TRANSMISSION PLANNING AND INVESTMENT REVIEW & MATERIAL CHANGE IN NETWORK INFRASTRUCTURE PROJECT COSTS RULE CHANGE REQUEST

PUBLIC FORUM

02 SEPTEMBER 2021

AEMC

Agenda

1.	Purpose of today's presentation
2.	Opening remarks
3.	Overview of the Review
4.	Issues canvassed in the consultation paper ○ Planning issues ○ Investment and delivery issues
5.	Questions
6.	Material change in network infrastructure project costs rule change
7.	Questions
8.	Next steps
9.	Closing remarks

Purpose of today's presentation

Inform the discussion on the issues affecting the timely and efficient delivery of major transmission investments

AEMC staff will provide an overview of the relevant issues identified in the consultation paper and answer questions

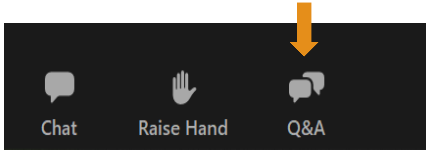
Forum participants are invited to ask questions

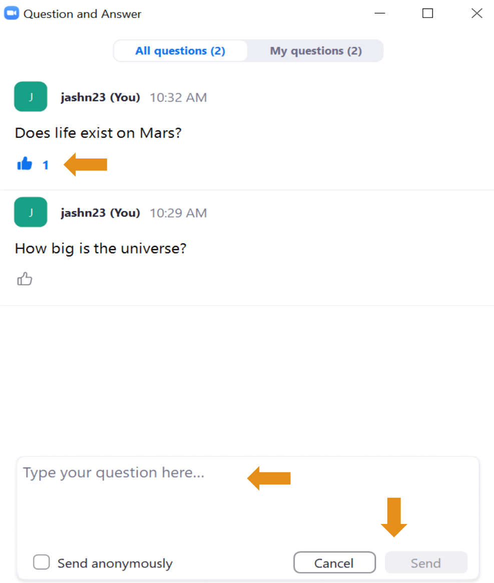
Housekeeping

- All participants are currently in 'listen-only' mode
    - Please stay on mute during presentations
- Presentations from today will be posted on our website after the webinar
- Please engage respectfully

Zoom Q&A function

- Q&A function is open throughout the webinar
  - Use the Q&A button on the bottom of your screen
- 'Upvoting' function
  - We will try to answer all questions, but will prioritise questions with most 'upvotes' first
- 'Dismissed' queue
  - This is a Zoom term
  - We will move questions here if they are duplicates





Asking questions

- Questions will be answered at dedicated Q&A sessions
- Please keep questions on topic and avoid making comments – we have a large audience and limited time
- When asking questions, please indicate which presenter you are directing the question to
- If requested by moderator please switch your mic or mic/video on during the Q&A session to further explain your question. Moderators won’t switch your mic/video on unless you specifically request it.

OPENING REMARKS

Charles Popple – Commissioner

OVERVIEW OF THE REVIEW

Danielle Beinart – Director

Why the Review is needed?

- The Review was prompted by issues raised as part of the *Financeability of ISP projects* rule change requests and also work carried out by the AER under the *Regulation of large transmission projects review.*
- Commonwealth and State Governments have also expressed concern that current frameworks may not support the timely and efficient delivery of major transmission projects and are eager to find and implement solutions.
- The purpose of the Review is to determine:
    - whether current regulatory frameworks optimise benefits to consumers through the timely and efficient delivery of major transmission projects (including Integrated System Plan (ISP) projects), and
    - whether changes are required to improve and support the timeliness and efficiency of transmission project delivery.
- Concurrent with the Review, the Commission is considering a rule change request from a number of generators and consumer groups concerning the requirement to reapply the RIT when there has been a material increase in project costs following completion of the RIT. Consultation on this has been initiated via the consultation paper for the Review.

AUSTRALIAN ENERGY REGULATOR

Companies Energy Energy security

Victoria sidesteps slow reforms to boost transmission

Angela Macdonald-Smith
Senior resources writer
Feb 18, 2020 – 2.46pm
Save Share

Energy users have voiced alarm at the Victorian government's move to push ahead unilaterally to boost transmission and storage to shore up its power grid, saying consumers will pay through higher prices and increased risks.

Lily D'Ambrosio, Minister for Energy, the Environment and Climate Change, said on Tuesday the government would amend its state electricity act to give Victoria the power to unlock renewable energy projects and improve reliability of supply.

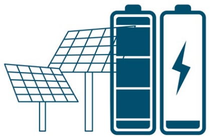
The move means Victoria would go ahead with projects such as the upgrade to the power cable connecting Victoria with NSW without going through the

Scope of the Review

The Review will determine whether changes are required to the existing **network planning and investment regulatory frameworks** that underpin the delivery of major transmission projects

The Review will consider:

- whether components of the transmission planning and pre-delivery framework meet their defined purposes
- whether there are opportunities to streamline the planning and pre-delivery process
- the suitability of the national planning assessment process.



The Review will consider:

- whether the transmission investment framework and delivery processes provide appropriate financial incentives with respect to the funding and delivery of major transmission projects
- the opportunity for changes to support the efficient and timely delivery of projects.

The consultation paper identifies several issues for consideration across the planning and investment frameworks for major transmission projects

Transmission planning issues

- The intrinsic uncertainty of major discrete projects challenges the existing ex-ante incentive-based framework.
- Opportunities to streamline the economic assessment of major transmission projects.
- Treatment of benefits in transmission planning:
    - Are the benefits included in the current planning process sufficiently broad to capture the drivers of major transmission investment?
    - Is guidance on hard to monetise benefits warranted due to a disconnect between what is required under the Rules and feasible in practice?
- Unequal treatment of network and non-network options under the RIT-T.

Transmission investment and delivery issues

- Risk that a TNSP’s exclusive right to build and own transmission projects but no corresponding obligation to invest may lead to major projects not proceeding.
- Potential impacts of different factors during the project planning and delivery stages:
    - Treatment of preparatory activities and cost recovery arrangements for early works.
    - Jurisdictional environmental and planning processes.

The Review will follow a staged approach

Stage 1 will focus on identifying issues with the frameworks for planning, funding and delivering major transmission projects.

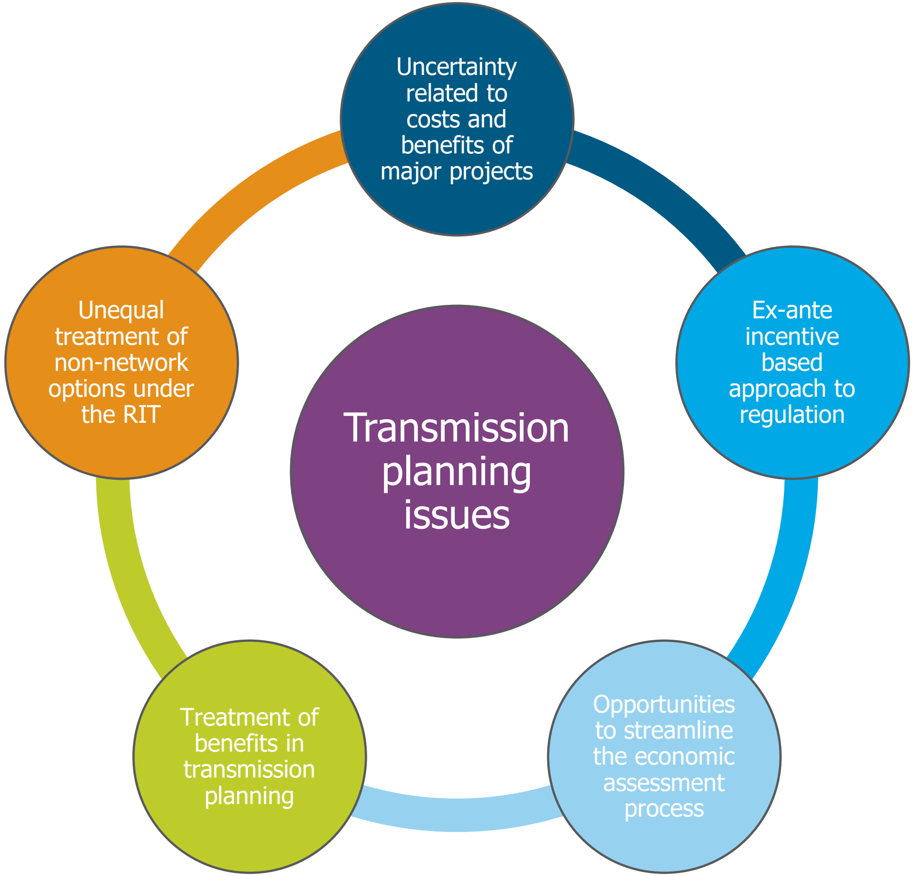
The consultation process for Stage 1 will request stakeholder feedback on identified and additional issues, the prioritisation of issues, and the rule change request.

Stage 2 will focus on identifying and developing solutions to address the issues identified in Stage 1. Consideration will be given to extending the statutory timeframe for publishing the draft determination on the rule change request in order to align with the Review.

PLANNING ISSUES EXPLORED IN THE CONSULTATION PAPER

Martina McCowan– Senior Adviser

Areas for consultation relating to the transmission planning process



What is driving the increase in uncertainty of major projects?

Project benefits

- Dependence on assumptions relating to the energy transition:
  i. Evolution of demand for electricity
  ii. Future costs of generation and storage technologies
  iii. Operation and retirement of the existing thermal generation fleet
  iv. Policy direction of federal and state governments

Project costs

- No recent experience of projects of the scale and size contemplated, meaning there are few best practice examples to benchmark
- Route design can substantially affect costs, but this process is dependent on jurisdictional environmental approval and planning processes – the timing and cost of which may not be controllable by TNSPs

Is the existing ex-ante incentive-based approach appropriate for major projects?

The current approach to planning and approving transmission investments assumes that uncertainty relating to project benefits and costs reduces as a project progresses through the regulatory process

This reduction of uncertainty may not be occurring in relation to major projects.

This greater uncertainty represents a challenge for the regulatory framework, which stakeholders have expressed was designed around a mature network that required incremental investments

Progressing projects with significant uncertainty through a regulatory framework that presupposes reducing uncertainty may result in suboptimal outcomes for consumers and TNSPs

Are there opportunities to streamline the economic assessment of major projects?

Stakeholders have raised concerns regarding the design of the economic assessment process, particularly with respect to the interactions between the ISP, RIT-T and AEMO feedback loop

The actionable ISP reforms strongly link the inputs, scenarios and assumptions of the ISP to the subsequent application of the RIT-T

These linkages may create a degree of duplication in the assessment process, particularly in light of capital costs continuing to be refined following the RIT-T. However, the RIT-T remains an important safeguard for consumers

The assessment process should be designed so that it provides a robust safeguard for consumers whilst facilitating the timely and efficient delivery of projects

Treatment of benefits in transmission planning

Are the benefits included in current processes sufficiently broad to capture the drivers of major transmission investments?

- Jurisdictions may value a range of benefits not currently captured by the RIT-T or ISP
- Stakeholders support the inclusion of wider benefits (e.g. jobs, regional development) and raised considerations around whether changes are warranted to the manner in which carbon emissions inform transmission planning and regulatory processes
- Stakeholders also continue to raise concerns regarding the treatment of carbon emissions in the planning process.

Does there need to be guidance on the assessment of hard to monetise benefits?

- RIT-T proponents (and AEMO) are required to consider all classes of market benefits as material prior to undertaking the analysis
- However, complex market benefits are often excluded on the basis that the cost of undertaking the analysis is disproportionate to the potential benefits
- Proponents may only quantify the minimum benefits necessary. Due to the possibility of cost increases, proponents may later on need to quantify new benefits to justify the investment – this leads to delays in the delivery of projects

Unequal treatment of non-network options under the RIT-T

The RIT-T is technologically neutral – the preferred option may be a network or non-network solution

Stakeholders have often raised concerns of barriers to non-network options in the RIT-T

These concerns principally relate to a perception that RIT-T proponents (typically TNSPs) have an intrinsic preference for network solutions because:

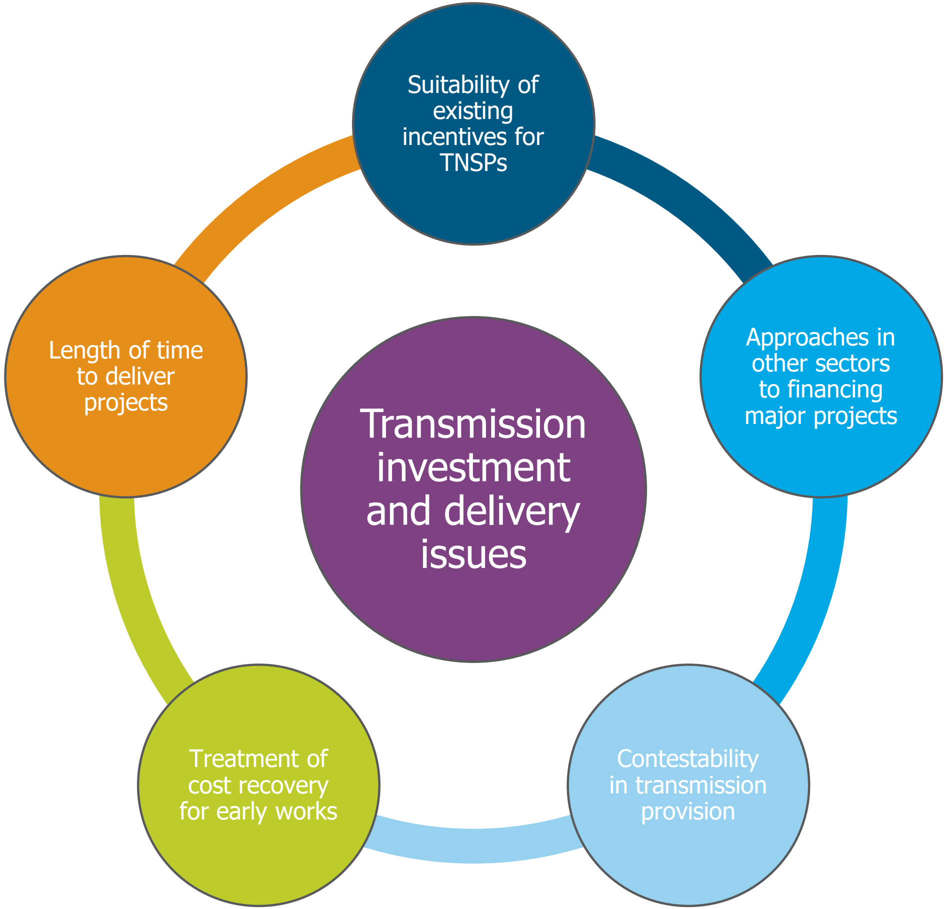
- The role of a TNSP is to own and operate the transmission network
- The structure of the regulatory framework is such that there is profit-based compensation for additional capital expenditure but not operating expenditure
- Network and non-network options are not like-for-like, and the differences may shape how they are considered in the assessment process

This preference may lead RIT-T proponents to take a relatively optimistic view of the net benefits of network options, while also having a less optimistic assessment of the ability for non-network options to address the identified need

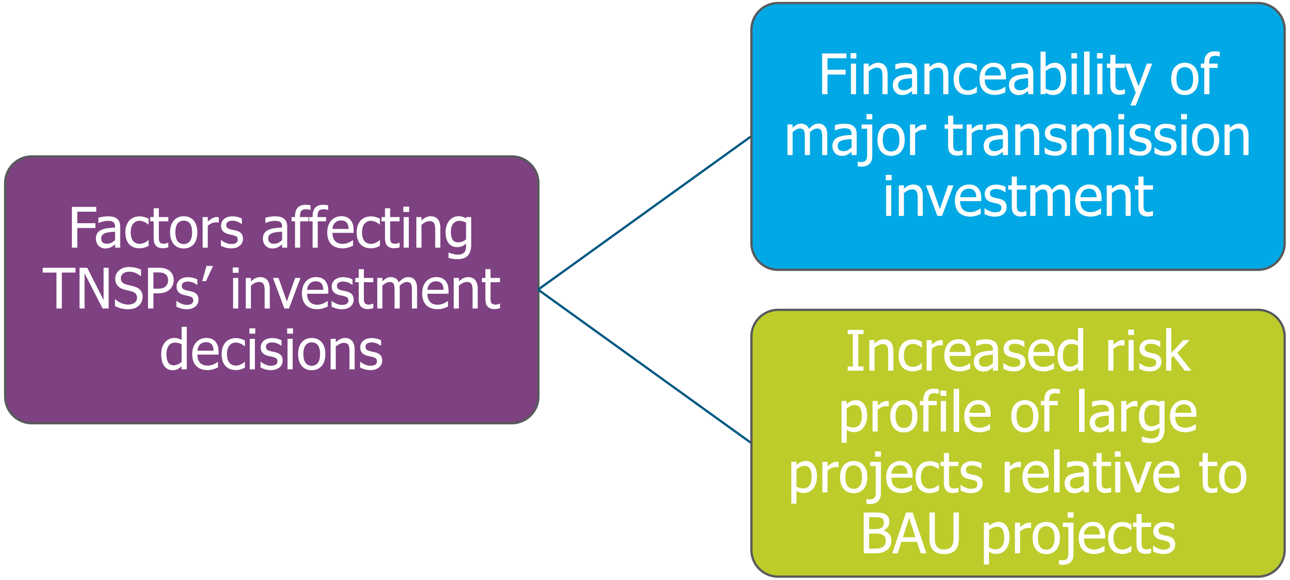
INVESTMENT AND DELIVERY ISSUES EXPLORED IN THE CONSULTATION PAPER

Rupert Doney– Senior Adviser

We have identified several areas of consultation relating to investment and delivery processes, drawing on initial input and previous work of the market bodies



Are the right incentives in place for incumbent TNSPs to invest in regulated major transmission infrastructure?



- Both of these issues may lead to incumbent TNSPs declining to invest in major strategic projects that present net market benefits

What features of financing infrastructure projects used in other sectors can be considered in the context of major transmission projects?

The potential for financeability challenges in the delivery of major infrastructure projects is not unique to the energy sector

The financing of long-lived and capital assets can present particular challenges owing to the capital intensity, high-upfront costs and lack of liquidity generating substantial financing requirements

Financing of the high initial cost of constructing infrastructure and the subsequent revenue recovery can take a number of forms (e.g. alternative funding and financing models)

A key area of focus for the Review will be whether parties other than incumbent TNSPs should be able to provide transmission infrastructure?

TNSP's exclusive right with no corresponding obligation presents a framework issue that drives the risk and uncertainty that TNSPs may not go ahead with projects that are in the best interests of consumers due to commercial reasons

The broader framework issues for consideration are therefore:

- should parties other than incumbent TNSPs be permitted to invest in transmission infrastructure?
- are there other options to ensure timely investment and delivery of major transmission projects?

Is clarification on the treatment of 'preparatory activities' and 'early works' required?

TNSPs have no certainty of recovering revenue from a project until it has passed all the stages, yet TNSPs face significant costs in getting the project to that stage.

To avoid delays, this has led to underwriting arrangements where State and Federal governments pay the network owner for the reasonable cost of preparatory activities/early works if the project is not approved, or if the recovery of those costs is not ultimately approved by the AER.

Clarification of the cost recovery arrangements for early works is an issue that has been raised by several stakeholders.

At the RIT-T stage, early works are often treated as substantive project delivery activities/expenditure that occur before a preferred option has been identified.

In some cases this has been addressed by jurisdictions funding early works to accelerate delivery of a project prior to AER approval.

Are there less ad-hoc approaches to funding early works that should be considered?

What is the impact of jurisdictional requirements on the timely and efficient delivery of transmission investment and are any changes necessary?

For regulated transmission infrastructure, the current transmission development process can take six to seven years end to end

Separate from the planning processes under the national transmission framework, transmission projects are also required to meet jurisdictional requirements, including:

- procurement of easements/property rights for transmission lines; and
- environmental planning approvals.

Funding arrangements for TNSPs to undertake preliminary activities to meet jurisdictional requirements are linked to investment approvals under the NER. Two key considerations are:

- whether jurisdictional requirements may lead to a potential source of delay in progressing the delivery of projects; and
- whether the current cost recovery arrangements impact the TNSP's ability to meet jurisdictional requirements in a timely manner.

QUESTIONS?

MATERIAL CHANGE IN NETWORK INFRASTRUCTURE PROJECT COSTS RULE CHANGE REQUEST

Katy Brady – Senior Adviser

Material change rule change request

On 15 February 2021, EUAA, MEU, ERM Power, Delta Electricity and AGL Energy submitted a request to change rules that apply when project costs materially increase after RIT is complete.

Under existing arrangements, the RIT must only be reapplied where, in the reasonable opinion of the project proponent, there has been a material change in circumstances which means the preferred option identified in the final RIT report is no longer the preferred option.

The rule change proponents are concerned that the cost of recent projects has risen substantially between completion of the RIT and request for AER funding approval – for example, Project EnergyConnect (60% increase) and Eyre Peninsula Upgrade (21% increase).

Proponents consider that allowing project costs to significantly increase post RIT completion undermines confidence in the RIT process and does not adequately protect consumers.

To address this, they propose objective cost metrics be included in the rules so the requirement to reapply the RIT does not rely on the proponent's opinion that circumstances have materially changed.

What changes are proposed?

A RIT proponent must reapply RIT if project costs increase by 10% (for larger transmission and distribution projects: i.e. >$500m and $200m respectively) or 15% (<$500m and $200m), unless AER grants exemption.

AER may determine that proponent is not required to reapply RIT (or is only required to repeat part of the RIT). AER would have 30 days from date of publication of revised project cost estimate to make and publish determination.

Project EnergyConnect (PEC) should be required to update its final RIT-T report to take account of material cost increases that have occurred since completion of the RIT.

Amend AER guidelines to require more rigorous cost estimates for final RIT report: will reduce risk that RIT will need to be reapplied. RIT cost estimates should be based on AACE class 2 estimates – i.e. detailed feasibility study.

Issues being considered

Who should decide whether the RIT should be reapplied when circumstances change? Should this remain with the project proponent or should the AER be responsible for determining this?

If the rules are amended as proposed, what cost increase thresholds should trigger reapplication of the RIT, and what projects should be subject to these thresholds?

Should the requirement to reapply the RIT be more targeted, or should the current approach remain (i.e. requiring the whole RIT to be repeated unless the AER determines otherwise)?

How would reapplication of the RIT be triggered for non-contingent projects given that there is little or no information available on the revised cost estimates of these projects?

Are there alternative approaches that could reduce the need to reapply the RIT? E.g. identifying upfront the changed circumstances that would alter ranking of the preferred option.

What level of rigour is appropriate to require in cost estimates at the RIT stage? Could the proposal to require detailed feasibility studies have unintended outcomes – e.g. fewer options being assessed?

QUESTIONS?

CLOSE AND NEXT STEPS

Next steps

- We welcome ongoing feedback – if you have additional comments or would like to discuss the Review further, please get in touch
- Please note that participation in today's forum is not a substitute for a written submission. We encourage formal submissions via the AEMC website: https://www.aemc.gov.au/market-reviews-advice/transmission-planning-and-investment-review

Milestone	Date
Submissions on consultation paper due	30 September 2021
Complete Stage 1 of the Review	Q4 2021
AEMC to publish draft report	Q4 2021/Q1 2022
Complete Stage 2 of the Review	Dependent on the scope of Stage 2 of the Review
AEMC to publish final report	Dependent on the scope of Stage 2 of the Review

CLOSING REMARKS

Charles Popple – Commissioner

AEMC

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