operators to carry out REZ infrastructure projects. We commend the NSW Government for developing a new framework with the dual objectives of more cost efficient and timely delivery of the required infrastructure and a consumer-centric approach. While we acknowledge the significant changes needed to drive the transition in NSW, it is also important to align processes with existing national frameworks wherever possible. This is central to reducing the regulatory complexity associated with investing in transmission projects across different regions and regulatory frameworks.

Given these changes, it is also important to ensure clarity and transparency where possible to further minimise disruption to investment and delivery of transmission infrastructure. The CEC considers that there is a risk of complexity and uncertainty around the implementation of the proposed framework, which could impede investment in the short-term. We appreciate that the guiding principles outlined in the paper acknowledge these concerns and should be carefully considered throughout the implementation of these changes.

Our submission explores these themes in explicitly covering:

1. Proposed classes of infrastructure – particularly the system security class
2. Identification of network infrastructure projects and the potential consideration of non-network solutions
3. The undertaking and funding of preparatory activities by the Infrastructure Planner

¹ <https://www.energy.nsw.gov.au/government-and-regulation/electricity-infrastructure-roadmap#LTESAs>

4. Authorisation of infrastructure projects and Priority Transmission Infrastructure Projects (PTIPs) by the Consumer Trustee
5. The alignment with Long-term Energy Service Agreement (LTESA) process
6. Transmission Efficiency Test (TET), revenue determination and financability implications

Proposed infrastructure classes

The CEC broadly agrees with the specification of different classes of network infrastructure. This allows adequate consideration of transmission capacity itself, in addition to the essential system services (ESS) required by the energy system, which are presumed to be included under Classes 3 and 4. Recent market developments have highlighted the importance of ESS such as system strength, inertia and primary frequency control, which are expected to increase in importance and value relative to bulk energy supply over the planning horizon of the Roadmap.

It is recommended that these services, particularly system strength, be delivered through the existing national frameworks wherever possible, such as those outlined in the *Efficient management of system strength on the power system* rule change. This would reduce complexity and contribute to effectively valuing this service within the NSW framework in line with the rest of the National Electricity Market (NEM).

There is also the possibility of delivering the services required via non-network solutions. We consider that the Infrastructure Planner should develop guidance and clarity to ensure that adequate consideration is given to both network and non-network solutions when identifying projects, particularly relating to the provision of system services.

The need for improved treatment of costs and benefits was highlighted in the CEC's recent submission to the AEMC's Transmission Planning and Investment Review²; the NSW Roadmap provides an opportunity to achieve this, ensuring technology neutrality and a fair assessment of all potential solutions and encouraging innovation and timely delivery of buildout.

Identification of network infrastructure projects

The CEC agrees with the critical need for regulatory reform of the current framework in order to achieve timely and efficient delivery of infrastructure. Many elements of the regulatory frameworks for transmission, such as the Regulatory Investment Test for Transmission (RIT-T), can be lengthy and onerous processes, and may not always deliver efficient investment when and where it is needed. The process of assessing network infrastructure projects by the Infrastructure Planner may provide greater certainty around the identification of the required projects. However, given the Infrastructure Planner role is currently undertaken by Primary TNSPs, and AEMO - through the actionable Integrated System Plan (ISP) rules - clarity is needed around the proposed role of the Infrastructure Planner under the Roadmap and interaction with existing mechanisms, to avoid the delays that can be associated with duplication.

In its role of identifying and recommending projects, the costs incurred by the Infrastructure Planner must be efficiently managed to minimise administrative costs over and above what would otherwise be incurred if the Primary TNSP was to take on this role. As such, the Infrastructure Planner should leverage existing resources such as the ISP and Transgrid's Transmission Annual Planning Report (TAPR) to minimise any overlap between these planning processes and reduce inefficient costs.

² <https://assets.cleanenergycouncil.org.au/documents/advocacy-initiatives/submissions/submission-consultation-paper-transmission-planning-investment-review.pdf>

Equally however, it will be important for the Infrastructure Planner to maintain independence throughout the planning and tender processes, allowing fairness, efficient cost and risk allocation between incumbent and non-incumbent network operators.

The cost recovery of this work has the potential to impact the cash flow and/or financability of the winning tenderer should this be incurred up front. This is discussed along with costs incurred through preparatory works below.

There is also the potential of losing economies of scale and scope afforded under the existing process of having Primary TNSPs undertake this work. This potential inefficiency must be considered against the benefits achieved under this framework. The effectiveness of the Infrastructure Planner should be continuously reviewed to ensure the Infrastructure Planner's role remains the most prudent and efficient way forward. Should a judgement be made that EnergyCo as the Infrastructure Planner is not effectively achieving the objectives of this role, there is scope under the proposed framework for the Minister to appoint another party as the Infrastructure Planner.

Preparatory activities

The CEC acknowledges the potential benefits provided by the Infrastructure Planner undertaking preparatory planning prior to recommendation to the Consumer Trustee and tender process. However, there is also the potential for inefficiencies in this process compared to the existing framework. Namely, the Network Operator currently undertakes these works before proceeding with a project. In doing so, they leverage experience which may minimise costs and timeframes of early works, and also have greater understanding of the project at later stages of the build. However, the CEC considers the proposed framework could be more effective than current arrangements, if it can be designed to effectively deal with the following risks.

Firstly, the handoff from the works undertaken by the Infrastructure Planner to the successful tenderer may give rise to contractual (probity issues) and physical difficulties (particularly where REZ infrastructure connects to the existing shared network). The scope of preparatory works must be clearly specified in order to define the responsibilities of the Infrastructure Planner and winning tenderer. For example, this may include explicitly defining what level of community engagement is necessary in the early works, or the completeness of the route selection, option identification or technical parameters that have been assessed. Failure to do this, and clearly communicate all relevant information to tenderers may lead to probity risk. Similarly, when the route selection indicates connection to existing shared network, there is a risk that responsibility over the connection is unclear between the winning tenderer and existing network operator – i.e., integration risk. This is particularly relevant where the designated network assets framework applies. This will ultimately impact modelling requirements for the planning and connection of the project. Further, this risks delays to construction and additional costs in the ownership and operation of the asset.

The responsibilities and liability of the Infrastructure Planner, tenders and winning tenderer must therefore be clearly identified to avoid the above risks. Alternatively, the framework should outline the allocation of these risks between these parties – e.g., the allocation of integration risk between incumbent and new network operators.

Secondly, the cost recovery mechanism used to fund preparatory works may significantly impact the financability for the successful tenderer, and also have significant cash flow implications for the Infrastructure Planner. This is particularly true if the recommendations above are adopted and the Infrastructure Planner undertakes comprehensive route planning, land acquisitions etc. due to the significant costs of these planning components. If the cost recovery is sought from the Network Operator, this would likely be incurred as upfront capital expenditure, then be recovered via the

revenue determination process. The exposure to this upfront cost is likely to impede the financability of the projects by tenderers, particularly if it is not clear how these costs will be treated in the revenue determination process. The alternative of seeking to recover costs from the Scheme Financial Vehicle (SFV) is unlikely to be seen as in the best interest of New South Wales (NSW) consumers. Therefore, the increased financability risk faced by successful tenders must be addressed in this framework.

The proposed framework must also ensure that preparatory works undertaken by the Infrastructure Planner are prudent and efficient. Under the current framework, early works are independently assessed and considered by the Australian Energy Regulator (AER) to ensure this efficiency. Failure to do so would negatively contribute to the second risk outlined above, and adversely impact NSW consumers.

If the above risks are addressed, the undertaking of preparatory activities by the Infrastructure Planner may provide overall benefits through the tendering process. If comprehensively undertaken, this may minimise the significant uncertainties and potential for estimated costs to increase in the transmission investment process. This is because a significant portion of costs are associated with route selection and environmental planning, and these are often the subject of material changes as details of projects are determined. Under the current framework, TNSPs can face significant delays and costs due to environmental obligations and route changes. We consider that the costs associated with these obligations (e.g., biodiversity offsets) are uncertain and therefore open to material changes until the later stages of detailed planning work under the current framework. Should the preparatory works undertaken by the Infrastructure Planner and options presented to the Consumer Trustee provide certainty around these costs to potential tenderers, this would result in better informed tenders under the contestable process. Additionally, the scope of the preparatory works should specify the level of community engagement and social license considerations required under the framework. The CEC considers this would be a desirable outcome under this framework.

Authorisation of projects

The CEC considers increased contestability in the delivery of transmission assets could deliver consumer benefits over the longer term but that this must be weighed against the immediate and urgent need to deliver the transmission infrastructure investment necessary to support NEM decarbonisation. The proposed framework should facilitate an efficient and competitive tendering process, authorising winning tenderers once the full suite of costs and benefits of the projects are understood. This will allow for all options, including non-network solutions, to be considered and maximise the benefit delivered to NSW consumers. Given the material changes from the existing framework, the authorisation process must provide clarity and certainty to tenderers.

Existing planning processes, particularly the RIT-T, may not support efficient transmission buildout. The proposed framework bypasses the RIT-T process and allows a streamlined project identification, authorisation and delivery process. However, this raises the risk that the associated costs and benefits are not fully internalised into the authorised projects, unless this is included under the broader identification of the REZ. As this is a key driver of the delays caused in the RIT-T process, the consideration of the full suite of costs and benefits associated with investment in major transmission projects should be captured in the assessment of a REZ (i.e., in the identification undertaken in the ISP or in NSW planning of the REZ), rather than on a project-by-project basis. This would ensure broader benefits are reflected in project authorisation and delivery, without causing the delays experienced under the current framework. This would also allow for the consideration of non-network solutions against network alternatives. These solutions may provide benefit, enabling timely delivery of system services under Classes 3 and 4. Finally, consideration

of the entirety of the life cycle and the total system costs of transmission projects must be undertaken to ensure the best outcome for consumers.

The CEC broadly supports the intent of REZ development as an approach to coordinating network and generation investment. However, we also consider that valuable investments may also occur outside of REZ areas. Regulatory framework design should therefore allow for such valuable projects to be recognised and supported, even if they exist outside of a REZ. This depends on the identification of such projects, such as minor augmentations, in planning processes such as the ISP. This may also include non-network solutions, which should be captured under the LTESA framework. Transmission infrastructure investment such as this should be facilitated by the proposed framework.

We consider the allowance of PTIPs a necessary backstop solution to a potential breach of the Energy Security Target (EST). Should the Minister identify and authorise a PTIP, a range of alternatives, including non-network solutions, should be considered to deliver the required services. This could be particularly beneficial when the EST breach is associated with timing pressure, where the implementation time of these solutions would be shorter than the network solutions.

We consider that there are a number of risks which must be addressed in the proposed authorisation process. Firstly, the incentives around competitive tenders for the construction, ownership and financing of infrastructure projects must not give rise to difficulties in the operation of the assets. A holistic view on both the construction and operation of the asset must be taken in the tendering and authorisation processes to ensure competitive pressures do not negatively impact the long-term operation of the asset. This is an inherent risk under the proposed contestable framework and is amplified by the presence of new market entrants, who may lack experience relative to existing TNSPs.

Secondly, adequate consideration is needed to avoid uncertainty regarding the preliminary authorisation and parallel consideration of LTESA and access rights. This is discussed further below.

Alignment with LTESAs

Under the proposed framework, uncertainty exists where a preliminary authorisation is made, or an LTESA is awarded and is conditionally dependent on the construction of a specific infrastructure project. This has the potential to stifle investment if it is not appropriately managed. To allow efficient generation investment, probabilities and risk assessments around this conditionality should be provided by the Consumer Trustee and/or Infrastructure Planner to enable generation proponents to manage this risk.

Transmission Efficiency Test and revenue determination

The CEC recognises the importance of efficient and prudent costings of transmission projects and the implications this has for energy consumers. We support the parallel TET and revenue determination process being undertaken by the AER as the Regulator. Alignment with the national framework where possible is appropriate in order to minimise uncertainty in this process. The proposed framework seems to achieve this in undertaking the revenue determination and TET similarly to a contingent project under the current framework. The framework also reduces the workload of the regulator given efficient costs are revealed through the tender process. This may result in a timelier regulatory process.

There is a strong need to consider financability under the proposed arrangements and the implications this will have on investment. This is impacted by the outcome of the TET and revenue

determination. The CEC considers that improving the financability arrangements for projects is likely to support efficient infrastructure investment. These arrangements should continue being improved to minimise hurdles to the funding of major transmission projects. Any such hurdles would delay the transition and threaten to increase costs to consumers. This is relevant in the Regulator considering the total life cycle and recognising the relevant benefits, as should be completed in early stages of the proposed framework. In line with discussion above, in considering the full suite of costs and benefits of an infrastructure project, a broad understanding of benefits will allow for an accurate revenue determination from the regulator and may improve financability for project proponents. That is, project revenue (or costs and benefits) should be recognised over the appropriate time period of the project in order to achieve optimal financing terms.

Finally, the CEC recognises the potential for delays and additional costs should the tendering process for transmission projects not be binding and result in a successful tenderer not proceeding after the revenue determination has been made. Under the proposed framework, there is no statutory requirement for the winning tenderer to carry out the authorised project (with any obligation subject to finalisation of the revenue determination). If adequate preparatory works are completed by the Infrastructure Planner and there is limited scope for variation, the tenderer is likely to have some expectation of the revenue determination. Therefore, it may be fair to include contractual obligations to ensure the project proceeds. Further consideration should be made comparing the delays and costs if this were to occur, against the implications of an obligation to proceed for the winning tenderer.

Further considerations

The CEC is generally supportive of open and competitive markets where this is practical. We therefore consider there are potential consumer benefits that may be achieved by contestability, over the longer term. However, facilitating effective competition requires careful market design to ensure that administration and transaction costs, including system reliability and security risk, do not outweigh the benefits of competition.

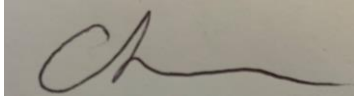
In the case of transmission investment, the CEC acknowledges that competition could theoretically deliver better outcomes for consumers. However, there are a number of structural and administrative cost issues that must be considered, such as the limited number of competitors in any market for building major transmission projects, and the significant additional administrative costs associated with running tenders. These costs must be weighed against the benefits of competition within the proposed framework.

There is a strong appreciation that consumers should not carry excessive risk in relation to network augmentations. For example, stranding risk should be substantially reduced through access rights and connection fees under the new LTESA framework, ensuring efficient delivery and benefits to consumers. Prudent and efficient costing must remain a key outcome of transmission investment. However, it is critical that the full suite of benefits of major transmission projects can actually be captured through the proposed frameworks – this is central to delivering value for consumers.

In delivering consumer benefits and ensuring that transmission infrastructure is fit-for-purpose, there should be flexibility in the design and construction of projects to meet the objective of the REZ without necessarily following existing local TNSP design processes. Given these processes have evolved over time, there is need for continued flexibility to ensure a cost-effective solution. This should be achieved through the contestable process.

Thank you for the opportunity to comment on this policy paper under the NSW Roadmap. If you would like to discuss any of the issues raised in this submission, please contact Jordan Ferrari, Policy Officer, [REDACTED] or myself, as outlined below, at [REDACTED].

Kind regards,

A handwritten signature in dark ink, appearing to be 'Ch' followed by a long horizontal stroke.

Christiaan Zuur
Policy Director – Energy Transformation