



# AER work program to support actionable ISP projects – focus group

AER Policy Development team

25-26 November 2020

[aer.gov.au](http://aer.gov.au)

# Welcome to the AER's focus group

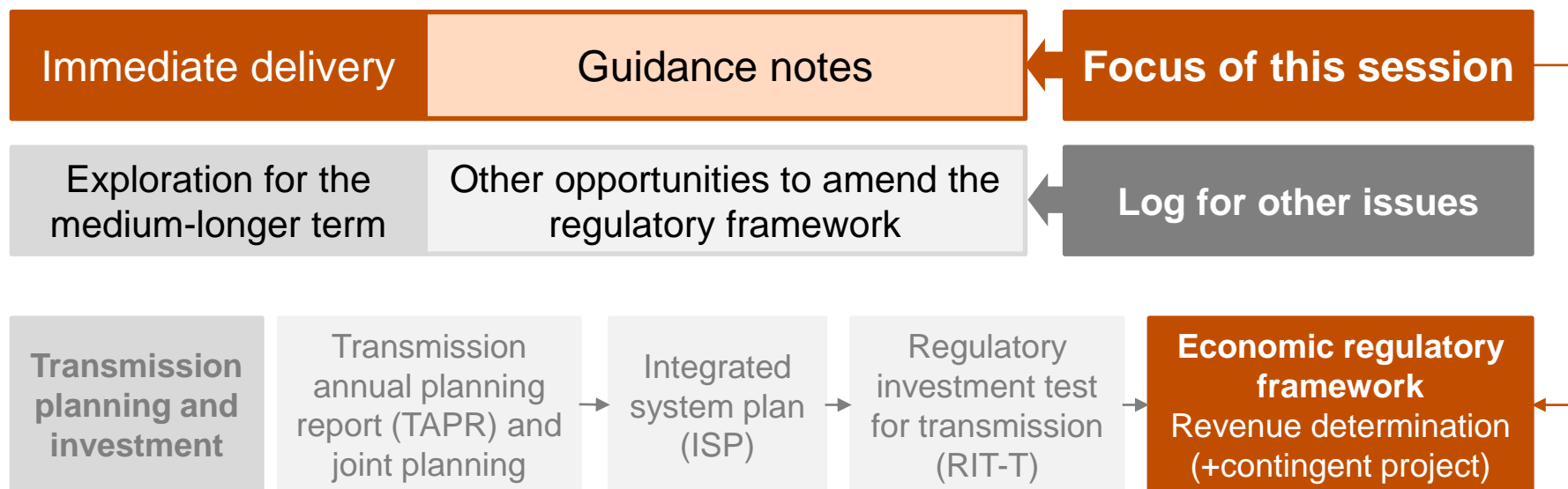
Item (presenter)	Timing
Welcome and overview	2:00pm
Contingent project application guidance note	2:10pm
Ex-post measures guidance note	2:30pm
Staging guidance note	2:50pm
Next steps and closing remarks	3:10pm

## Housekeeping

- Please remain on mute when you are not speaking
- Please use the chat box or raise your 'hand' to raise questions or comments – we will stop regularly to discuss and answer questions.

# Our work program and the focus of this session

- We have commenced a program of work to support the efficient and timely delivery of large transmission projects, identified as ‘actionable’ in AEMO’s Integrated System Plan
- We want to ensure our regulatory tools remain fit-for-purpose to effectively assess forecast costs for these projects against the criteria set out in the National Electricity Rules.



# Why we are doing this work

## 2020 Integrated System Plan

The Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP) provides a 20-year roadmap for the National Electricity Market (NEM) through the energy transition period to 2040.

### Consultation

AEMO facilitated an 18-month consultation program in developing the draft and final ISP, along with the Forecasting and Planning Scenarios, Inputs and Assumption Report, including:

- 200+ stakeholders consulted
- 8 workshops held
- 3 webinars hosted
- 85 written submissions provided

### Considerations

- Market reforms
- Government policies
- Economic growth
- Emissions reductions
- Grid technologies and services
- Consumer investment in DER

### Expected changes to 2040

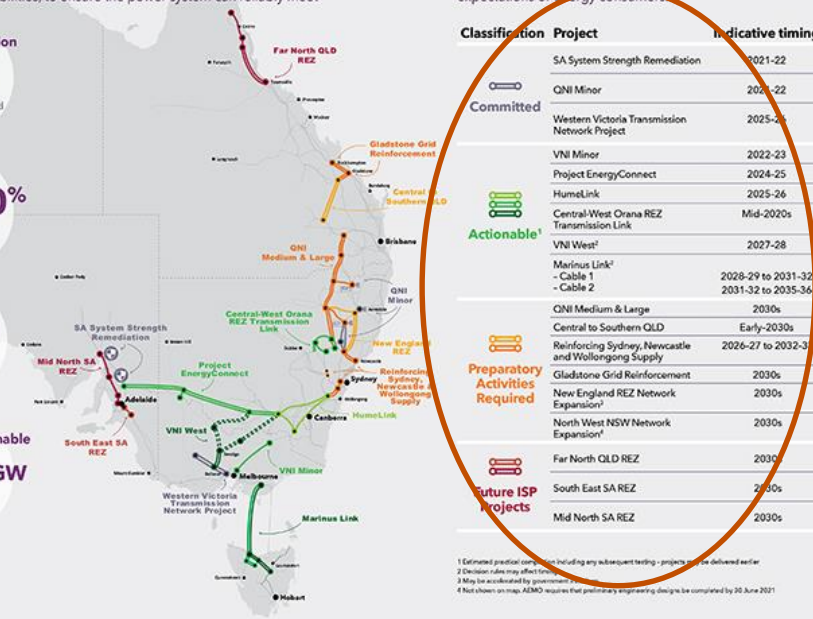
The ISP modelling confirms that the least-cost, least-regret transition of the NEM is from a centralised coal-fired generation system to a highly diverse portfolio dominated by distributed energy resources (DER) and variable renewable energy (VRE), supported by dispatchable resources and enhanced grid and service capabilities, to ensure the power system can reliably meet demand at all times.

Coal generation retirements  
**15GW**  
or 63% of coal-fired generators

DER  
**+200%**  
supplying from 7% to 13-22% of total consumption

New VRE  
**26GW**  
(grid-scale wind and solar)

New dispatchable resources  
**6-19GW**  
(pumped hydro, batteries, gas)



<sup>1</sup> Estimated practical completion including any subsequent testing - projects to be delivered earlier  
<sup>2</sup> Detailed studies may affect timing  
<sup>3</sup> May be accelerated by government policy  
<sup>4</sup> Not shown on map. AEMO requires that preliminary engineering designs be completed by 30 June 2021

Unprecedented pipeline of large transmission projects

Greater uncertainty around costs & benefits

More prone to larger cost overruns\*  
\*(see chart in appendix B)

Many risks can be managed but some risks are unforeseeable

Under the current framework, may be an incentive to include 'buffers' in cost forecasts

# Our proposed guidance notes

- The guidance notes will improve regulatory predictability and transparency, and set out our expectations for transmission businesses
- The guidance notes work together to encourage proactive risk management and productive efficiencies – improving efficiency and reliability of cost estimates for actionable ISP projects.

## Contingent project application guidance note

To clarify the key considerations for the AER in assessing contingent project applications for actionable ISP projects, including procurement and risk management

## Ex-post measures guidance note

To provide greater predictability about how we intend to undertake ex-post reviews when capital expenditure forecasts contain actionable ISP projects

## Staging guidance note

To allow certain actionable ISP projects to progress through the regulatory process in stages to reduce project risk, and clarify how this should work

Arista Kontos

# Contingent project application guidance note

## Purpose and key topics

- The AER typically assesses cost forecasts for actionable ISP projects through the contingent project application (CPA) process (set out in Rule 6A.8 of NER)
- **Purpose** of the guidance note:  
To provide greater clarity and predictability around what the AER expects TNSPs to demonstrate in their CPAs for actionable ISP projects, and how it will conduct its assessment
- Highlight our key considerations for these large projects in increasing confidence in the efficiency and reliability of cost forecasts
- Proposed **topics** to be covered are:
  1. Pre-lodgement consultation/engagement
  2. Project governance and management
  3. Project risk assessment.

# 1. Pre-lodgement consultation / engagement

- Aim to promote meaningful early engagement with stakeholders, prior to CPA lodgement
- Emphasis on consulting with local community and consumer groups. We propose transmission businesses should:
  - Consider formats that best facilitate engagement and discussion, given the range of interested stakeholders and the complexity of the project
  - Demonstrate how it has considered and taken into account the feedback received (and used this to inform risk identification and management)
- Should also provide AER with visibility of CPA planning and preparation, particularly:
  - The scope the transmission business intends to provide the market
  - The procurement process.



## 2. Project governance and management

- Propose to set out principles for effective project governance and management, including procurement of design and construct work
- TNSPs should provide an overview of these arrangements to demonstrate they have promoted these principles, including:
  - Procurement activities – the extent to which the costs are market-tested and based on a procurement process that promotes innovative and cost effective design specifications
  - Proactive risk management and project controls for managing cost and schedule overruns
  - Project governance arrangements that demonstrate clear roles and responsibilities, lines of accountability and decision making
  - Appropriate planning and design work to ensure clear project definition, design and scope, and improve risk management.

### 3. Risk assessment

- Will clarify the principles underpinning AER's assessment of project risk costs in a CPA for an actionable ISP project
  - We recognise there can be trade-offs between cost efficiency and risk management, and TNSPs should only mitigate, transfer or avoid risks where the cost of doing so is less than the cost of the risk eventuating (taking into account the probability of this)
- Expect transmission businesses to provide information on identified risks and how it has assessed the associated costs, where possible
- Transmission businesses should also explain which risks it is bearing / managing, and where it has put in place arrangements to share or transfer project risks.

# Questions?

- What are your views / feedback on the proposed guidance note content?
- What other topics or issues should we include?

Nish Perera

# Ex-post measures guidance note

# Purpose and key topics

- Every time we conduct a transmission revenue determination, we must make an ex-post statement, and in some limited circumstances, can exclude capital expenditure from the regulatory asset base (RAB)
- **Purpose** of the guidance note:  
To clarify how we will conduct ex-post reviews when a capex forecast contains actionable ISP project costs. This aims to provide greater predictability so transmission businesses have a clearer understanding about how we will form a view on costs that may and may not be excluded from the RAB in an ex-post review
- Proposed **topics** to be covered are:
  1. Intent of the ex-post review
  2. Link to CPA guidance note.

# 1. Intent of the ex-post review

- The economic regulatory framework set out in chapter 6A of the NER is focused on ex-ante incentives to promote efficient project delivery and capital expenditure
- The ex-post review is a ‘last resort’ check and incentive that would only exclude clear cases of capital expenditure that is not efficient or prudent
- Conducting an ex-post statement at each revenue determination is also a way to facilitate continuous learning and improvement, and increase transparency.

## What can be excluded from the RAB roll forward?

1. When a transmission business has spent more than its capex allowance, the amount of capex above the allowance that does not reasonably reflect the capital expenditure criteria
2. Where there is an inflated related party margin (that is, the margin refers to arrangements that do not reflect arm’s length terms), the inflated portion of the margin
3. Where a change to a transmission business’ capitalisation policy has led to operating expenditure (opex) being capitalised, the capitalised opex.

## 2. Link to CPA guidance note

- We propose to draw links between the ex-post review and the CPA guidance note, particularly the elements on project governance and management
- This provides more clarity on the information about project planning and management tools and processes in the current capital expenditure incentives guideline
- We expect transmission businesses to demonstrate they have delivered the actionable ISP project in accordance with project governance structures, and project and risk management plans / processes evidenced in its CPA
- We also expect transmission businesses to demonstrate they have controlled and minimised any cost overruns.

# Questions?

- What are your views / feedback on the proposed guidance note content?
- What other topics or issues should we include?



Nish Perera

# Project staging guidance note

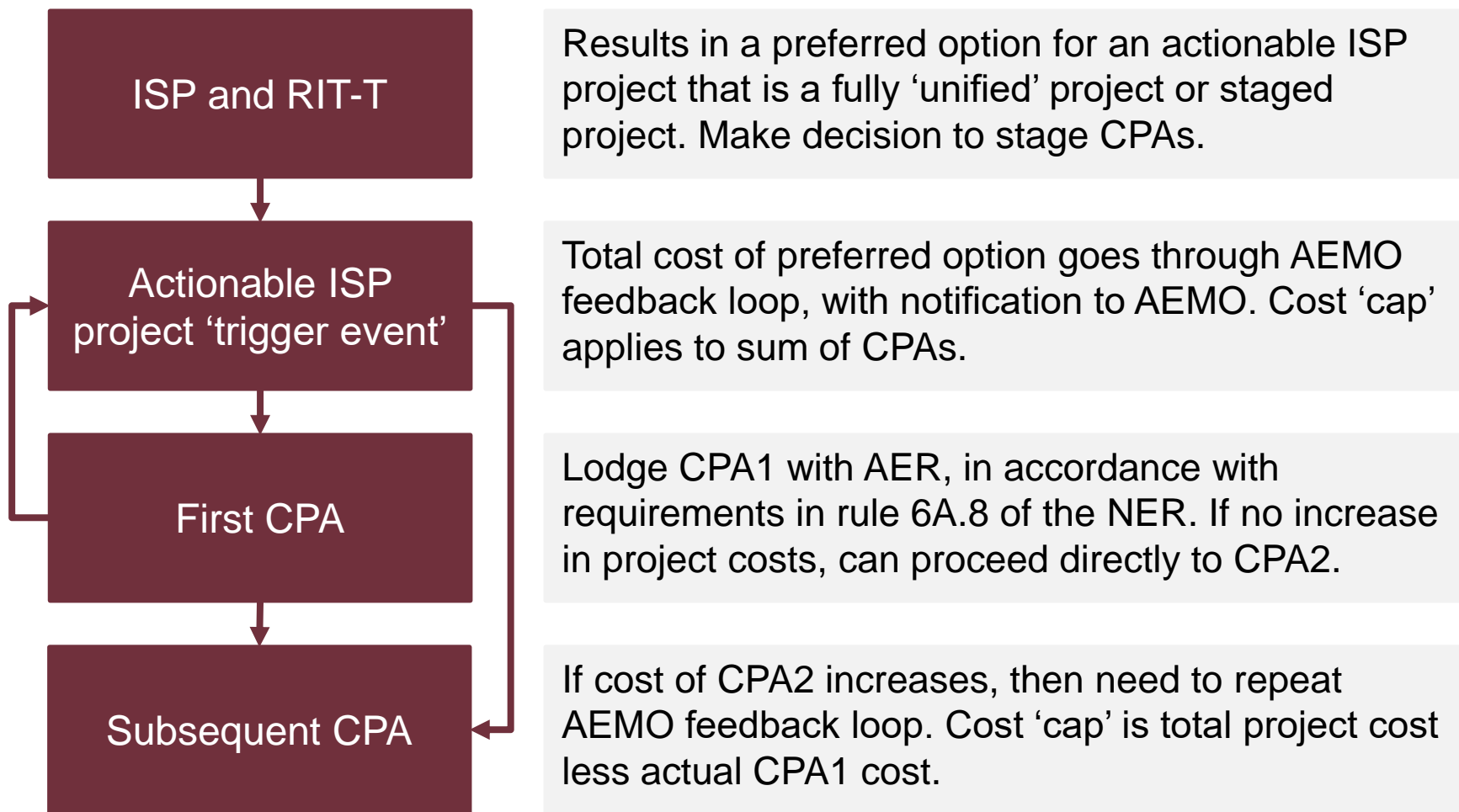
# Purpose and key topics

- Transmission businesses can stage the regulatory process for actionable ISP projects by lodging multiple CPAs with the AER. Each CPA would correspond to a different component of the project
- **Purpose** of the guidance note:
  - Allow TNSPs to use CPA staging in certain circumstances to help reduce uncertainty associated with project costs and benefits
  - Clarify the technical interactions between the ISP, regulatory investment test for transmission (RIT-T), and staged CPAs
- Proposed **topics** to be covered are:
  1. Objectives of staging CPAs
  2. Mechanics of staging CPAs.

# 1. Objectives of staging CPAs

- Staging of projects or CPAs can reduce the risk of actionable ISP projects and increase flexibility to respond to changing market conditions or project risks as they arise
- There are also challenges. Breaking the regulatory process up into too many stages can make it harder to assess the project as a whole and result in excessive regulatory involvement
- We consider staging has the most benefits when it is used for actionable ISP projects that are particularly large or risky (e.g. greenfield interconnector across varied terrain)
- Currently, we consider staging has particular benefits when used to conduct early works activities at the planning and design stage, before submitting a CPA for the full project.

## 2. Mechanics of staging CPAs



# Questions?

- What are your views / feedback on the proposed guidance note content?
- What other topics or issues should we include?

Next steps

## Next steps

- We will publish the slides from this session, and a Q&A
- We will collate the log of other issues and consider the best way to respond – some may be best considered as part of the other reform options being explored as part of this work program
- Email [TIRreview@aer.gov.au](mailto:TIRreview@aer.gov.au) to request a meeting with us or send through further feedback on the guidance notes.

Milestone	Indicative timing
Draft guidance notes released	December 2020 – January 2021
Stakeholder workshop	January 2021
Submissions close	January – February 2021
Final guidance notes released	March 2020

Thank you for attending this focus  
group session



# Appendix

# Appendix A: current transmission planning and economic regulatory frameworks

## Transmission planning framework (ISP projects)

- Transmission annual planning reports (TAPRs) and joint planning feed into / iterate with the ISP
- AEMO uses biennial ISP to identify actionable ISP projects, and identified needs to guide RIT-Ts
- TNSPs conduct RIT-Ts to select the preferred option for meeting the identified need
- TNSPs develop detailed cost estimates, go through AEMO feedback loop, and submit contingent project application

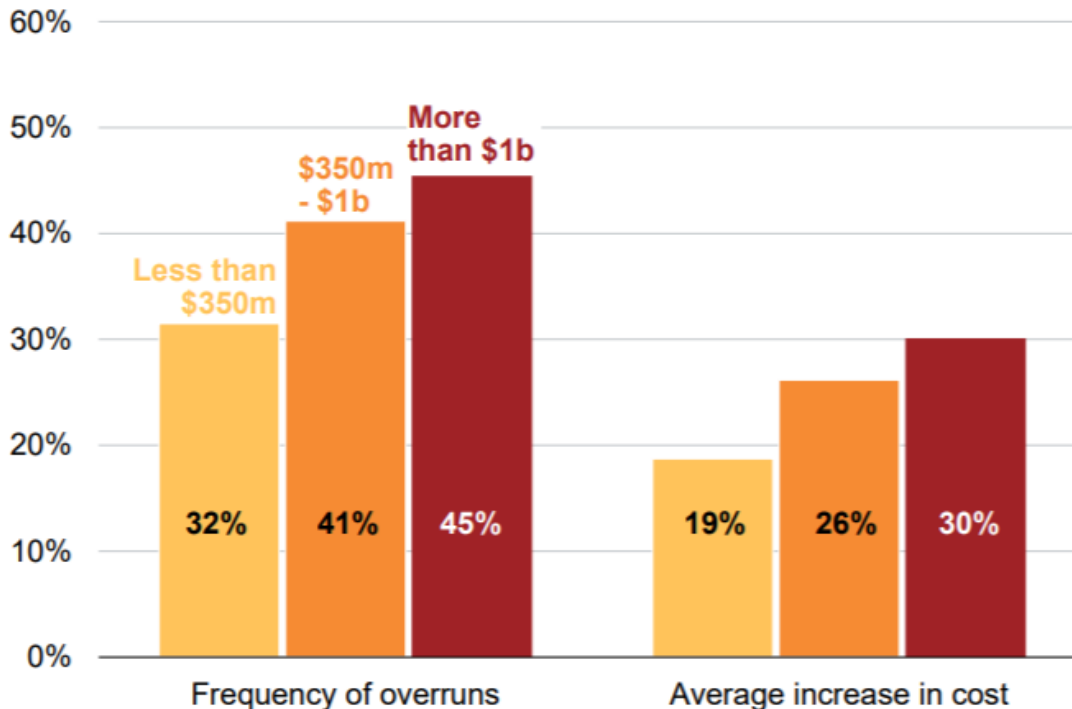
## Economic regulatory framework

- AER uses the contingent project application process to incorporate actionable ISP projects into allowed revenue – AER makes a decision on the efficient and prudent **forecast capex** (and incremental opex) associated with the project (e.g. \$2 bil). The RAB is updated with the forecast capex and then **amortised** in the annual revenue allowance as return on capital and depreciation building blocks.
- TNSP delivers actionable ISP project. Actual cost may be under or over forecast costs (e.g. \$2.5 bil)
- At the next revenue determination, AER updates forecast capex with **actual capex** in RAB and determine CESS – if overspend on total forecast capex (for all projects), then decide whether to apply an ex-post review.
- This means the TNSP recovers actual capex spent on the project (subject to ex-post review), and recovers this gradually recovered over many regulatory periods.

# Appendix B: Large projects appear more prone to larger cost overruns

**Figure 2.1: Bigger projects overrun more often and by more**

Frequency of overruns and average increase in cost as a percentage of initial project costs by level of initial cost



*Note: Includes all public road and rail projects costing more than \$20 million that were completed between Q1 2001 and Q1 2020.*

*Source: Grattan analysis of Deloitte Access Economics Investment Monitor.*

Source: Grattan Institute, The rise of megaprojects – counting the costs, November 2020, p. 16