

# Consumer Advisory Panel Meeting 25

Thursday, 29 September 2022

# Acknowledgement of Country

We would like to acknowledge the Traditional Owners of the land on which we meet and pay our respects to their Elders past and present and extend that respect to other Aboriginal and Torres Strait Islander people who are present today

# Welcome

- Welcome & Introductions
- Opening Remarks
- AER Draft Decision
- Revised Revenue Proposal
  1. What are the customer considerations?
  2. What role should the CAP play?
  3. What other information do you need to fulfil that role?
- Project EnergyConnect Update
- Next Steps



## Purpose & Introductions

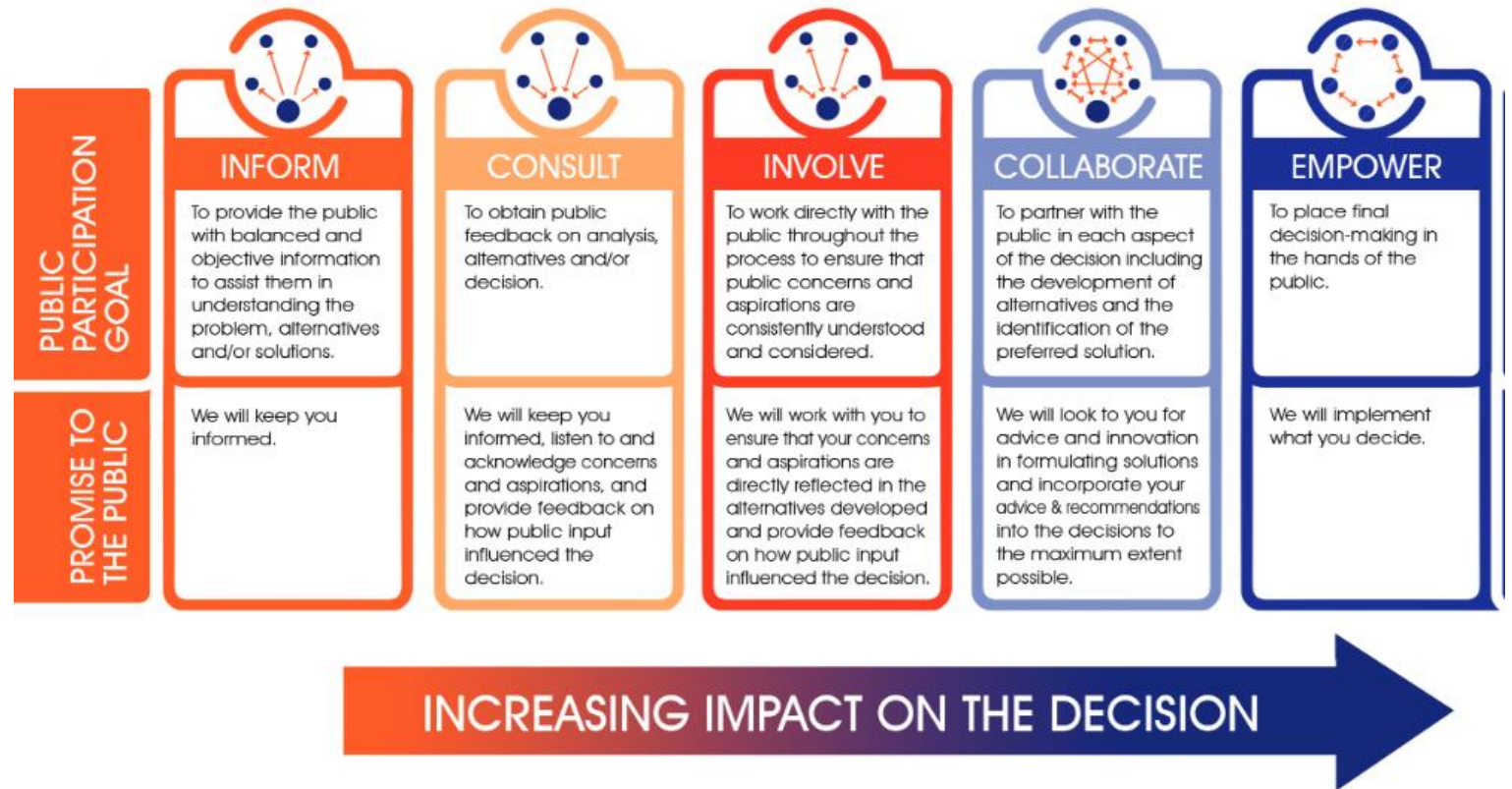
# Consumer Advisory Panel

- The overarching **PURPOSE** of this engagement is to *provide meaningful opportunities for input to improve the value of electricity transmission services in South Australia.*
- The CAP is part of ElectraNet's commitment to consumer engagement
- The CAP is the vehicle for ElectraNet to engage and collaborate with consumer representatives
- The CAP brings together representatives of different organisations and / or individuals
- Members are expected to contribute to advice and ideas through a range of mechanisms including attendance at meetings, meeting preparation, review of documents, contributions to written advice/ reports
- The CAP will be independently facilitated

# IAP2 SPECTRUM

International Association of Public Participation = IAP2

## IAP2 Spectrum



# Opening Remarks

**Simon Emms**  
Chief Executive

# AER's Draft Decision

**Lynley Jorgensen**

Director, Australian Energy Regulator



# Revised Revenue Proposal

**Jeremy Tustin,**  
Regulated Investment Planning Manager

# Developing Revised Revenue Proposal - role of the CAP

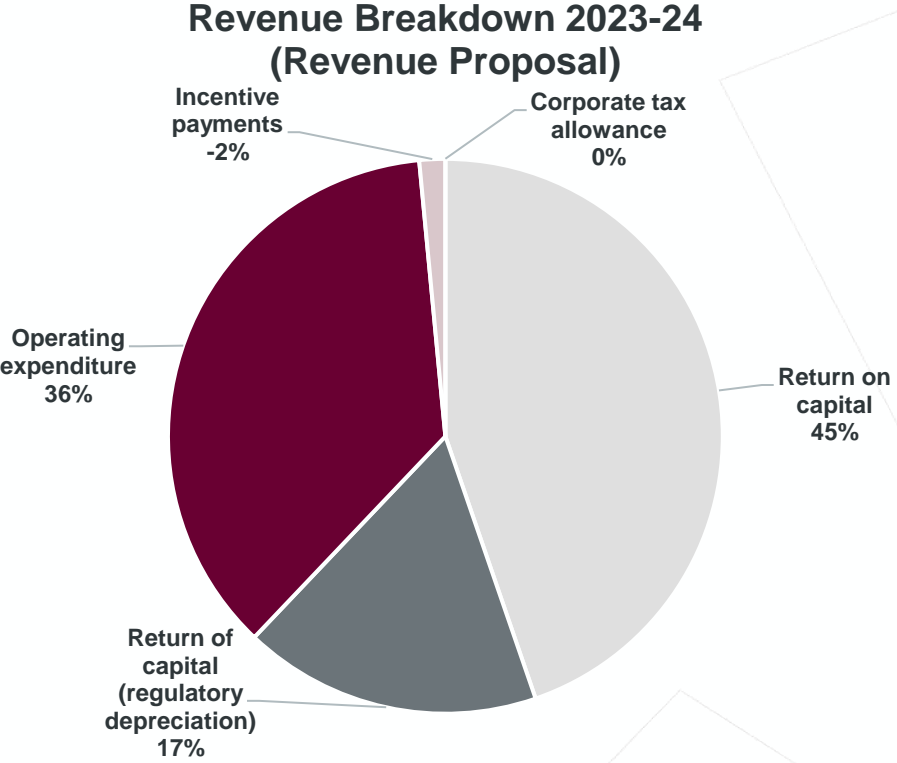
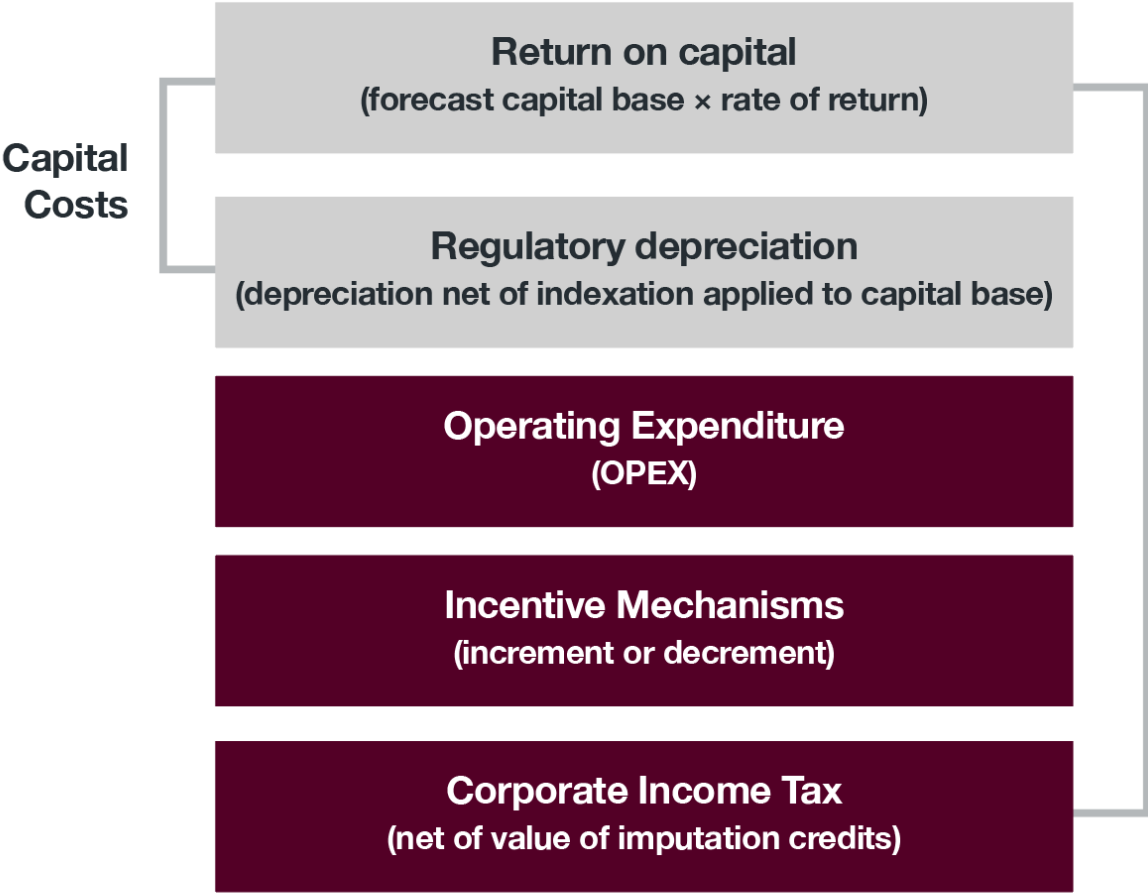
- Purpose of a Revised Revenue Proposal
  - Matters approved by the AER at the Draft Decision stage are considered settled
  - ElectraNet can respond to outstanding issues in a Revised Revenue Proposal
- The key question for the CAP is:
  - *“How can customer interests be best served through ElectraNet’s response to the remaining issues”*

## Way Forward:

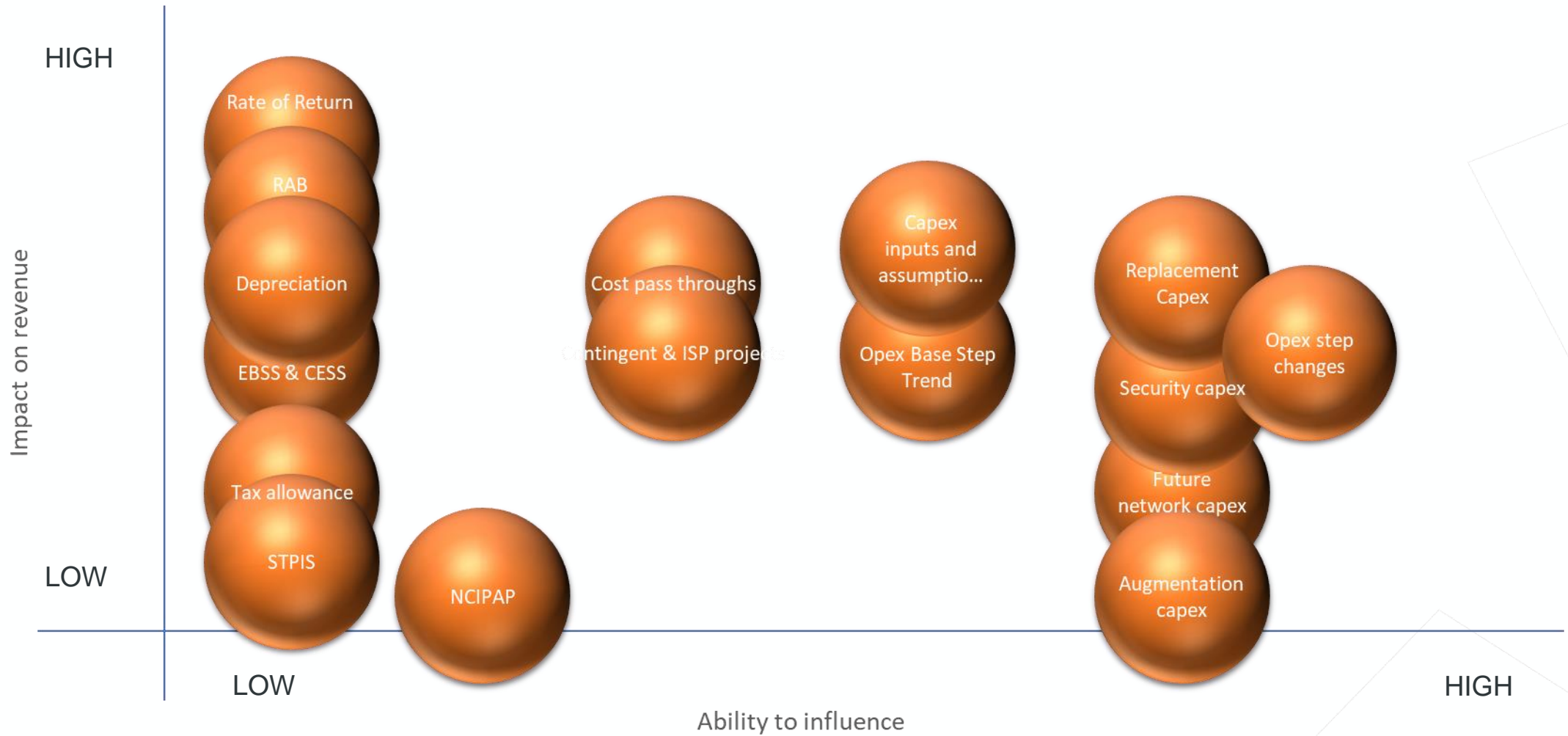
- AER Draft Decision - **30 Sep 2022**
- Engagement with the CAP - **Sep-Nov 2022**
- Revised Proposal due - **2 Dec 2022**
- AER Final Decision - **30 Apr 2023**
- Ongoing Annual Planning Cycle



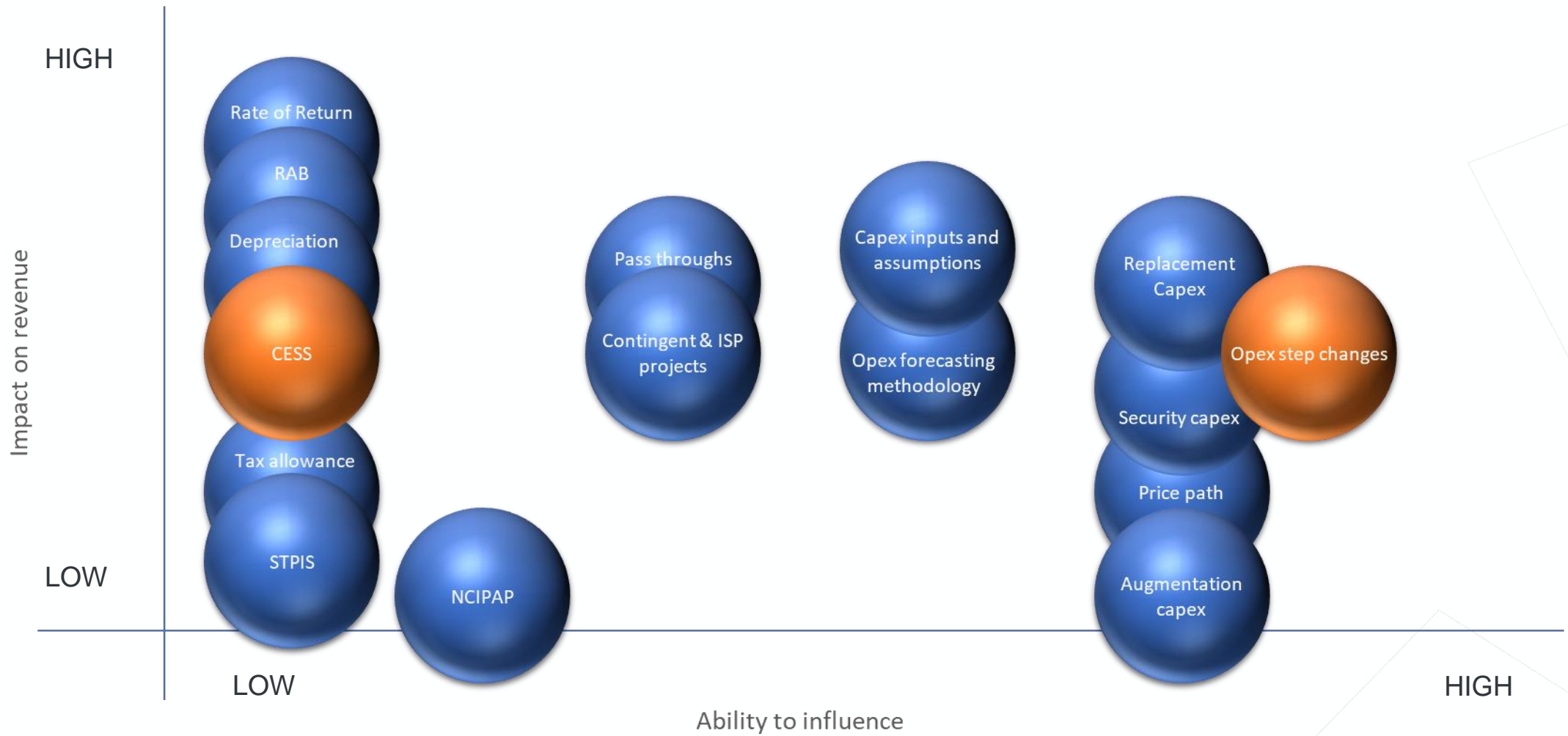
# Revenue Proposal - revenue setting framework



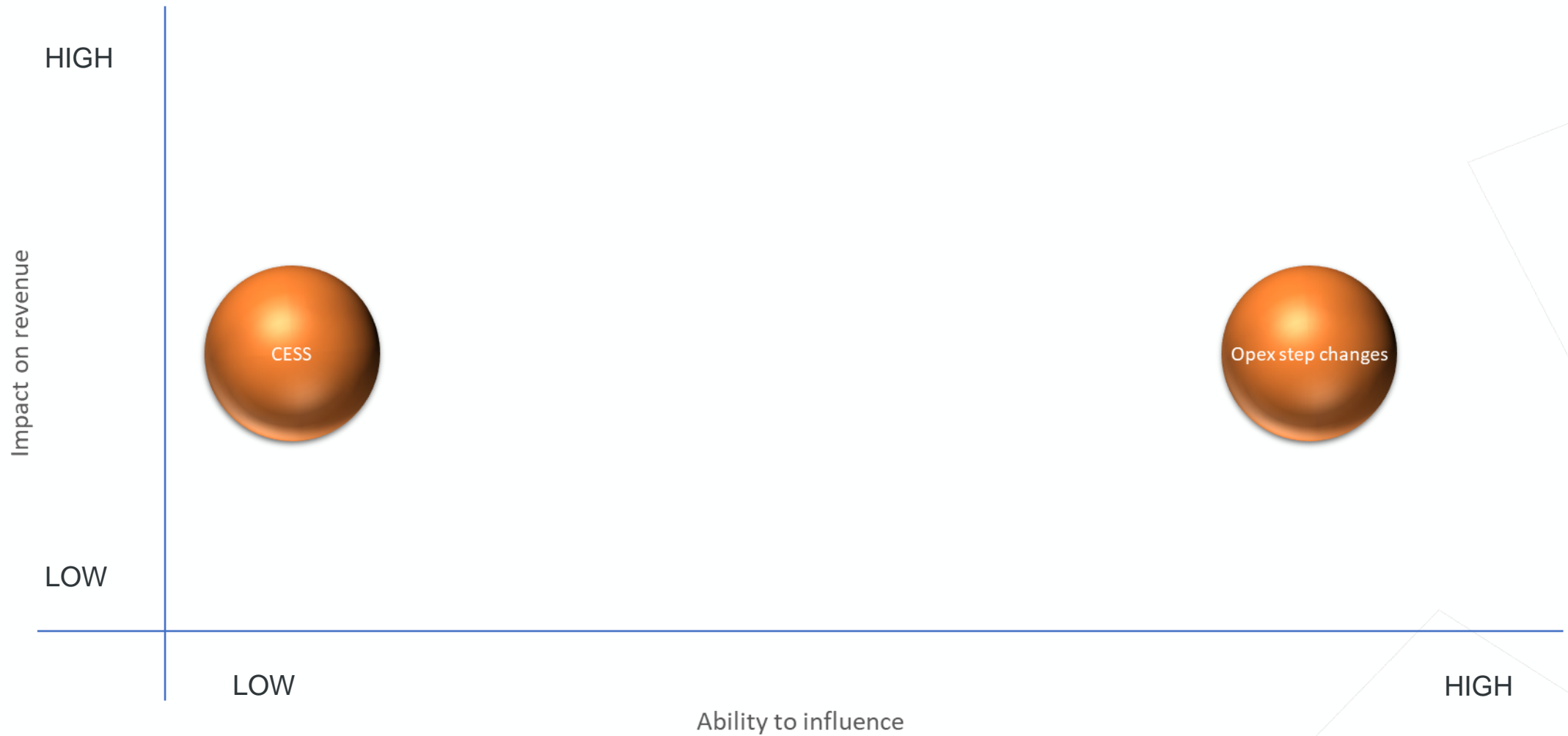
# Original focus areas identified by the CAP WG



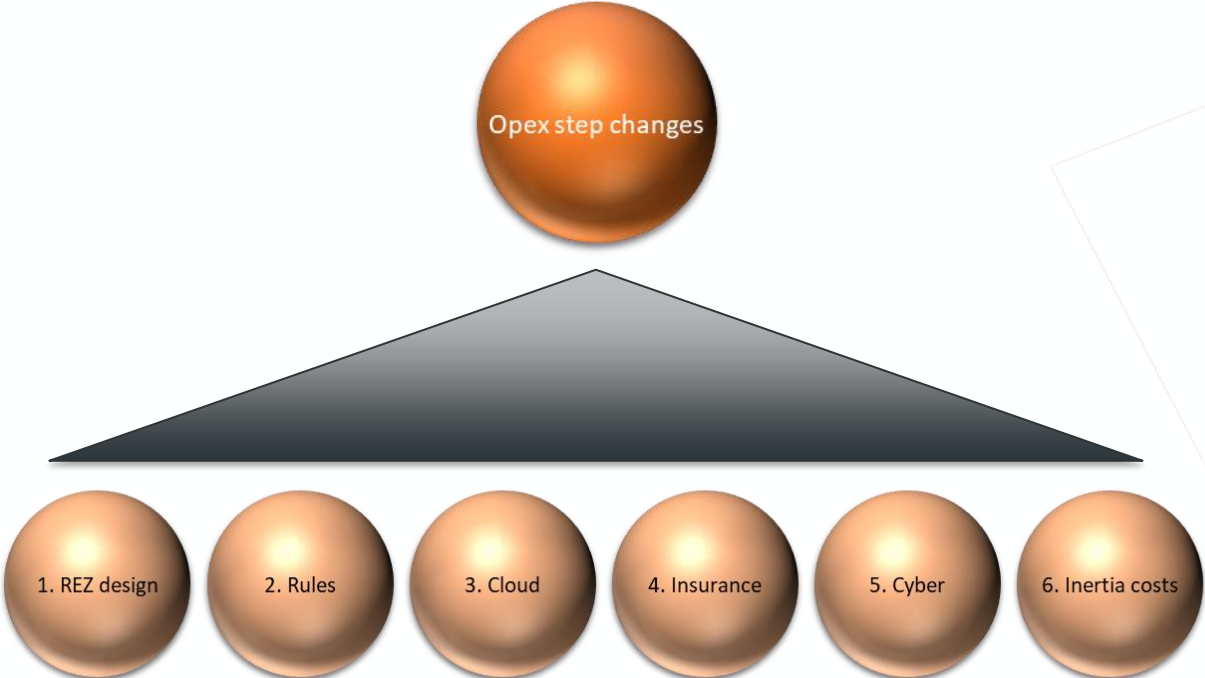
# As 'narrowed down' in AER Draft Decision



# As 'narrowed down' in AER Draft Decision



# For discussion



Ability to influence

- 1. What are the customer considerations?
- 2. What role should the CAP have in this issue?
- 3. What other information do you need to fulfil that role?

# 1. Rule changes - REZ Design Reports



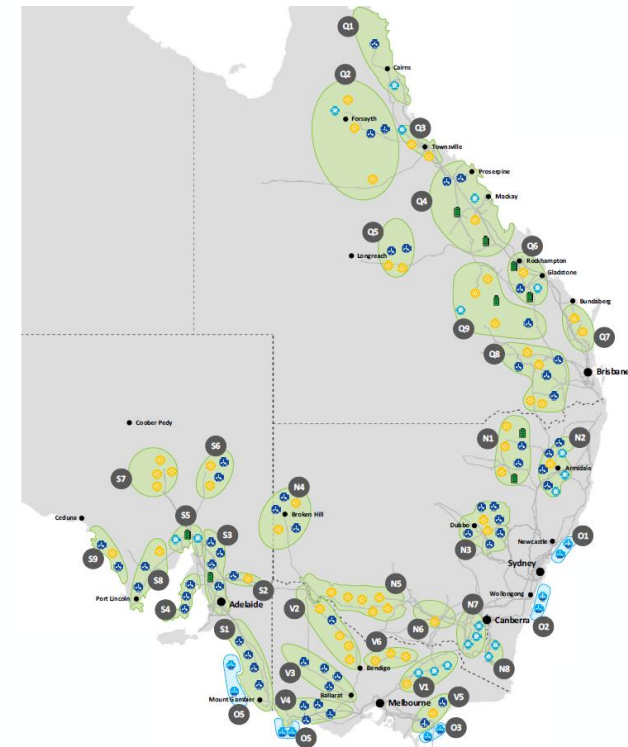
AEMO has identified Renewable Energy Zones

- *High-quality resource areas where clusters of large-scale renewable energy projects can be developed using economies of scale*
- 9 in South Australia
- REZ development ‘triggered’ by ISP (next published in 2024 and 2026)

## Impact on ElectraNet

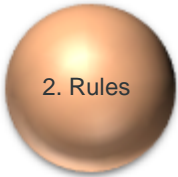
- REZ Design Reports
  - Engineering
  - Community consultation
- Is it reasonable to anticipate 2 or 3 REZ Design Reports in SA per ISP? (4 to 6 total)
- Indicative cost per report ~\$300k  
→ \$1.2 ~ 1.8m over reg period (~1% opex)

1. What are the customer considerations?
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# 2. Rule changes - Increasing system complexity



The power system is becoming increasingly complex

- New obligations under the Rules
- AEMO engineering framework
- Operational technology roadmap
- 100% instantaneous renewables

AEMO “...median investment ~\$500k per GW peak demand p.a. ...”

## Impact on ElectraNet

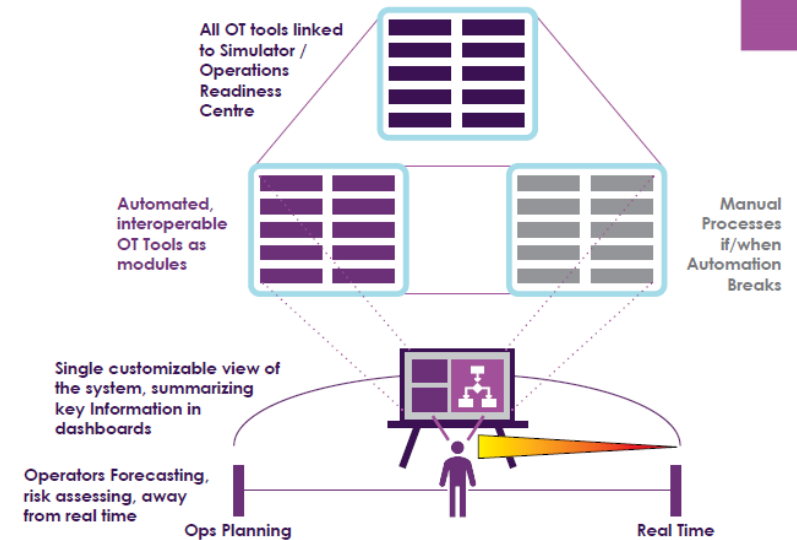
- Need for ongoing improvement in real time system analysis
- Increasingly complex power system to plan and operate
- Personnel and capacity uplift required (e.g.)
  - Increased number of connections
  - Sharp increase in control room alarms
  - Outage management
  - Need to invest in future skills
- Indicative need for 20+ FTE for various functions

1. What are the customer considerations?
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## EPRI Control Room of the Future Framework

EPRI has an established methodology and framework when developing roadmaps and research associated with transmission system control rooms of the future (CROF). This is a complex, interconnected model, with four foundations and eleven pillars all supporting the purpose and vision for the CROF. This was developed in consultation with key stakeholders during the development process.

The framework establishes a pathway to develop a future system operations vision, shown right. In this vision of future operations, operators engage with OT tools via a streamlined interface. They act further from real time, risk assessing the system trajectory based on forecasts. The OT tools are interoperable and while automated processes dominate, manual backup is available at all times. All OT tools are mirrored in a training simulator or operations readiness centre environment.



AEMO Operations Technology Roadmap, Executive Summary Document June 2022

# 3. Insurance cost pressures

Global events have put substantial upward pressure on insurance markets

- COVID-19
- Bushfires
- Qld and NSW floods - may end up in top 4 insurance cost events ever

1. What are the customer considerations?
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## Impact on ElectraNet

- Legal obligations to maintain certain level of insurance
  - Transmission licence
  - Financier covenants
  - Leasing arrangements
- Tightening market – reduced choice
- Situation has deteriorated this year
  - Forthcoming cost pass through application
- Consideration as to whether existing forecast is adequate based on latest market movements



# 4. Cloud computing

There is a need to migrate part of our IT infrastructure to the Cloud to maintain and enhance operational capabilities moving forward

This involves a capex/opex trade off

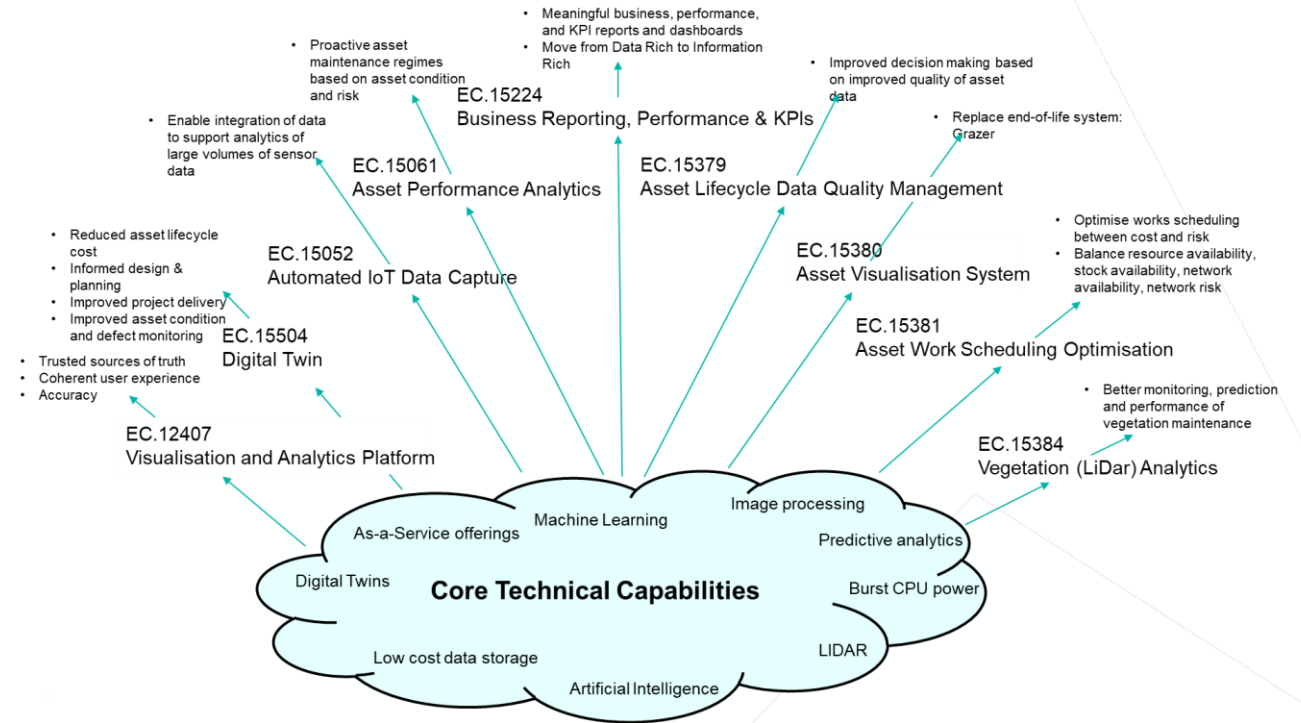
- Step change to cover the cost of additional licence fees
- Offset by benefits

## Implications of Draft Decision to decline step change...

- Jeopardises the migration
- Limits access to future efficiencies?
- Rules require reasonable opportunity to recover efficient costs

ElectraNet needs to consider implications and position

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# 5. Cyber security

The Australian Energy Sector Cyber Security Framework sets out a roadmap for improving cyber security

The AER and ElectraNet agree that:

- It is prudent for ElectraNet to increase to Security Profile 3 (SP-3)
- This will place pressure on opex which requires a step change

The AER has not accepted ElectraNet's forecast costs of achieving this

## Impact on ElectraNet

- Significant internal and external resources are needed to address all areas required
- Independent expert advice obtained
- Some preparations already brought forward
- ElectraNet needs to consider position and revisit cost forecasts

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# 6. Inertia costs

AEMO has declared a shortfall calling for *inertia support services* relating to 'islanded' SA network

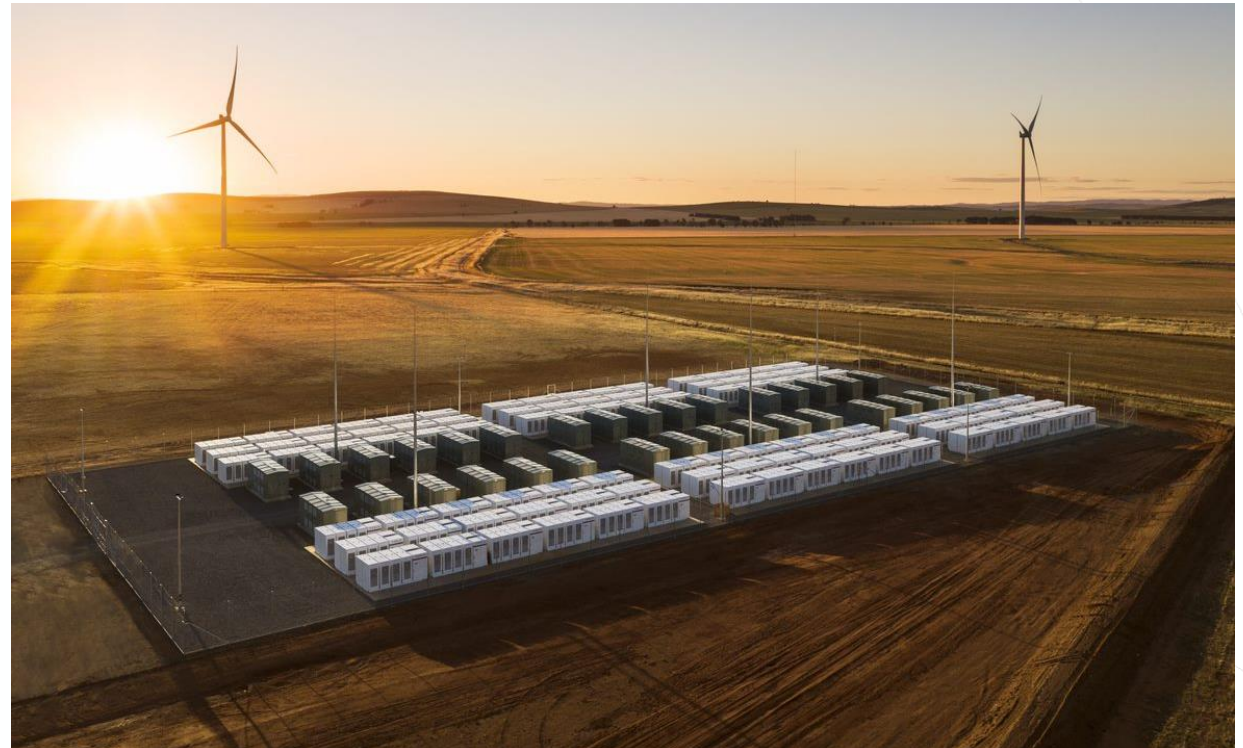
ElectraNet must tender to provide these services

- 200 MWs this year (in place)
- 360 MWs until Project EnergyConnect is fully operational (yet to be contracted)

## Impact on ElectraNet

- Cost of inertia services to be passed through to customers via Network Support pass through
  - Annual true up process against allowance
  - No allowance currently in place
- Cost not yet known – tendering is underway
  - Likely fixed and variable components
  - Variable only occurs if service invoked
- Cost recovery could be:
  - Real time
  - In arrears
  - Hybrid

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# 7. Capital Expenditure Sharing Scheme



CESS is designed to encourage efficient investment

- Rewards efficient underspend & penalises overspend

Adjustment mechanism exists to avoid windfall gains from deferral of large projects

ElectraNet and CAP agreed no windfall gain should result from deferral of Project EnergyConnect

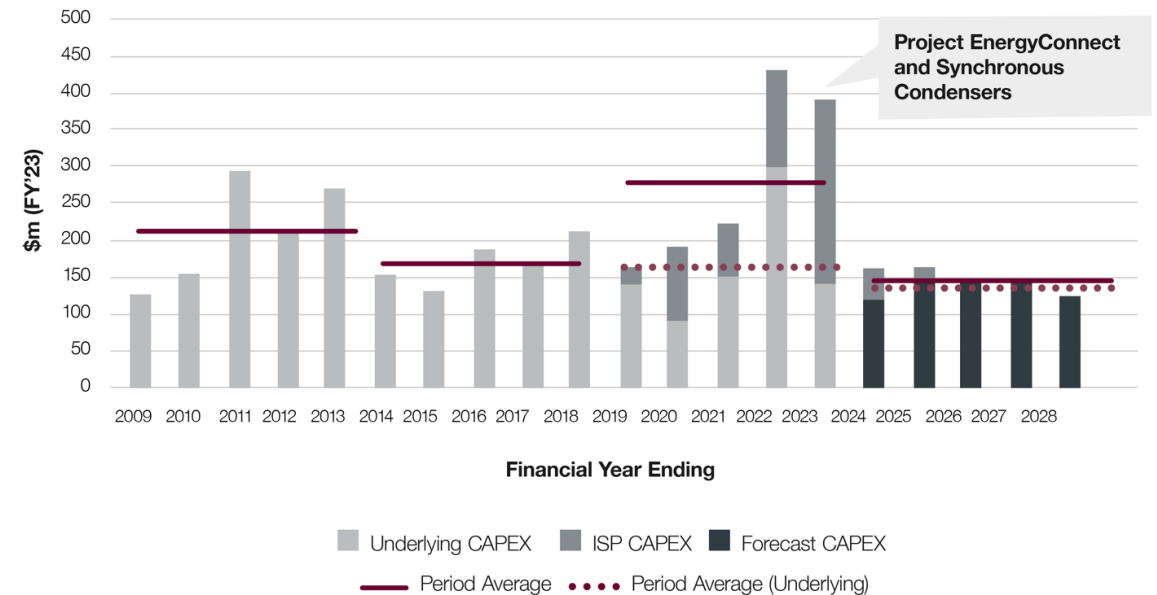
ElectraNet has sought to correct adjustment made for a windfall gain that does not exist – the AER has not accepted this

Implications of Draft Decision to apply deferral adjustment...

- Penalises windfall gain that does not exist – fails to provide incentive for efficient investment in accordance with the National Electricity Law
- Appears inconsistent with AER Guideline – offset expenditure should be considered
- Unprecedented in decisions to date

1. What are the customer considerations?
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Our past and future capital program



# Major Projects Update

**Rainer Korte**  
**Group Executive Asset Management**

# Project EnergyConnect Update

## Project at a Glance

- The project is 900km high-voltage transmission interconnector between Robertstown and Wagga Wagga in New South Wales
- The line capacity will be 800 MW – equivalent of delivering electricity to 240,000 households
- The voltage will be 330 kV (new to SA)
- The total cost of the project is \$2.28 billion and the South Australian section is \$457 million
- Route passes through high-quality renewable energy zones, facilitating the transition of more renewable energy into the National Electricity Market
- Project is expected to create over 200 jobs during construction and around 250 on-going jobs in SA

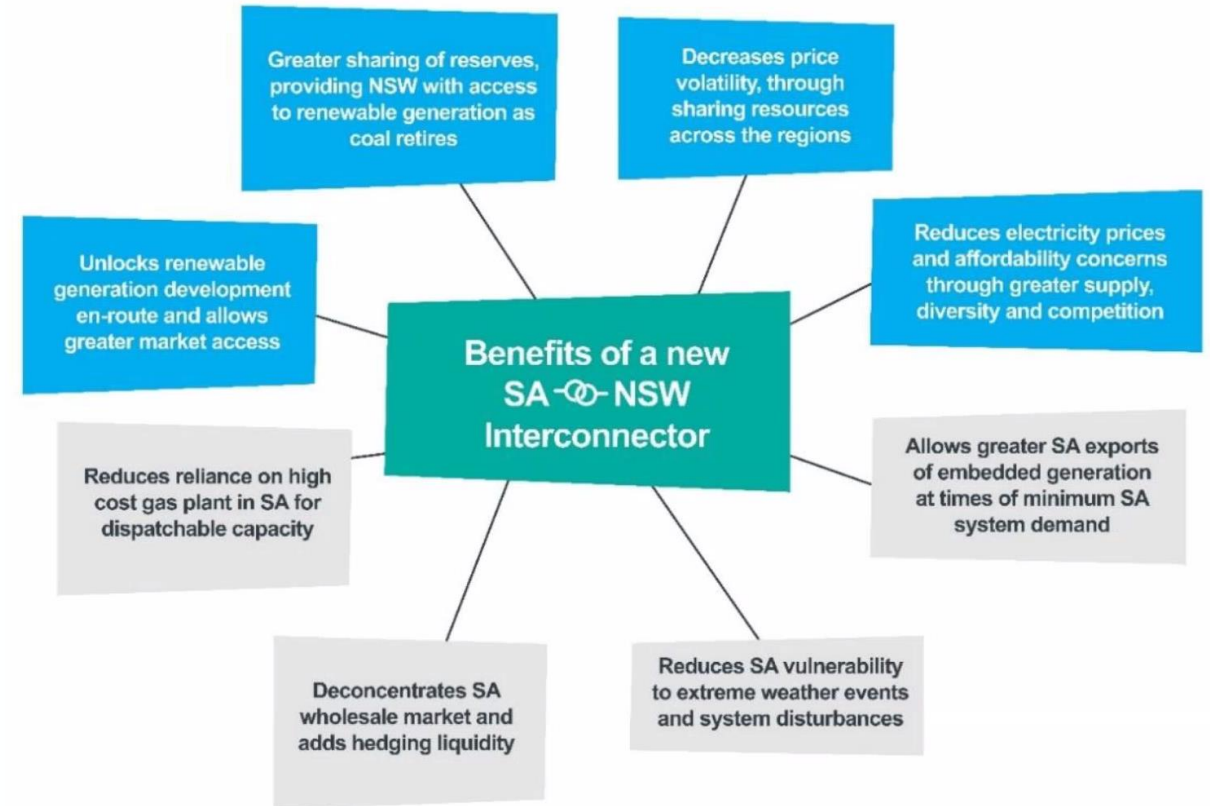




# Project EnergyConnect Update

## Customer Benefits

- For SA customers, benefits include access to additional capacity when needed to replace expensive gas generation and improved resilience and security of the power system
- For NSW customers, benefits include improved diversity of supply and access to cheaper renewable energy sources as the coal fleet progressively retires – it also unlocks significant renewable energy development along the route
- Customer price reductions are expected in both regions which outweigh the additional transmission costs by a factor of 6-7 times or more



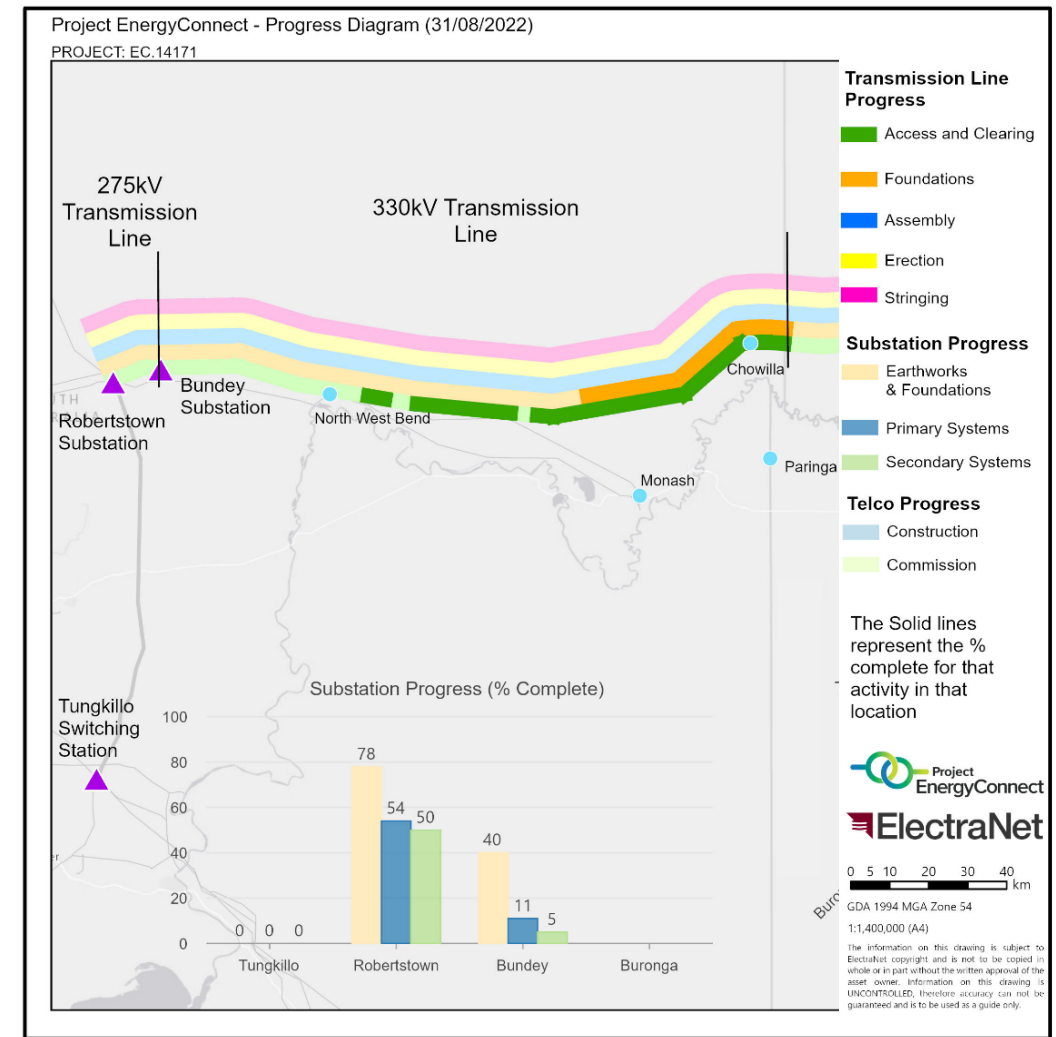
# Project EnergyConnect Update

## Project Timing

- In February 2022, major work commenced on the South Australian component of Project EnergyConnect
- Project EnergyConnect will be delivered in two stages:
  - The completion of construction from Robertstown to Buronga and energisation in late 2023, with commissioning and release of initial transfer capability over the following 12 months
  - The completion of the second section from Buronga to Wagga Wagga and energisation in late 2024, with inter-network testing and release of transfer capacity over 12-18 months, ramping up to 800MW

## Environmental Approvals

- EIS Approvals are now complete
- All Cultural heritage agreements signed
- Easement acquisition is complete with all landholders





Bunday Substation earthworks



Completed foundations at tower 356  
(Terminal structure at SA/NSW border)



Calperum Station easement track

Erection of first 330 kV tower in SA



# Wrap Up and Next Steps

**Chris Hanna**

Government and Stakeholder Relations Adviser

# Wrap Up and Next Steps

- 2022-23 Proposed Meeting Schedule:
  - **CAP Meeting:** Monday, 17 October 2022, 3pm to 5pm
    - Engagement principles, practices and co-design
    - Revised Revenue Proposal
  - **CAP Meeting:** Thursday, 23 February 2023, 3pm to 5pm
  - **CAP Meeting:** Thursday, 25 May 2023 + Site Visit
  
- Sitting Fees – to be discussed