30 September 2021

Ms Anna Collyer
Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Electronic Submission – EPR0087

Consultation Paper – Transmission Planning and Investment review

Dear Ms Collyer,

Energy Networks Australia (ENA) welcomes the opportunity to provide a submission to the Australian Energy Market Commission's (AEMC's) consultation paper for its Transmission Planning and Investment Review ('the review').

ENA is the national industry body representing Australia's electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia. This response is on behalf of ENA transmission members.

The key points that have shaped our more detailed response to the questions posed by the AEMC in its consultation paper are outlined below. Those detailed responses are provided in the format requested by the AEMC, as an attachment.

Focus and coverage of the review

Transmission is a critical enabler of the transition to renewable energy. It is important that the outcome of the review delivers material benefits to consumers and does not expose them to critical risks and delays to transmission investment as the energy market transitions to a low carbon future. ENA supports the AEMC's prioritisation of issues that are practical to implement and will deliver long term, realisable benefits to consumers in relation to price, reliability and system security. The review should focus on the lowest long term total cost to consumers. ENA suggests that the AEMC add as an assessment criterion 'the extent to which reform options are likely to promote consumer confidence in the energy framework and improve social licence for the development of major transmission projects'.

ENA believes that the focus of the review should logically be confined to Integrated System Plan (ISP) projects that are not yet actionable. The actionable ISP projects from the 2020 ISP are already progressing through the current framework. No major concerns have been raised on the timeliness or efficiency of investment in non-ISP projects, the vast majority of which are mandated as a 'reliability corrective action' (with a corresponding obligation on the transmission network service provider (TNSP) to invest). Removing non-ISP projects from the scope of the review will allow ISP projects, which are of greatest concern to consumers, to receive more attention.

The ex-ante regulatory framework continues to be appropriate for major projects

The intrinsic and material uncertainty surrounding the costs and benefits of major discrete transmission projects is at the heart of the challenge for the regulatory framework. However, some elements of this uncertainty are already becoming less acute – such as uncertainty around greenfield investment costs (with the progression of several major transmission projects) and uncertainty over future generator retirements and technology costs (with the ISP scenarios capturing a range of assumptions, consulted on with stakeholders).

It is also important to recognise that, when the first ISP was developed in 2018, most stakeholders did not fully comprehend the seismic shifts about to impact the National Electricity Market (NEM). Further, the Australian Energy Market Operator (AEMO) and TNSPs had limited relevant experience in planning and delivering the type of mega-projects being conceived. The increases in estimated project costs since 2018 has more to do with AEMO and TNSPs developing a greater understanding of the drivers of major project costs than risk aversion or innate conservatism on the part of the TNSPs.

Notwithstanding, some areas of material uncertainty will remain, including the impact of environmental requirements on costs (including biodiversity offset costs), which depend on detailed route design, jurisdictional requirements and the potential for further future government policy changes. The costs associated to build and sustain a social licence to construct major new infrastructure are also a source of material uncertainty. This uncertainty gives rise to material risks, predominantly outside of the control of TNSPs, which may impact costs after the Australian Energy Regulator (AER) has approved the Contingent Project Application (CPA)[1].

The new staged CPA process applying to ISP projects will assist in addressing the cost uncertainties associated with detailed route design and procurement, which have previously been a source of concern for TNSPs. HumeLink is the first major ISP project able to utilise this new provision.

However, even with the staged CPA process, the current regulatory framework does not fully deal with the allocation of external risks *ex ante* between TNSPs and consumers. As a consequence, consumers are bearing higher costs through cost estimates that factor in the additional risk and/or the costs that contractors price to take on external risks they may not be best placed to manage, and TNSPs are facing a higher level of risk which can result in commercial disincentives to invest.

The introduction of contestability for major transmission projects would not solve the problems with the extent and allocation of the external risks associated with major projects:

- The price offered by a contestable provider prior to the commencement of a project would be akin to an *ex-ante* revenue allowance, as it would be determined upfront. A contestable provider would either need to structure its bid to accommodate the risks and uncertainties it would bear (in a

[1] The Victorian transmission framework differs from the rest of the NEM, nevertheless the material cost uncertainties are still present.

similar manner to regulatory provision), or the contract would be subject to later variations, increasing the final cost paid by consumers, especially when considered over the life of the project.

- Further, it could be difficult to replicate the benefits of the new staged CPA framework under a contestable approach, in terms of a process that facilitates the progressive activities necessary to estimate the overall efficient cost of the project more accurately, prior to construction commencing. Contestability could disrupt the continuity in consumer engagement between the planning and delivery processes, potentially undermining attempts to build social licence for the development. So the uncertainty issues would likely be exacerbated under a contestable model.

There are potential changes to the application of the current *ex-ante* framework that would represent a more effective and easily implementable option for addressing uncertainty and risk allocation, such as:

- Allowing for the identification of additional nominated pass-through events at the CPA stage (as well as the revenue determination stage) relating to clearly identifiable external risks that would otherwise be borne by the TNSP, such as decisions on biodiversity costs. Under the existing National Electricity Rules (NER), TNSPs would still need to demonstrate they have taken actions to minimise these costs, if the pass-through event occurs, and so incentives on TNSPs to minimise these costs would be maintained.
- Exclusion of identified major projects from the general 'over-spending' *ex post* review trigger, and replacement with a bespoke arrangement which would allow the AER observer status as the project progresses and major decisions are made.

Planning framework

ENA does not consider there is a need to further streamline the economic assessment of ISP and non-ISP projects under the NER, although there may be opportunities for the AEMC to clarify some elements and potentially to place a timeframe around the feedback loop process (noting that the intention was not for this process to add an additional six months to the end-to-end process, but this has been the experience to date).

The amended planning rules in the NER and associated AER guidelines (the 'actionable ISP' framework) have only been in place since July 2020 and should be given an opportunity to work. The forthcoming 2022 ISP will be the first prepared by AEMO under the full framework, and to date no ISP project has been through the entirety of the new framework.

The sheer size of the investments in the ISP, which will be reflected in network charges for years to come, means that it is important that there is a robust and transparent process for identifying the required investments and providing confidence that the assessment of the market benefits delivered to consumers is robust.

The regulatory investment test for transmission (RIT-T) conducted by TNSPs for ISP projects allows for further detailed assessment of option variants and market benefits that is simply not feasible at an ISP level, where AEMO is undertaking analysis across multiple investment combinations. The local TNSP has significant knowledge about the network assets to identify options and progress more detailed project assessments in the RIT-T. The RIT-T:

- includes the feasibility of fully considering certain benefit categories (such as competition benefits and option value), as well as identifying and evaluating non-network options.

- provides a transparent process for stakeholders to engage on specific projects and so can assist with community buy-in and developing social licence.

ENA considers that it is a matter for policy makers to determine either if a wider economic benefits test is desired, or if the value of emissions reductions should be captured as part of the cost benefit assessment for ISP projects, noting that the scope of the RIT-T assessment is currently limited by the National Electricity Objective.

Overall, the future operation of the actionable ISP arrangements will be a better test of the new framework's effectiveness, rather than the transitional experience over the last 12 months. ENA considers the new framework should be assessed in the already-planned review in 2025.

ENA notes that community engagement and acceptance are key to ensuring the timely delivery of major transmission projects. Improvements in this area may ultimately deliver a greater impact on investment timeliness than making fundamental changes to the investment planning framework.

Transmission investment and delivery

ENA notes the AEMC's key concern regarding TNSPs having an exclusive right to build and own transmission projects but no corresponding obligation to invest. ENA notes the commitment shown by TransGrid and ElectraNet to deliver Project EnergyConnect. For non-ISP projects, investment in major projects generally occurs to comply with obligations in the NER (including those relating to the connection of load and voltage requirements), or in a TNSP's licence. In these cases, the TNSP does have an obligation to invest. The ENA also notes that reluctance by TNSPs to invest in some circumstances may be for valid reasons from a consumer perspective, including where it arises from concerns with the assumptions underpinning the economic assessment.

However, there can be a misalignment between the long-term interests of consumers and the commercial considerations of investors where TNSPs are asked to bear more risk than they are being compensated for, and where cost recovery cashflows raise financeability concerns. Addressing the underlying causes of misalignment would be the most effective means of lowering the risk of non-investment. This could be achieved by:

- minor amendments to the regulatory framework to more appropriately allocate external risks (as discussed above).
- setting the Rate of Return at an appropriate level and introducing a financeability check, which would also ensure lower costs to consumers (through keeping the required return on debt low).

ENA does not consider the introduction of contestability to be an effective, proportionate or readily implementable change to address concerns about investment not proceeding:

- Contestable provision of individual transmission investments introduces the need for coordination arrangements between different asset owners, which adds complexity and risk, and introduces potential constraints in how the network is managed, thereby introducing additional costs. The rights and responsibilities of all parties would require careful consideration (eg, asset maintenance and operation) in order to ensure that there is no adverse impact on overall network reliability and security.

- The current framework is built on a policy of clear accountability for shared network service outcomes in each jurisdiction (outside Victoria); this would be undermined by a fragmented approach to shared transmission network investment.
- Contestability would have implications for the costs paid by consumers, with a high likelihood of costs increasing as bidders would not be restricted to seeking a regulatory return nor to a regulated revenue timing profile.
- No evidence has been provided from experience in Victoria that lower long-term total costs to consumers (not merely upfront costs) have been achieved under a contestable approach.
- Contestability comes with a substantial reduction in accountability for managing transmission infrastructure and transparency in relation to outturn costs. A contestable process—such as currently applies in Victoria—does not include the same active role for the AER in assessing the efficiency of costs as part of a CPA, and contestable projects do not currently go through the 'feedback loop' provisions to ensure that at the outturn contract cost the ISP project remains on the optimal development path and delivers a net benefit to consumers.
- Most of the costs of ISP projects are already competitively tendered by TNSPs - typically over 75% of project cost, with statutory costs such as environmental offsets, land acquisition and approvals making up a sizeable portion of the remainder - so customers already benefit from competitive outcomes under the current framework.

Some jurisdictions, notably New South Wales, have existing provisions in their legislation to 'direct' a TNSP to invest in a major project. Although these types of provisions do not necessarily support NEM-wide solutions, this appears to be a more suitable 'backstop' mechanism to compel investment if required, particularly if coupled with a requirement for a jurisdiction to seek advice from AEMO prior to making a direction.

Material change in network infrastructure costs rule change request

ENA supports transmission and distribution network service providers (NSPs) retaining primary responsibility for identifying a material change in network infrastructure costs, but agrees that a reasonable safeguard for consumers would be for the AER to be able to require NSPs to justify their view that a material change in circumstance has not occurred. Where the AER is not convinced, it could require the NSP to update and consult on the NPV assessment (rather than re-starting the entire regulatory investment test for transmission/distribution (RIT) process).

ENA considers that this requirement should only apply to projects subject to a CPA. In order to manage the risk of this requirement creating uncertainty and unduly extending investment timeframes, ENA supports clarification of when a project would no longer be subject to the material change in circumstance test. ENA suggests this should be at the stage of an approved CPA.

ENA does not support a pre-determined cost threshold at which the RIT would need to be re-applied, and notes that for major ISP and non-ISP projects the RIT-T already includes sensitivity testing to changes in capital costs, and that the impact of any cost increases outside of the range tested is already taken into account under the NER at the CPA stage.

The 'decision-rule' approach set out in the consultation paper is similar to the threshold analysis NSPs currently incorporate in their RITs, and ENA believes would provide a more useful approach. However, this approach should only be applied to major transmission projects, and should not apply to distribution

investments, or transmission investments below a certain size, as it could materially increase the time and costs associated with the planning of these projects and delay timely investment.

ENA considers that the level of cost estimation required at the RIT stage should remain a class 4 Association for the Advancement of Cost Engineering estimate, in line with AEMO's approach in the ISP. For major projects in particular, providing cost estimates at a greater degree of accuracy at the RIT-T stage would be costly and would require early works to be undertaken on each of the options being considered (for example, to confirm route selection and procurement information), which is impractical.

Contestability an assumed outcome?

ENA is disappointed that question 21 in the consultation paper is framed in a way that presumes the delivery of transmission projects should be made contestable. As outlined above and in the detailed responses to questions below, ENA does not believe the case for contestability has been made. It is not clear from the consultation paper exactly what customer outcomes contestability would improve and how it would do so.

ENA has attached a report ENA commissioned from FarrierSwier that identifies issues that would need to be addressed if a contestable model for transmission investment were to be contemplated. A focus on system-level outcomes and long-term total costs to customers is essential in any evaluation of contestability.

Should you have any queries on this response please feel free to contact Verity Watson, vwatson@energynetworks.com.au.

Yours sincerely,

Andrew Dillon

CEO

Attachment

Introduction- Assessment criteria

1. Do you agree with the Commission's proposed assessment framework for this Review?	Energy Networks Australia (ENA) generally supports the AEMC's proposed assessment framework, and its proposed prioritisation of issues that will deliver substantial improvements to consumers and are practical to implement. It is important that the outcome of the AEMC's review delivers material benefits to consumers. For major transmission projects, which will be reflected in network charges for years to come, ENA considers that the balance of emphasis in the assessment framework should be on promoting efficient investment outcomes, and ensuring that the assessment of the market benefits delivered to consumers is robust. ENA supports the AEMC's recognition that information provision and transparency are key elements in promoting economic efficiency, and notes that this extends to providing transparency to consumers and other stakeholders, to ensure accountable decision-making. ENA also notes that the assessment of economic efficiency needs to take into account the impact on the whole system, rather than be limited to a specific project, given the potential for material coordination issues to arise with some options the AEMC may be assessing (ie, the introduction of contestability). This is consistent with one of the objectives of the review to enable timely and efficient delivery of transmission services that are in the long-term interests of consumers. In relation to the implementation and effectiveness criteria, any proposed changes arising from the review should be able to be implemented in time to affect the major Integrated System Plan (ISP) projects currently identified as 'future ISP projects', if they are to deliver benefits to consumers and not delay investments. ENA believes that the focus of the review should logically be confined to ISP projects. Any major transmission project affecting the energy transition is expected to be included in the ISP, or to be dealt with on a jurisdictional basis (and therefore not subject to the national framework). Further, no major concerns have been raised on the timeliness or efficiency of transmission investments in non-ISP projects, the vast majority of which are mandated as a 'reliability corrective action' (with a corresponding obligation on the transmission network service provider (TNSP) to invest). Removing non-ISP projects from the scope of the review will also allow major ISP projects, which are of greatest concern to consumers, to receive more attention.

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2. Are there any additional criteria the Commission should consider as a part of its assessment framework?	ENA suggests that the AEMC add as an assessment criterion 'the extent to which reform options are likely to promote consumer confidence in the energy framework and improve social licence for the development of major transmission projects'. Community concern in relation to greenfield transmission developments in particular is emerging as a material factor affecting the timeliness and costs of major transmission investment. It is important that the end-to-end planning and investment framework accommodates adequate consideration of community concerns and helps to build the social licence that is needed to underpin community acceptance of these investments.

CHAPTER 3 – Issues in the regulatory framework and processes for planning of major transmission projects

Implications of increased uncertainty for the ex-ante incentive-based regulatory framework	
3. Do you agree that the identified factors contribute to an increase to the uncertainty surrounding major transmission projects, relative to BAU projects? Are there other factors that should be taken into account?	ENA agrees that uncertainty is a key issue affecting the application of the ex-ante regulatory framework to major transmission projects. This uncertainty also has the potential to affect the timeliness of transmission investments (as changes in key assumptions can impact the outcome of investment planning assessments), and so needs to be taken into account in considering the effectiveness of the planning framework. ENA agrees with the key elements of that uncertainty identified by the AEMC but notes the following: • Uncertainty over future generator retirements, availability and technology costs is becoming less acute. Although uncertainty remains, different assumptions are captured within the ISP scenarios used for planning purposes, which are consulted on with a broad range of stakeholders; • Uncertainty around the costs of greenfield transmission investment in Australia is also reducing, with the progression of several ISP projects (Project EnergyConnect (PEC), HumeLink) as well as the development of other major transmission projects outside of the National Electricity Market (NEM), including Renewable Energy Zones (REZs) in NSW and Victoria and CopperString in Queensland. The Australian Energy Market Operator (AEMO) has also updated its database on transmission costs, through a process that has involved consultation with stakeholders; • Uncertainty over costs relating to the specific route of major transmission projects (which includes the extent of biodiversity offset costs required) will remain a key area of uncertainty, and can only be addressed by detailed analysis once the preferred investment option is identified. It is therefore important that both the planning framework and the ex-ante cost recovery framework are able to accommodate this uncertainty; and • Uncertainty surrounding both jurisdictional and federal government policies (eg, jurisdictional REZ policy, federal government policy in relation to new generation development) has also had a major impact on transmission planning and remains a key area of future potential uncertainty.
4. Do you consider that the current ex-ante incentive-based approach to regulation is appropriate for major transmission projects? Why? Are there opportunities to drive more efficient expenditure and operational outcomes?	ENA considers that an ex-ante incentive-based approach to regulation does remain appropriate for major transmission projects but that incremental adjustments to the existing framework could be made to ensure that it operates in the best interests of consumers. The staged Contingent Project Application (CPA) process for ISP projects that was introduced as part of the 'actionable ISP' changes to the National Electricity Rules (NER or Rules), and which forms part of the Australian Energy Regulator's

	(AER) Guidance Note on the Regulation of Actionable ISP Projects,[2] will help to address some of the issues relating to the impact of uncertainty on project costs. The staged CPA process allows TNSPs to obtain cost recovery for more detailed project planning and design works (including those relating to the specific project route), following the identification of the preferred option under the regulatory investment test for transmission (RIT-T) and prior to finalisation of the overall project cost estimate. This addresses cost uncertainty relating to route selection and greenfield investment, as it allows TNSPs to undertake the works necessary to estimate project costs more accurately. This in turn means that TNSPs do not have to build-in such a high risk allowance in relation to project costs at the time of their final CPA application, as key areas of uncertainty have been addressed through the works in the first stage. The staged CPA process is expected to be applied for the first time to HumeLink. ENA considers that the staged CPA process is a material improvement in the regulatory framework and will go a long way to addressing some of the risks associated with applying the ex-ante regulatory framework to major transmission projects. There are a number of other incremental changes that could be made to the ex-ante regulatory framework that would improve the balance between risks and project costs. TNSPs should not bear risks that are outside of their control. Even with the staged CPA process, the current regulatory framework is not resulting in an optimal allocation of risks ex-ante between TNSPs and consumers, with the consequence that consumers are bearing higher costs (through cost estimates that factor in the additional risk and/or the costs that contractors price to take on external risks they may not be best placed to manage), and TNSPs are facing a higher level of risk, which can result in commercial disincentives to invest. ENA encourages the AEMC to consider incremental changes such as: • Extending cost pass through arrangements for externally imposed costs (eg, biodiversity costs) to contingent projects, through allowing additional nominated cost pass-through events to be proposed as part of a CPA, as well as in the TNSP's revenue determination. The AER could then consider the appropriateness of treating uncertainty through a cost pass-through event, in the same way that it assesses the efficiency of self-insurance, insurance and cost pass-through in its normal regulatory determinations. Further, under the existing Rules, TNSPs would still need to demonstrate that they have taken actions to minimise these costs if the nominated pass-through event occurred and so incentives on TNSPs to minimise these costs would be maintained; and • Excluding major projects from the general NER ex-post review provisions (and in particular the calculation of the 'overspending requirement' in NER clause S6A.2.2A), with its replacement with a bespoke arrangement for major projects which would allow the AER observer status as the project progresses and major decision are

[2] AER, *Guidance Note - Regulation of actionable ISP projects*, March 2021.

	made. Such a bespoke arrangement could be modelled on that proposed by TransGrid for PEC,[3] and would build on the greater level of AER scrutiny that has already been a feature of TNSPs' CPA processes.
5. Do you agree that the Review should take forward this issue as a priority issue? If not, why?	The AEMC should progress this issue further in the review so that further incremental changes to the ex-ante framework can be considered. However, ENA is of the opinion that other issues are a higher priority for the review because: • Recent changes to the regulatory framework (ie, the introduction of the staged CPA approach) are expected to go a long way to addressing the issues identified by the AEMC; and • ENA does not consider that major reform to the current arrangements is necessary to address this issue. The introduction of contestability for major transmission projects would not address the current problems with the extent and allocation of external risks (as appears to be suggested in the AEMC's consultation paper): • The price offered by a contestable provider prior to the commencement of a project is akin to an ex-ante revenue allowance, determined upfront as an outcome of the contestability process. • A contestable provider would either need to structure its cost forecast to accommodate the risks it bears (in a similar manner to TNSPs under the current ex-ante framework), or the contract would be subject to later variations, raising the ultimate price paid by consumers over the life of the project. Currently AEMO as the Victorian transmission planner cannot take on any risk/liability, so risks for contestable projects in Victoria are either built into the contract cost or variations are passed to consumers. • It would be difficult to replicate the benefits of the new staged CPA framework under a contestable approach, in terms of a process that facilitates the activities necessary to more firmly estimate the overall cost of the project. • The degree of transparency as to how risks are priced by the contestable provider would also be substantially less than that afforded to the AER under the current CPA process – noting that for TransGrid's portion of PEC the AER was fully briefed on the contract award process, to which there were several independent observers.[4] For many major greenfield ISP projects, a major proportion of the costs are government costs, which are independent of who builds and owns the project. For example, for HumeLink around 28 per cent of the current cost estimate relates to government-imposed biodiversity costs (ie, $935m compared to the costs for lines and substations of $2.38 bn (around 80 per cent of which will be subject to competitive procurement)). Further, the introduction of contestability has broader implications for the effective delivery of major projects and the costs associated with those projects (discussed in response to Chapter 4 questions below). Recent experience in Victoria

[3] See TransGrid, *Project EnergyConnect | Contingent Project Application – Revised Capex Application,* 30 April 2021, p. 27.
[4] See TransGrid, *Project EnergyConnect | Contingent Project Application*, 29 June 2020, p. 16,

	for large greenfield projects has been that introducing contestability has a wide range of implications on communities and the ability to obtain social acceptance of projects.
Economic assessment of major transmission projects	

6. Are there opportunities to streamline the economic assessments of ISP and non-ISP projects without compromising their rigour? If so, how could the framework be streamlined?	ENA does not consider that there is a need to further streamline the economic assessment of ISP and non-ISP projects.
	
	The actionable ISP framework should be given the opportunity to work
	
	The amended planning Rules and associated AER guidelines (the 'actionable ISP' framework) have only been in place since July 2020 and should be given an opportunity to work.
	
	• The forthcoming 2022 ISP will be the first ISP prepared by AEMO under the full framework. The 2020 ISP was not developed under the new AER guidelines (and as a consequence was subject to less consultation and less rigour in the cost benefit assessment, as well as being based on outdated transmission costs).
	• Further, no actionable ISP project has yet been through the entirety of the new planning framework.
	  • HumeLink, VNI West and MarinusLink are currently going through the actionable ISP process but were begun under the previous framework.
	  • QNI minor and VNI minor were progressed under the old framework, prior to having the new AEMO feedback loop applied under the new Rules.
	  • PEC was progressed under the old framework.
	• The AER's guidance note on the regulation of actionable ISP projects (which covers procurement and project risks) was only finalised in March 2021.
	
	ENA considers that the 2022 ISP is likely to be a more robust basis for future RIT-Ts and AEMO's feedback loop assessment. The future operation of the actionable ISP arrangements will therefore be a better test of the new planning arrangements rather than the transitional experience over the last 12 months. ENA considers that the actionable ISP framework, including the role of the RIT-T, should be given an opportunity to function as intended and the arrangements reviewed in 2025 (as already allowed for under the NER).
	
	ENA recognises that there is a tension between the robustness and transparency of the economic assessment and the overall timeframe for investment delivery. However, ENA considers that the sheer size of the investments in the ISP befits the balance being weighted towards robustness. The extent of timing that could be saved from an amended, less

rigorous process can be measured in months, for assets that will be reflected in consumers' bills at least 50 years into the future.

The need to regularly update inputs and assumptions used in the economic assessment is an outworking of the uncertainties affecting major transmission projects (as identified by the AEMC and discussed above). These uncertainties are driven by changes in government policy, market conditions and other factors. The scenarios adopted in the ISP and RIT-T are one means of managing these uncertainties. However, there will inevitably be changes between ISPs.

The actionable ISP framework is likely to work best for RIT-Ts that are able to be progressed quickly following the ISP, or where the feedback loop aligns with the timing of a new ISP. This 'bunching' of assessments may be inevitable, and is not a signal that the planning arrangements are not appropriate.

The RIT-T plays a distinct role for ISP projects in the current framework

The RIT-T plays an important and distinct role in the actionable ISP framework, through promoting a much greater degree of transparency and rigour in the analysis owing to its focus on a particular project. Further, the RIT-T for major transmission projects:

- provides a discipline on AEMO and the ISP process, helping to ensure the robustness of the investment choice and the costs incurred by consumers;
- is able to consider some of the more complex benefit categories (ie, competition benefits, option value) and canvass non-network options (NNOs) in more detail than is feasible at the ISP level, where AEMO is optimising across all investments (see ENA's response to questions 13-15, below);
- considers all credible options that may meet the identified need (including NNO), whereas the ISP does not;
- enables a greater level of community engagement than is possible through the ISP, helping to build community understanding and social licence; and
- provides a more detailed and granular net present value (NPV) analysis for a specific project than the ISP.

Therefore, it is not apparent that a sufficiently rigorous assessment of large-scale projects would occur if the ISP itself was the only cost-benefit test undertaken.

Opportunities to streamline the current process:

In the context of the points raised above, ENA considers that the AEMC could clarify the following elements of the existing framework to enhance the framework's efficiency:

- confirming that RIT-T assessments are able to use the latest available information – eg, the draft Inputs, Assumptions and Scenarios Report (IASR) (as used in the MarinusLink Project Assessment Conclusions Report (PACR)) – in their analysis;
- giving careful consideration to the timing of feedback loop assessments to align with draft or final ISPs; and
- placing a timeframe around the feedback loop process, noting that the intention was not for this process to add an additional six months to the end-to-end process.

	These reforms would not necessitate additional analysis or add time to overall project delivery; rather they would ensure that assessments required under the existing framework make the best use of available data. This represents a sensible approach to managing uncertainty and streamlining cost-benefit assessments to the extent possible, without undermining their rigour.
7. Do you agree that the RIT-T has a clearer value-add in relation to non-ISP projects? If not, why?	ENA agrees that the RIT-T plays a crucial role as the primary cost-benefit assessment for non-ISP projects. The RIT-T is used to identify the potential for NNOs, and provides transparency and opportunities for stakeholders to engage. However, ENA's view is that the RIT-T also retains an important role in the assessment of major ISP projects (as discussed above in the response to question 6). The value-add of a RIT-T for major ISP projects is at least as significant as for non-ISP projects, given the scale and importance of ISP projects for consumers.
8. Do you agree that the Review should take forward this issue as a priority issue? If not, why?	ENA does not agree that this issue should be taken forward as a priority issue for the review. It is important that the new actionable ISP framework be given an opportunity to work. ENA therefore suggests remaining with the planned review of the new arrangements in 2025. Minor changes to existing arrangements could be made to address issues arising to date.
Benefits included in planning processes	
9. Are the benefits included in current planning processes sufficiently broad to capture the drivers of major transmission investment? Does the scale and pace of the NEM's energy transition necessitate inclusion of other classes of market benefits or wider economic benefits? If so, what kind of other classes of market benefits or wider economic benefits should be included?	ENA considers that the issues identified in previous reviews by the Productivity Commission, the (former) COAG Energy Council and the AEMC remain regarding the inclusion of broader economic benefits and the additional complexity that would bring. Further, although a number of submissions to the Energy Security Board (referenced in Appendix A of the consultation paper) expressed support for broadening the scope of the benefits test, the conceptual and pragmatic reasons for not widening the test[5] would need to be solved before the test could be broadened. Further, these difficulties would be exacerbated in the context of major ISP projects because these benefits would also need to be included in the ISP assessment, which considers optimisation across all major transmission investments. This would be complex, time intensive and likely to be subject to dispute. As a result, ENA is of the view that the consideration of wider economic benefits in this review does not meet the AEMC's 'effectiveness of implementation' criterion. However, ultimately, it is a matter for policy makers to determine if a wider economic benefits test is desired.
10. Are major transmission projects failing to satisfy economic assessments because certain	ENA has seen no evidence of major transmission projects failing to satisfy economic assessments because certain benefits are not able to be quantified.

[5] Productivity Commission, *Electricity Networks Regulatory Frameworks*, April 2013, pp. 647–8 and app D.

benefits (market or non-market) are not permitted to be quantified?	ENA notes that governments are able to make a contribution to ensure projects pass the RIT-T, which can include sizing projects bigger or earlier to meet state policy objectives, noting that the current scope of benefits assessment under the RIT-T under the Rules is effectively constrained by the NEO.
11. Are changes warranted to the manner in which carbon emissions inform transmission planning and regulatory processes?	This as an issue to which policymakers may wish to give further consideration. AEMO's ISP scenarios do already capture different assumptions about future emissions reduction levels. However, if policymakers consider that further reform is required to ensure that emissions reductions are valued appropriately in the ISP and RIT-T cost-benefit assessments, ENA considers this would be reasonably straightforward to implement through applying a valuation to the emission reductions associated with different options. The wholesale market modelling that underpins the current cost-benefit assessments already contains all of the information that would be needed to value the reduction in emissions as a separate, additional benefit category.
12. Do you agree that the Review should take forward this issue as a priority issue? If not, why?	ENA does not agree that this should be taken forward as a priority issue because: • The inclusion of broader benefits has been considered in previous review processes; and • It is not a key factor affecting the timely and efficient delivery of major transmission projects.
Guidance on hard to monetise benefits	
13. What classes of market benefits are hard to monetise? Is there a way that these benefits could be made easier to quantify?	In addition to the benefit categories identified by the AEMC, option value is a market benefit category which is complex to model and has not been explicitly quantified as part of the majority of ISP/RIT-T assessments to date (outside of its inclusion via scenario analysis). ENA does not consider that there is a way in which these benefits could be made easier to quantify, given the nature of how they arise. As the market develops further, these benefit categories may become more prevalent and material as part of the justification for ISP projects (and as the scope for dispatch cost benefits potentially diminishes). ENA therefore expects that these benefit categories will become a more frequent feature of both the ISP and RIT-T assessments. ENA also notes that to date these benefit categories have been calculated where they are material (eg, competition benefits in the recent TransGrid HumeLink PACR; option value for ElectraNet's Eyre Peninsula RIT-T). ENA does not agree that the overall end-to-end investment process would be materially shortened where these benefit categories are more frequently calculated as part of the ISP or RIT-T assessments, even where they are not considered material initially, due to the complexity and time required. ENA considers that the current approach, where these benefits are calculated at the point at which they are clearly going to be material to the choice of investment option, strikes the appropriate balance.
14. Would guidance on hard to monetise benefits improve the timeliness at which projects proceed through the regulatory process?	ENA does not consider that the provision of further guidance on hard to monetise benefit categories would improve the timeliness at which projects proceed through the regulatory process. Rather, additional guidance risks increasing the complexity (through restraining the choice of an appropriate and proportionate approach) and therefore adding to the time required to complete the process.

	Ancillary services benefits are likely to become more material as new technologies and new market arrangements for these services develop. As such, it may be expected that quantification of this benefit category may become more common going forward (particularly as other benefit categories, such as dispatch cost benefits, start to become less material). The modelling of ancillary service benefits is likely to be based on an expansion of the existing wholesale market modelling approaches, and ENA would expect developers of the wholesale market models currently adopted to be expanding their modelling into ancillary services. Further guidance on competition benefits and option value is unnecessary, as AER guidance and established precedent in both of these areas already exists. ENA notes that overall timeliness would be impacted if AEMO were to incorporate all of these benefits in the ISP assessment (which may not be practically feasible). AEMO has not quantified these benefits in its ISP assessment to date. As stated, the RIT-T can provide value in identifying additional benefits for a specific investment, as demonstrated most recently by the assessment of competition benefits for HumeLink.
15. Do you agree that the Review should take forward this issue as a priority issue? If not, why?	For the reasons identified in response to question 14, ENA does not consider that this should be a priority issue for the review.
Market versus consumer benefits test	
16. Do you consider that there are certain changes that have occurred in the energy sector that warrant reconsidering the merits of a market versus consumer benefits test? If yes, what are these changes and why do they require revisiting this issue?	ENA agrees with the AEMC that a market benefits test remains fit-for-purpose.
17. Do you agree that the Review should take forward this issue as a priority issue? If not, why?	ENA considers that this is not a priority issue.
Treatment of non-network options	
18. Do you agree that there are barriers for non-network options in economic assessments? If so, do you agree with the barriers identified? Are there any further barriers? How should these barriers be addressed?	ENA does not agree that TNSPs have a bias against NNOs in their economic assessments. As the AEMC acknowledges, there is no evidence that TNSPs are biased towards accumulating capex. ENA considers that the RIT-T plays a crucial role in identifying NNOs. The RIT-T process allows NNO proponents to engage and put forward their options. The fact that the ISP has not replicated or replaced this process reinforces the value of the RIT-T in this area.

	NNO have been considered and implemented by TNSPs on several occasions, for both ISP and non-ISP projects, including most recently: • In April 2020 AEMO issued Powerlink with a fault level shortfall notification for the Ross node in far north Queensland. Powerlink subsequently commenced an expression of interest process for both short and long-term solutions seeking offers for non-network solutions to address the fault level shortfall. Powerlink subsequently entered into a short-term agreement with CleanCo Queensland to utilise CleanCo's hydro generation assets to provide system strength services. Powerlink also entered into an agreement with Daydream, Hamilton, Hayman and Whitsunday Solar Farms in north Queensland to validate the expected positive benefits of inverter tuning during the daytime. Powerlink also worked with Mt Emerald Wind Farm and AEMO on changes to control settings. Based on AEMO's most recent assessment, the minimum fault level requirement at Ross is being met with no shortfall identified. NNO were also thoroughly explored as part of the PEC RIT-T, including via the commissioning of a stand-alone consultant report on the potential for NNO. The AER's recent change in guidance on treatment of NNO has raised a key barrier for non-network options in economic assessments. The AER now requires the full costs of NNO to be included in the cost-benefit assessment, even where the NNO proponent expects to recover part of those costs through revenues from other market participants rather than through proposed network support costs.[6] TransGrid's Broken Hill PADR provides a real-world example of the potential impact of this change in approach. ENA notes that the change in the AER's guidance arose out of the development of the AER's Guidelines to make the ISP actionable, but was not consulted on explicitly. ENA suggests that the latest AER guidance be further considered and consulted on as part of this review, given that it will have a material effect on the assessment of NNOs in the ISP and RIT-Ts (as well as RIT-Ds) and can potentially represent a significant barrier to the development of NNOs.
19. Do you agree that the Review should take forward this issue as a priority issue? If not, why?	ENA supports the recent change in the AER's guidance on the treatment of NNOs being considered as part of this review.

[6] AER, *Final Decision – Guidelines to make the Integrated System Plan actionable*, August 2020, p. 26.

CHAPTER 4 – Issues in the regulatory framework and processes for transmission investment, financing and delivery

Balancing TNSP's exclusive right to build and own transmission projects	
20. Are there features of financing infrastructure projects used in other sectors that should be considered in the context of the efficient and timely delivery of major transmission projects?	ENA considers that financing arrangements for infrastructure projects used in other sectors are likely to be of limited assistance in revealing efficient financing arrangements for major electricity transmission investments. There is unlikely to be a 'silver bullet' found in other sectors. One of the key differences with electricity transmission is the importance of the integration of major projects with the overall operation and management of the electricity system, to provide reliability and system security. There are many unsuccessful examples of public/private partnerships in other sectors, where investment has either been subject to extensive delays and/or unexpected costs.
21. Should the delivery of transmission projects be made contestable? If not, why?	The case has not been made that moving to the contestable provision of transmission projects is likely to deliver benefits for consumers. ENA considers that introducing contestability is not the most effective, appropriate or proportionate approach to addressing the AEMC's concern in relation to the lack of obligation on TNSPs to invest under the current framework. ENA's general and specific concerns are outlined below. In general: • **Consumer costs may not be lower under a contestable approach**: There is a lack of evidence, or reason to expect, that a contestable framework would result in lower prices for consumers compared to the ex-ante regulatory framework. Rather, there is a high likelihood of costs increasing, as bidders would not be restricted to seeking a regulatory return. • **Underlying uncertainty will remain and be priced into contestable bids**: Contestability would not solve the underlying uncertainties that impact the timely and efficient delivery of major transmission projects. Under a contestable framework, risks are still present for tenderers. Contestability introduces competition in terms of the pricing of that uncertainty, which would continue to be borne by consumers (see response to question 5). The uncertainty relating to major projects – which may provide a disincentive for TNSPs to invest because of the risks they currently bear– can be addressed more effectively through modifications to the ex-ante framework. These modifications are discussed in ENA's response to question 4, above, and question 22, below. In relation to the potential benefits of contestability, the key elements of regulated major projects are currently put out to commercial tender to achieve cost efficiencies. Further, under the current regulated framework there is a high degree of transparency on areas such as degree of risk transfer and tender evaluation, through the AER's involvement in the CPA process. The AER's March 2021 Guidance Note also sets out requirements on TNSPs to seek out and incentivise innovation

	in the design of the solution (and therefore potential cost savings) through the early stages of its tendering process, by tendering a functional specification rather than full design solution.[7] ENA also has a number of specific concerns regarding the operation of a contestable framework for major transmission projects: **(a) Transparency and accountability** There would need to be clear separation of the contestable assets from the existing transmission network such that the responsibility for individual assets and the overall network are clear for consumers. This point is discussed in the attached FarrierSwier report (pages 16 and 17). When it comes to major projects that will be reflected in network charges for several decades, it is crucial that project costs are transparent to maintain accountability. Moving to a contestable framework is likely to reduce this transparency because responsibility for transmission network costs would be divided and parties may not be forced to reveal their outturn costs in the same way as under a regulated model. Under the current Victorian arrangements (which ENA notes has not been applied to major greenfield projects to date): • There is no feedback loop confirmation by AEMO that at the outturn tender cost the project is still on the optimal development path; • There is no equivalent CPA process and review by the AER of whether the costs are efficient or opportunity for stakeholder consultation; and • Final outturn costs (including contract variations) have not been transparent to date and would not be subject to the threat of ex-post review in the same way that regulated investments are. Further challenges under a contestable framework include: • Ensuring that consumers' ability to engage with project proponents is not lessened due to lack of transparency and regulatory oversight; and • Ensuring clarity around the responsibility for ongoing operation and maintenance of different parts of the transmission network. **(b) Rigour in economic assessments** A contestable model would place sole reliance on AEMO, as both the central planner and the presumptive investment procurer (and would forgo the TNSP RIT-T element of the process). This would need to be accompanied by a strong

[7] AER *Guidance Note - Regulation of actionable ISP projects*, 31 March 2021, p.13.

	accountability framework, so that consumers could have confidence in the efficiency of the investment and the outturn costs. Substantial time and effort to implement is a likely consequence. ISP assessments occur well in advance of the actual investment occurring and at a less granular level than the RIT-T. The ISP (centralised assessment) would play a more significant role under a contestable framework. Given the scale and significance of the investments, ENA has significant concerns over reducing the rigour of the economic assessments in this way. **(c) Reliability and security concerns** Introducing contestability may have significant implications for the reliability and security of the network. If different parties can own different transmission assets within one jurisdiction, a lack of accountability for the overall transmission system may arise. This issue is elaborated on in the attached FarrierSwier report, including at page 12 where the report poses the question: "Will a contestable provider who is only responsible for just certain parts of the network have incentives to minimise the costs of those network elements at the expense of total system costs or long-term security and reliability?" However, ENA does not consider that accountability for the operation of these assets should be passed through to the regulated TNSP, as that would result in unacceptable risk for the TSNP and a lack of accountability for the contestable provider. **(d) Level of competition** It is likely that for very large projects, only one or two high quality bidders would enter a competitive tender as noted in the recent Grattan Institute report, Megabang for megabucks.[8] This level of competition may undermine the rationale that contestability could be used to drive down efficient costs. **(e) Other practical concerns** It is unclear to ENA how a contestable framework would interact with staging processes (ie, the staged CPA process) that are proving useful for reducing uncertainty in the delivery of major transmission projects. If the incumbent TNSP was required to undertake the detailed planning works currently envisaged to be supported by the first stage of a CPA process, in order to arrive at a more detailed route specification, it would appear that this TNSP could have an advantage in a subsequent competitive process. Further, if contestable delivery was introduced at this point, this could disrupt the continuity in consumer engagement between the planning and delivery processes, potentially undermining attempts to build social licence for the development. Recent experience in Victoria for large greenfield projects is that introducing contestability has a wide range of implications on communities and the ability to obtain and sustain social acceptance of projects, and that opportunities for consumer engagement are lower.

[8] Grattan Institute, *Megabang for megabucks – Driving a harder bargain on megaprojects,* May 2021, ch. 3 [https://grattan.edu.au/report/megabang-for-megabucks/].

	In contrast, if the project is put out to tender without the detailed planning works having been undertaken, the risks for contracting parties can also be higher (and would get priced in), as they would essentially inherit a project that has no defined route and no land tenure in place prior to contracting. This goes against the project management principle of reducing risk before signing major construction contracts. If the projects were contestable following the ISP, then they may potentially be reliant on preparatory reports and vendors may price in higher risk premiums. In addition to the points discussed above, the attached Farrier Swier report provides a useful overview of issues that need to be considered in deciding whether to move to a contestable framework. This includes costs, benefits, and a number of practical considerations. Overall, ENA is of the view that the introduction of contestability would not be supported by the AEMC's 'effectiveness of implementation' evaluation criterion.
22. What options, other than changes to the right of TNSPs to provide regulated transmission assets, could be considered to ensure timely investment and delivery of major transmission projects?	ENA recognises the AEMC's concerns around the right but lack of obligation for TNSPs to invest in major transmission infrastructure. However, there are more effective, proportionate and implementable options that should be considered to ensure the delivery of major transmission assets. There can be a misalignment between the long-term interests of consumers and the commercial considerations of investors where TNSPs are being asked to bear more risk than they are being compensated for and where cost recovery cashflows raise financeability concerns. Some of the recent modification to the regulatory framework (in particular the introduction of the staged CPA process) will go a long way to addressing the concerns in relation to risk. Addressing these underlying causes of misalignment would be the most effective means of lowering the risk of non-investment under the current framework. This could be done by: • amending the regulatory framework to more appropriately allocate external risks (as discussed above in response to question 4). • setting the Rate of Return at an appropriate level and introducing a financeability check, which would also ensure lower costs to consumers (through keeping the required return on debt low), including by representing a transparent regulatory commitment to the RAB-based benchmark cost recovery model. ENA also notes that TNSPs have committed to investment in major ISP projects (notably PEC), even ahead of the latest changes in the regulatory framework, and have actively sought solutions to enable such investment (including in the case of PEC the agreement of concessional financing from the Clean Energy Finance Corporation (CEFC)). ENA therefore considers that the additional measures outlined above would likely be sufficient to allay any continued concerns about TNSPs not having an obligation to invest under the current framework. Notwithstanding, it is also important to recognise that TNSPs do already have obligations to invest in some cases, notably where they face an obligation under the NER or a jurisdictional instrument (such as the requirement to meet voltage standards or to supply anticipated load) which requires investment. Such investments are the subject of 'reliability corrective action' RIT-Ts under the current framework. ENA notes that the ability for jurisdictions to impose obligations on the regulated TNSPs, including obligations to undertake specific investments, already exists in some jurisdictions' legislation (including NSW and Victoria). This provides a potential

	backstop if a TNSP declines to invest in an actionable ISP project. Using this type of backstop arrangement, particularly where any direction is made in consultation with AEMO to lower sovereign risk concerns, would be more appropriate than introducing contestability or a more wide-ranging obligation on TNSPs to invest on the completion of the planning process. Further, the existence of these statutory provisions, and the possibility that other jurisdictions could enact similar provisions, are likely to incentivise TNSPs to invest in major projects. ENA also notes that it is unclear that the option of introducing an obligation to invest in all cases would be beneficial for consumers. A reluctance by TNSPs to invest in some circumstances may be for valid reasons from a consumer perspective, including where it arises from concerns with the assumptions underpinning the economic assessment. ENA considers that, while they should be an important trigger for assessment about the appropriateness of regulatory settings, ISP investments not proceeding will not always exclusively indicate a problem with the regulatory framework. The current planning process, and in particular the separate RIT-T evaluation, enables a party with 'skin in the game' (ie, the incumbent TNSP) to fully assess the benefits of the investment. This is beneficial, from a consumer perspective, as it provides further transparency and support for a robust assessment.
23. Do you agree that the Review should take forward this issue as a priority issue? If not, why?	ENA understands that this is an area of key concern for the AEMC and stakeholders that will need to be addressed by the review. Given that TNSPs already tender a large portion of ISP project costs, ENA suggest evidence of long-term benefits for consumers should be provided to warrant the complexity of adopting contestability, and that careful consideration should be given to the details of the arrangement, as these details will affect the extent of risk and costs borne by consumers. It would also be important to consider carefully which investments would be potentially subject to contestability. ENA notes that in some overseas jurisdictions, very limited investment occurs as contestable investment.
Treatment of 'early works'	
24. Do stakeholders seek further clarity on the meaning of preparatory activities and early works?	ENA considers that further clarity would be helpful in distinguishing between the concepts of 'preparatory activities' and 'early works', and the related cost recovery provisions in relation to each. The differences between preparatory activities, which may be required by AEMO as part of the ISP for future ISP projects, and early works, which may be required either to enable a more accurate cost estimate for a preferred project once it completes the planning process, or to complete certain activities 'early' in order to compress the overall investment timeframe, is essentially one of magnitude and the extent to which the activities are project-specific. Cost recovery for preparatory activities under the current framework is through the inclusion of those planning activities within the TNSP's opex forecast. ENA notes that the extent of the required preparatory activities can be difficult to forecast, as they are dependent on activities required as part of future ISPs. It may therefore be more appropriate for the cost of these preparatory activities to be treated as a cost pass-through, triggered by publication of the final ISP, and not subject to a materiality threshold. In contrast, early works relate to more material planning activities related to specific ISP projects (including actionable ISP projects) and would generally be capitalised and recovered via the first stage of the staged CPA process. However, cost recovery for early works in situations where the option does not proceed and there is no CPA need to be further considered

	(see below). This could include stakeholder engagement costs which are incurred in order to start to build social licence for the project, with the aim of reducing the subsequent investment timeframe.

25. Should the Commission consider how the costs of early works can be recovered?	ENA considers that there does need to be further consideration given to how early works costs can be recovered. ENA notes that to date, the cost of early works for some ISP projects has needed to be covered through government underwriting agreements, outside of the regulatory framework.
	ENA notes that:
	• the new staged CPA arrangement should better enable cost recovery for early works activities for major transmission projects going forward. However, cost recovery through the staged approach can only occur after a RIT-T is completed and the AEMO feedback loop has been satisfied.
	• where these activities are either undertaken ahead of the CPA process (in order to shorten the overall investment timeframe), or where they are required in order to adequately estimate the costs of the option in the RIT-T, then it is possible that the option does not proceed to the CPA stage, and therefore under the current framework cost recovery for these early works costs are uncertain. For example, it is not clear how the cost of early works can be recovered:
	  • if a TNSP is required to undertake early works but the project does not proceed (for example, due to an update to the ISP or the project failing the feedback loop);
	  • if a non-network solution is ultimately selected in a RIT-T.
	It may be appropriate to allow a TNSP to lodge a CPA for undertaking early works ahead of completion of a RIT-T, where this is recommended by the ISP.
	ENA also notes that if a contestable framework were introduced, there would need to be cost recovery arrangements for early works undertaken by the incumbent TNSP, where these activities were still required in order to properly scope the works to be tendered. As noted above, the lack of continuity where early works are undertaken by a different party to the one that will own the asset in the long term may lead to added complexity and erode social licence, to the disadvantage of consumers.

26. Do you agree that the Review should take forward this issue as a priority issue? If not, why?	ENA agrees that the review should take this issue forward as a priority.
Processes for jurisdictional environmental and planning approval	
27. Would additional clarity on cost recovery arrangements for preparatory activities or early work improve a TNSP's ability to meet jurisdictional requirements in a timely manner?	ENA agrees that a lack of clarity for cost recovery for preparatory activities and early works linked to environmental and jurisdictional approvals is likely to be a source of investment delays and that additional clarity on cost recovery would likely improve the timeliness of the overall investment process.

28. Do jurisdictional planning and environmental requirement intersect with the national transmission planning and investment frameworks in ways that are not discussed above and may require further consideration?	Environmental planning issues are a key source of cost and route uncertainty that impacts the regulatory approval process (as noted in ENA's response to questions 3 and 4 above). The relative timing of these two processes – with the environmental approvals inevitably lagging behind the regulatory considerations but potentially impacting the cost outcomes – needs to be recognised and considered within the overall investment framework. The potential effects of environmental approvals planning and investment frameworks are amplified by: • the large and uncertain amounts of costs involved; • potential for duplication of assessment and approval processes at the jurisdictional and federal levels; and • the role that political issues can play in this area.
29. Do you agree that the Review should take forward this issue as a priority issue? If not, why?	ENA considers that the processes for jurisdictional and environmental approval should be taken forward as a priority issue for the review. Community engagement and acceptance are key to ensuring the timely delivery of major projects, and play a major role in obtaining jurisdictional and environmental planning approval. Improvements in this area, including consideration of compensation and how to build social licence, may ultimately deliver a greater impact on investment timeliness than making further, significant changes in the investment planning framework.

OTHER COMMENTS

30. Please provide any further comment relating to issues discussed in the chapters 1-4 of the consultation paper.	ENA encourages the AEMC to consider the interactions between elements of this review. It is difficult to see a world where improved investment frameworks, fit-for-purpose regulatory incentives, better environmental planning, efficient early works and contestability are all progressed together (or are all required). Contestability could undermine progression in the other areas and seems to be an extreme (and potentially ineffective) solution to a problem that would not exist should the other incremental investment framework improvements be made.
31. Please discuss any further issues the Commission should take forward in this review in relation to topics covered in chapters 1-4 of the consultation paper.	The AEMC states in the consultation paper that it does not intend to consider financeability issues in relation to regulatory transmission investments as part of its review, as it considers that this issue is more appropriately addressed through the AER's 2022 Rate of Return Instrument (RORI) review. ENA encourages the AEMC to reconsider this position and to include financeability issues within the scope of its review. As explained above, finanaceability issues are one source of the potential for misalignment between the long-term interests of consumers and the commercial considerations of investors. The financeability issue stems from structural constraints in the National Electricity Law and NER, which are not able to be addressed by the AER through its RORI review. As an example, the AER faces a legally binding constraint to establish a *single* rate of return applicable to all electricity transmission capital investments, comprising of either mature network assets, or potential new major greenfields-type investments (See National Electricity Law s.18J(2)(a)). In these circumstances, a reference of the issue in its entirety back to the AER will not overcome or recognise this constraint. ENA notes that:

	• Financeability is relevant to the underlying uncertainty affecting the decision to invest in major transmission assets, and the scale of the investment required, whether they be regulated or contestable investments. • Large transmission investments are often a significant part of a network's existing RAB, which brings into focus the role of financeability. The $290m in concessional CEFC financing required for PEC demonstrates that financeability issues can and are occurring in practice. • Regulators in other jurisdictions (Ofwat and Ofgem in the United Kingdom, and the Independent Pricing and Regulatory Tribunal and the Essential Services Commission (Victoria) in Australia) have implemented financeability tests as safeguards against conditions that may result in underinvestment and potentially detrimental consumer outcomes. ENA agrees that there are sound considerations which would lead to the AER usefully enhancing its consideration of financeability in future Rate of Return Instrument reviews, to ensure the determined rate of return methodology is internally consistent and appropriate. This should proceed, but is not a substitute for addressing specific additional challenging issues of financeability that arise in relation to major ISP investments under current regulatory settings.

Template for Material change in network infrastructure project costs rule change request

CHAPTER 5 – Material change in network infrastructure project costs rule change request

Who should decide whether the RIT-T must be reapplied?[9]	
32. Should this decision remain the responsibility of the proponent or should it be a matter for the AER? Why?	ENA considers that the proponent should retain primary responsibility to decide whether the regulatory investment tests for transmission and distribution (RIT) should be reapplied because: • NSPs are best placed to judge when a change in circumstance may lead to a different ranking in the RIT; and • issues regarding uncertainty and timeliness for major transmission projects, discussed in ENA's response to questions 4 and 6 above, may be exacerbated by uncertainty over whether and how often the AER may direct a TNSP to reapply the RIT-T. Further, the actionable ISP framework already includes the following mechanisms to address the implications on the economic assessment of material changes in costs for ISP projects: • the application of the feedback loop ahead of the CPA stage is to confirm that any increase in costs does not change the project's status as being on the optimal development path; • any material change in circumstance more generally (such as a new government policy) would be reflected in an ISP update, which would identify whether the ISP project (if not considered committed) is still on the optimal development path; and • the AER guidance note on the regulation of actionable ISP projects specifically provides for consultation between the PACR and CPA to cater for scope changes in the case of route adjustments.[10] In the case of non-ISP projects that are subject to a CPA, the AER may already ask the proponent to confirm that there has been no material change in the costs and benefits of the project at the CPA stage.

[9] Although the AEMC's submission template poses the question 'who should decide whether the RIT-T must be applied', question 11(1) in the consultation paper, and the discussion in sections 5.1 to 5.4.1 of the paper which precede question 11(1), relates to the regulatory investment tests for transmission (RIT-T) and for distribution (RIT-D). References in ENA's submission to 'RIT' are references to the tests for transmission and distribution.

[10] AER, *Guidance note – Regulation of actionable ISP projects*, p.5.

33. If the decision remains with the proponent, should the AER have the right to test that opinion?	Yes. ENA considers that a reasonable safeguard for consumers would be for the AER to be able to ask the NSP (for both transmission and distribution) to justify its view that there has not been a material change in circumstance. The NSP could provide such justification by drawing on its earlier NPV assessment or by updating the assessment to demonstrate that the option rankings do not change. ENA notes that, in effect, this was the approach that was applied to PEC, where the AER asked ElectraNet to confirm that there had been no material change in circumstance. If the AER was not satisfied with an NSP's justification, it could direct the NSP to redo and consult on a specific aspect of the RIT that is the source of concern for the AER. Taking this approach would achieve an appropriate balance in ensuring the timeliness of the regulatory process while maintaining its rigour. ENA considers that requiring an NSP to redo the entire RIT process would represent an overly rigorous approach without clear benefits to consumers for the additional time taken. ENA also questions the value to consumers of applying this approach to projects which are included in a regulatory determination, and suggests it may be appropriate to limit the approach to contingent projects.
Cost thresholds	
34. Should the NER include a requirement to reapply the RIT, or update analysis, when costs increase above specified thresholds? If so, do you have a view as to what those thresholds should be?	ENA considers that the use of thresholds in this circumstance is unnecessary and contradicts other aims of the AEMC's review. RITs already include sensitivities around the impact on the option ranking if there is a change in project costs. The CPA process specifically addresses the impact of cost increases, either through the AEMO feedback loop provision or the non-ISP CPA justification for the project. Requiring the RIT-T to be re-run for cost increases above a specified threshold would be an additional and duplicative step targeting the same issue, which would further delay investment. This is in contrast to the aims of the review to ensure the timely and efficient delivery of major transmission projects. Further, AEMO also has an obligation under the NER to consider whether any change in circumstance is material and could affect the ISP optimal development path.
35. Do you consider this requirement should apply to all RIT projects or only those above a particular cost threshold/s? If so, do you have a view as to what the threshold/s should be?	ENA agrees with the AEMC that the thresholds proposed in the rule change request are too low and do not reflect the nature of cost estimates at the RIT-T or CPA stage. Further, a single approach to all RIT-T projects is unlikely to be appropriate given the different circumstances surrounding different types and sizes of projects to which a RIT-T is applied. If a threshold were to be imposed, it should: • Only apply to major ISP projects above a certain size, with a process adopted to identify the appropriate threshold; and • Only apply to cost changes that occur prior to major contracts being agreed.
36. Do you have any views regarding the suggested alternative "decision rule" approach?	ENA considers that the proposed 'decision rule' approach is similar to the threshold analysis typically undertaken in a RIT and would be a more appropriate way to consider the application of a threshold.

	ENA agrees that such a rule could also be extended to the identification of other factors (i.e. those subject to substantial uncertainty and material to the outcome for that particular RIT-T), such as changes in particular market benefit categories. However, the inclusion of a decision rule should only be contemplated for investments that meet the major project threshold. Extending the same approach to distribution and to lower cost transmission investments appears unreasonable given the vastly different nature of the issues faced, including the relative significance of the ISP and CPA processes compared to investments included in the regulatory reset.
37. Should updated project cost data be provided to AEMO to help improve the accuracy of the ISP?	ENA supports updated data being provided to AEMO in relation to major transmission projects, to help improve the accuracy of the ISP.
38. Do you have any other suggestions regarding alternative ways to manage cost increases?	The new staged CPA process provides a useful mechanism, with oversight from the AER, to identify the cause of cost increases for major transmission projects.
Requirements when reapplying the RIT	
39. Should the requirement to reapply the RIT be more targeted?	Yes. ENA supports the AEMC's proposals for a more targeted approach. As discussed in ENA's response to question 33 above, this is likely to achieve a more appropriate balance between timeliness and rigour in the regulatory process.
40. Should any additional analysis and modelling that is required to be undertaken be published and subject to public consultation?	Yes, ENA supports transparency in the regulatory process and the opportunity for stakeholders to engage in the process.
Trigger to reapply the RIT[11]	
41. Do you have any views as to how the requirement to reapply the RIT should be given effect, including for contingent and non-contingent projects?	If a requirement is imposed, ENA considers that it should not apply to non-contingent projects. Given the cost of the RIT-T as a proportion of total project costs, any requirement is only likely to benefit consumers in the case of major transmission projects. Refer to question 33 for ENA's suggested approach in relation to contingent projects.
42. Should there be a cut-off point (e.g. once the AER approves the CPA, or once construction	ENA considers that a cut-off point is appropriate and that the point at which the AER approves the CPA would be the most sensible choice.

[11] Although questions 41 to 43 in the AEMC's submission template seek comment on triggers to 'reapply the RIT', section 5.4.4 of the consultation paper is titled 'Trigger to reapply the RIT-T'.

commences) beyond which any requirement to update analysis cannot be triggered? If so, what would be an appropriate cut-off point?	Further, any requirements to update the analysis should only occur prior to major contracts being entered into for project delivery.
43. Should there be a limit on how many times RIT analysis must be updated?	ENA does not consider that there needs to be an explicit limit on the number of times the RIT-T analysis may be updated. Rather, it is important to clearly restrict the requirement to re-do the RIT-T analysis to material projects (i.e. ones to which a CPA applies) and to have a clear cut-off point (see responses to questions 41 and 42).
Should RIT cost estimates be more rigorous?	
44. Do you consider that the current level of rigour used for RIT cost estimates is suitable? If not, what level of rigour is appropriate? In particular, would it be appropriate to require an AACE 2 estimate (i.e. a detailed feasibility study) for each credible option?	ENA considers that the level of cost estimation required at the RIT stage should remain a class 4 estimate, in line with AEMO's approach in the ISP. ENA does not consider that the additional costs to obtain more accurate cost estimates is warranted or practical at the RIT stage and considers that the current level of rigour is fit-for-purpose. Using class 2 estimates to assess all credible options would be a costly exercise and is unlikely to provide commensurate benefits for consumers. For major projects in particular, providing cost estimates at a greater degree of accuracy at the RIT-T stage would be costly and would require early works to be undertaken on each of the options being considered, such as detailed route selection and procurement processes, which is clearly impractical.
45. If more detailed cost estimates are required at the RIT stage, should this apply to all RIT projects, or only to larger projects? If so, which projects should be subject to this requirement?	If this requirement is to apply, ENA considers that it should only apply to major ISP projects above a substantive threshold, with a transparent process to determine that threshold on the basis of costs and benefits.
46. Do you have any other suggestions to address the issues raised in the rule change request?	ENA does not have any additional issues to raise.

OTHER COMMENTS

47. Please provide any further comments on this chapter.	ENA does not have any additional comments.