Revenue Reset Reference Group

TUESDAY, 26 MAY 2026

electranet

Acknowledgement of Country

ElectraNet acknowledges the Traditional Owners of the land and waters on which we operate.

We pay our respects to their Elders past, present and emerging and extend that respect to all other Aboriginal and Torres Strait Islander people of Australia.

electranet

Agenda, Overview of session and Standing items

Leanne Muffet
Facilitator

electranet

Executive Summary

Date	26/05/2026
Meeting Name:	RRRG Meeting 8
Agenda Item:	Capex Deep Dive 2
Purpose:	PRP engagement
Division:	Various
Presenters:	Various

The below Executive Summary serves as a concise and comprehensive overview of the presentation that follows. The primary purpose of the Executive Summary is to provide the RRRG a quick and clear understanding of the key essential points and findings contained in the full presentation.

1. Introduction:

- This session aims to give the RRRG a clear, early view of our capital drivers covering network augmentation, network security & compliance (and how the regulatory mechanism works), and our corporate accommodation strategy (10-year lease v build), so consumers can develop an understanding of the drivers, test the rationale, challenge assumptions before positions are locked in.

2. Summary of Objectives:

- Early visibility of capex drivers for augmentation, security/compliance, contingent projects and our accommodation plans.
- Build understanding i.e., what is driving projects and why they are needed.
- Test and shape – challenge & test assumptions before positions are locked in.

3. Key Findings / "So what?" messages:

- Costs rising with clear drivers – demand growth, transition pressures, compliance obligations
- Not all spend is optional – core compliance/reliability v areas with genuine flexibility
- Contingent = manage uncertainty – delay commitment until triggers/need are clear

4. Recommendations or Conclusions – What we need from the RRRG:

- Validate the "why", are the drivers clear, credible?
- Test trade-offs e.g., optionality in reference to lease v build
- Inform PRP narrative – evidence responsiveness and prudent decision-making

Meeting Agenda

Agenda Item	Engagement (IAP2)	Time	Presenter
Acknowledgement of Country		10:30 to 10:35	Leanne Muffet - *Facilitator*
Minutes & actions		10:35 to 10:45	Leanne + All
Capex 2 Network Augmentation ▪ Augex Overview & Forecasting Methodology	Inform	10.45 to 11:00	Brad Harrison – *Head of Network Strategy and Investment Planning*
Capex 2 Project Deep Dive ▪ Augex Sample of Key Projects ▪ Contingent Projects	Consult/Involve	11:00 to 11:30	Luke Wines & Tom Arnold – *Network Strategy and Investment Planning*
Break		11:30 to 11:40	
Capex 2 Project Deep Dive (contd.) ▪ Security/Compliance overview & key projects		11:40 to 12:00	Michael Wong & Laurie Antal – *Network Portfolio and Planning*
Capex 2 ▪ Corporate Building Options	Consult/Involve	12:00 to 12:30	John O'Dea – *Chief Financial Officer*
Open dialogue and reflections for RRRG members		12:30 to 1:05	Greg + Leanne
Pulse check, meeting actions, AOB		1:05 to 1:30	Leanne Muffet

PRP Disclaimer

The contents of this presentation is the results of early working drafts shared to support open and early engagement, consistent with the Better Resets approach.

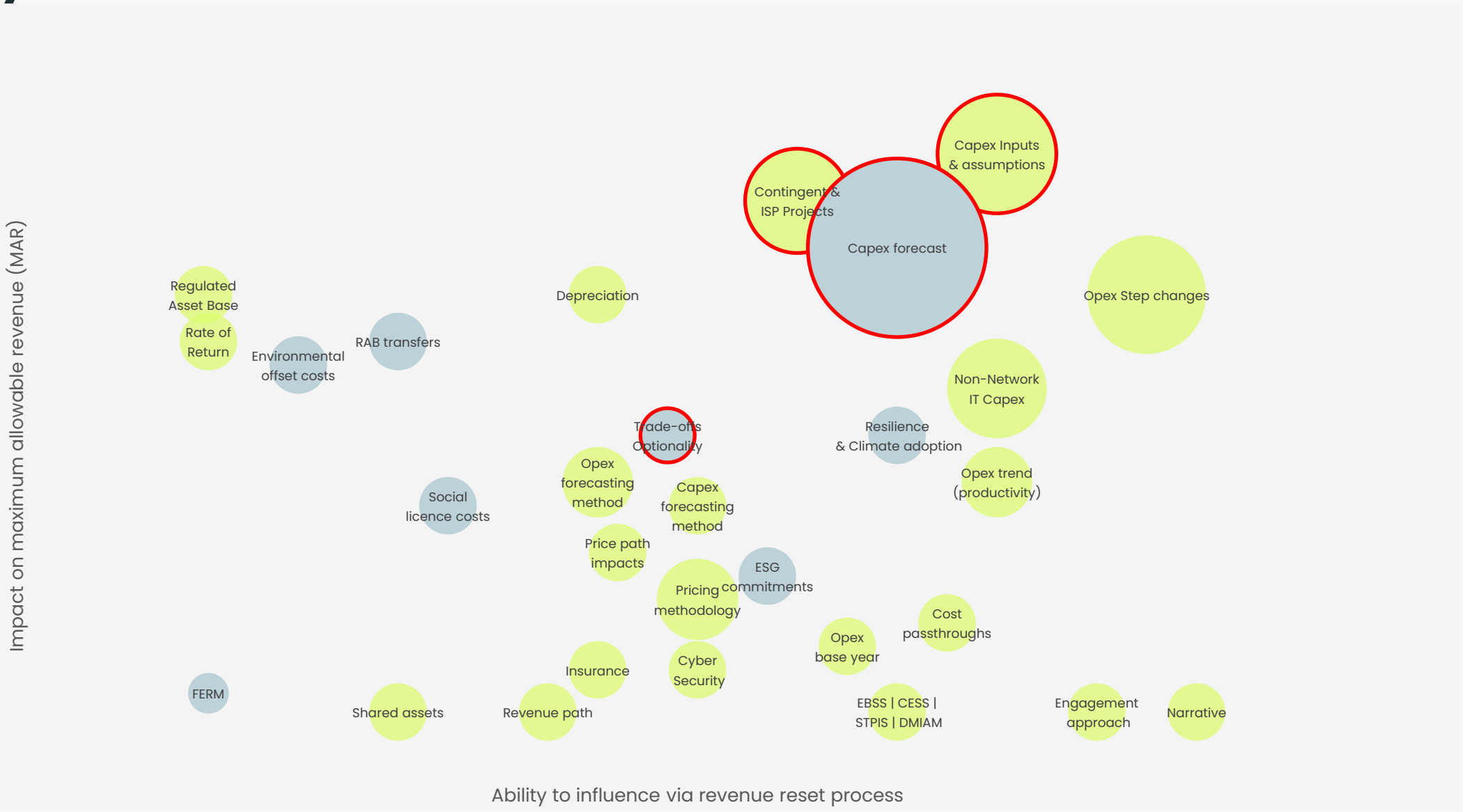
The information is indicative only. The analysis has been developed using high-level planning assumptions to inform an initial view of projects, expenditure and associated impacts on revenue. It does not represent modelling required for the revenue proposal including the full suite of individual AER models.

Many usual checks, assurance processes and refinements have not yet been completed. Projects are still being scoped, expenditure estimates are preliminary. Expenditure has not been phased in a detailed way and work in progress has been simplified at this stage. The proposal will be iteratively refined as analysis progresses and stakeholder feedback is considered.

PRP content (assuming $2.9b Capex position)

	CURRENT PERIOD	PRELIMINARY REVENUE PROPOSAL	COMMENTARY
Capital Expenditure	**$824m**	**$2.9b**	**Discussed in March, to be discussed in May, ongoing**
Operating Expenditure ($real 2028)	$745m	$926m (185m p.a).	Discussed in April
Rate of Return	5.55%-5.92%	Expected 6.49% - 7.32%	For discussion Sep
Total Revenue ($nominal)	$2.2b	$3.3b	For discussion Sep
Opening RAB ($nominal)	$3.9b	$4.3b	This is an outcome of Capex excl NtX For review Sep
Closing RAB ($nominal)	$4.3b	$5.8b	As above
Transmission Pricing (p0)	13%	29%	For discussion Sep

May RRRG focus areas

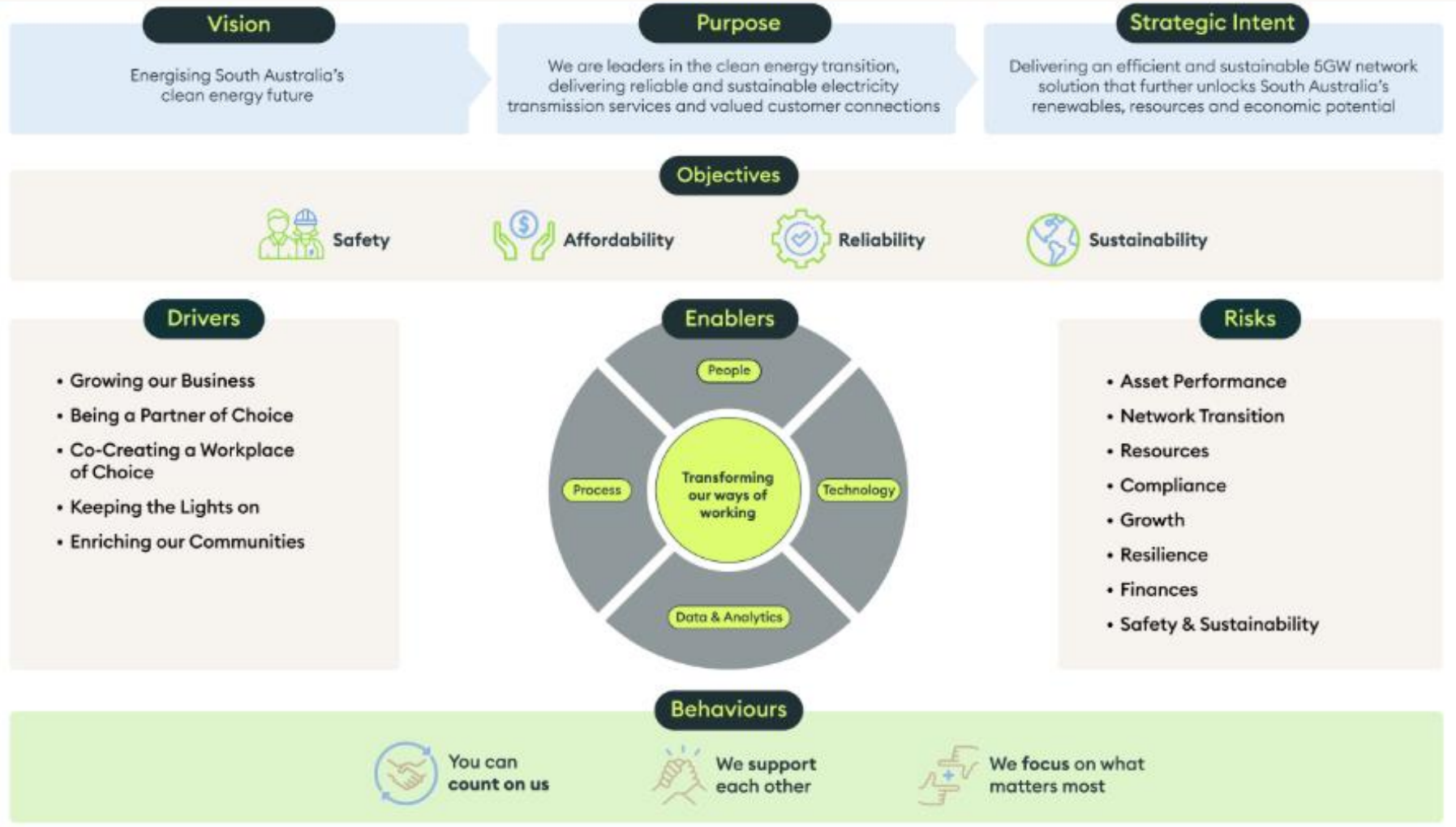


Capex 2 Deep Dive – Augex
Session 1: Forecasting Methodology

Brad Harrison
Head of Network Strategy &
Investment Planning

electranet

ElectraNet Strategy



The Big Picture: What is happening around the Globe?

Across the world there are a range of driving forces that are having significant impacts on the electricity sector. Individually factors such as geopolitics and electrification would be considerable, together they are driving change that could never be forecast.

Geopolitics & Supply Chains

Across the world, a wide range of factors continue to influence the development of electricity networks

Economic Progress

Both the global, national and local economy continues to evolve at pace, particularly in relation to technology, mineral supply, and defence industries

Government Policy Evolution

The development of government policy has impacted the sector at all levels in an unprecedented way

Consumer Behaviour & Electrification

Consumers are choosing to engage with their energy consumption like never before – in their home, on the roads and on their roofs

Technological Advancements and Disruption

Sustainability Imperatives

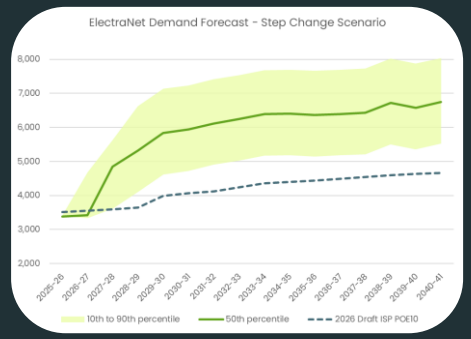
electranet

The Local Perspective: Why New Investment Is Needed

There are four key pillars underpinning the need for investment in the South Australian transmission network during the 2028-33 reset period. The themes are well known but the scale and pace continue to accelerate under a constant cloud of uncertainty.

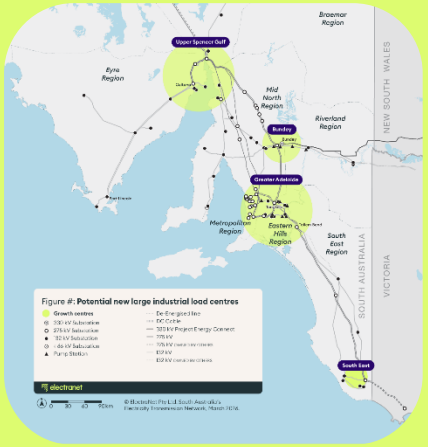
South Australia's electricity system is changing, and demand on the transmission network is rising

Electricity is becoming more critical to everyday life and the economy.



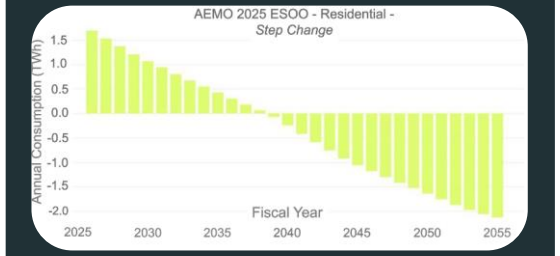
The system must perform under greater stress and uncertainty

Electricity now underpins jobs, industry, and essential community services.



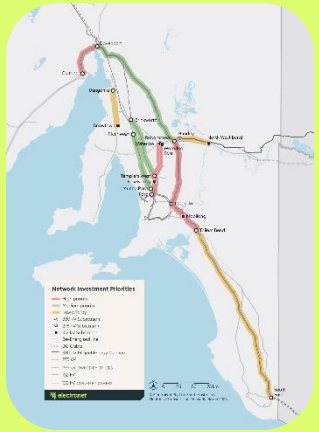
The energy transition is reshaping how the system operates

Renewable generation is replacing ageing thermal plant.



Long-term under-investment would increase costs and risks for consumers

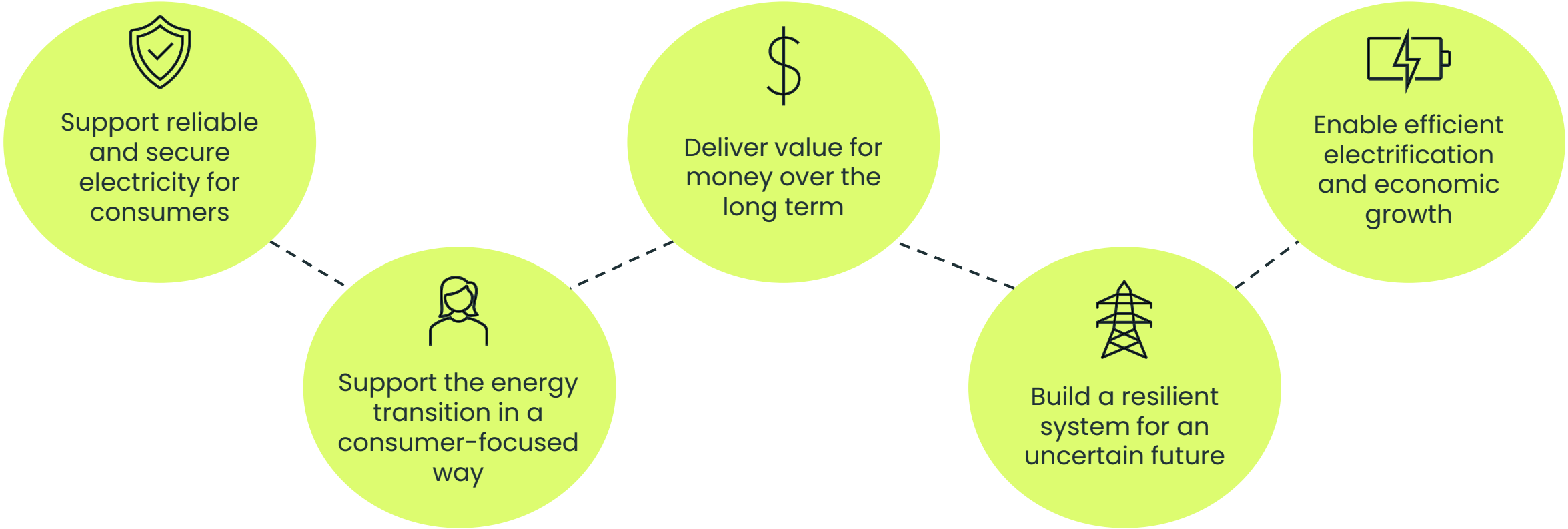
Forward-looking investment supports lower long-term prices and better service outcomes.



electranet

Objectives: What the Investment Is Designed to Achieve

In scoping solutions to the needs identified, ElectraNet works to achieve the overarching objectives and principles that underpin our planning process. In planning for the future of the South Australian network we ground our work in the five objectives below.



Capex 2 Deep Dive - Network Augmentation Session 2: Sample of key projects

Luke Wines & Tom Arnold
Network Strategy & Investment Planning

electranet

How the RRRG Can Influence Augmentation Expenditure

Not all Augex decisions are the same - this session focuses your input on where it matters most, bring together the various perspectives on network needs, inherent risks and the ongoing delivery of outcomes for consumers.

Where Augex is non-negotiable (compliance driven)

- In some areas the network must be upgraded to meet compliance and licence-to-operate obligations
- These investments are not discretionary

Your role:

- Test whether reasoning is clear, credible and understandable from a consumer perspective
- Advise whether the explanation would feel fair and reasonable to consumers

Where Augex the process highlights a highly likely future need (planning-led decisions)

- The ElectraNet planning process is underpinned by internal capabilities, such as forecasting, our joint planning work with SA Power Networks, and our close contact with customers and the market
- The process identifies areas where investment is required to ensure continuity of positive consumer outcomes

Your role:

- Sense-check whether the planning approach feels proportionate
- Test whether the balance between cost, risk and long-term outcomes is clearly explained

Where genuine optionality exists (consumer influence is strongest)

- Some Augex decisions involve choices around timing, scope or sequencing
- These choices involved trade offs between near-term costs and future risks

Your role:

- Provide views on acceptable trade-offs from a consumer perspective
- Help identify where flexibility should or should not be exercised

Portfolio: Lines **~$81M**

EC.11011 - Upper South East Expansion

Business Case

The need for this project is driven by:

- **The benefits of relieving existing and forecasted increases in congestion and shoring up a critical supply path to and from Adelaide.**
- This will provide greater access to geographically diverse renewables and storage in South East.
- Expected to increase transfer capacity between critical substations on the Heywood interconnector corridor (Tailem Bend – Tungkillo)
- Firms up import and export along Heywood Interconnector.
- A series of events mean that the 2028-2033 reset period is an opportune time to complete this project.

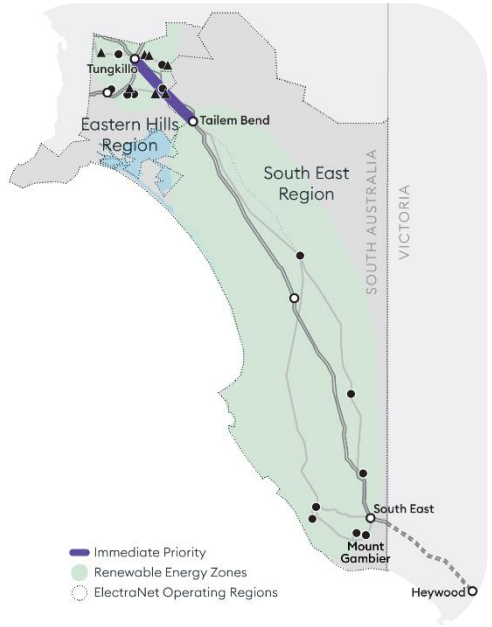
Bottom Line

- This project is expected to put downward pressure on wholesale electricity prices
- If not, it is expected that congestion will increase in this critical corridor which will likely create inefficiencies in market outcomes.

Scope Overview

Stringing a new 275 kV line on the vacant side of an existing set of towers between Tepko and Tailem Bend, completing a new line between Tungkillo and Tailem Bend (2031)

- Involves stringing ~50 km of new conductor. This means no new structures or changes to easement, in an effort to maximise value derived from existing assets.
- Expected to increase transfer capacity by ~100 MW



electranet

Portfolio: Substations **$26,175,648**

EC.15468 - Tailem Bend Transformer Replacement

Business Case

The need for this project is driven by:

- **Consumer load at Tailem Bend increasing to the point that network capacity is insufficient to maintain reliable supply**
- SAPN is forecasting that underlying load growth will exceed capability of transformers at Tailem Bend in Summer 2031/2032
- ElectraNet has obligations to maintain sufficient N-1 transformer capacity under SA ETC for category 4 connection points
- Joint Planning with SAPN has revealed an additional benefit. Upsizing transformers will reduce potential restrictions on consumer resources.

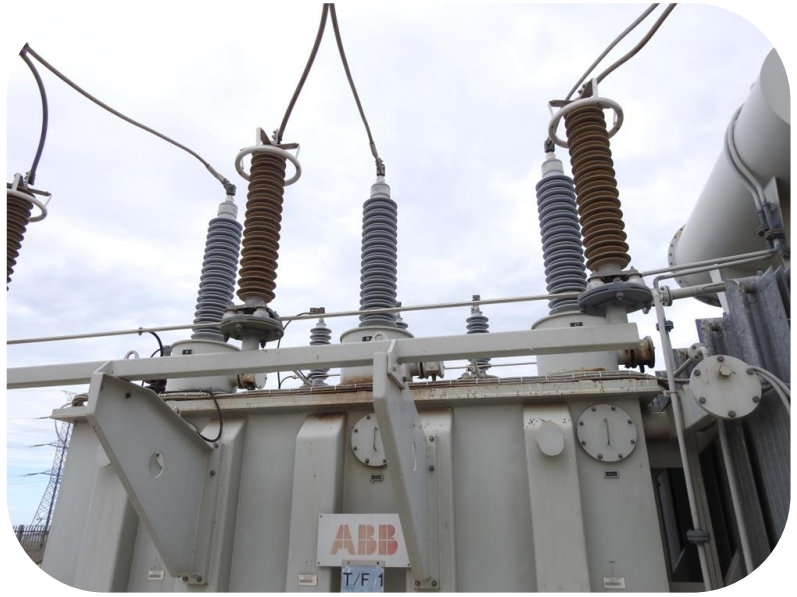
Bottom Line

- This will enable ElectraNet to maintain a reliable supply of electricity to Tailem Bend beyond 2031/2032
- If not, ElectraNet will be in breach of its ETC obligations and there is potential for unserved energy at Tailem Bend

Scope Overview

Replacement of two transformers at Tailem Bend to meet rising demand in October 2032

- Replace two 25 MVA transformers with new 60 MVA transformers
- Retain 25 MVA transformers as system spares and potential replacements for other connection points that require augmentation (2033-38)
- Replace associated equipment to get full capacity out of new transformers



electranet

Portfolio: Substations **$12,542,223**

EC.15708 - Lower South East Upgrade (Mount Gambier)

Business Case

The need for this project is driven by:

- **Industrial load at Blanche increasing to the point that network capacity is insufficient to maintain reliable supply**
- SAPN is forecasting that industrial demand growth will exceed capability of transformers at Blanche in Summer 2030/2031
- ElectraNet has obligations to maintain sufficient N-1 transformer capacity under SA ETC for category 4 connection points
- Joint Planning with SAPN canvassed multiple options to find the lowest-cost and most efficient solution.

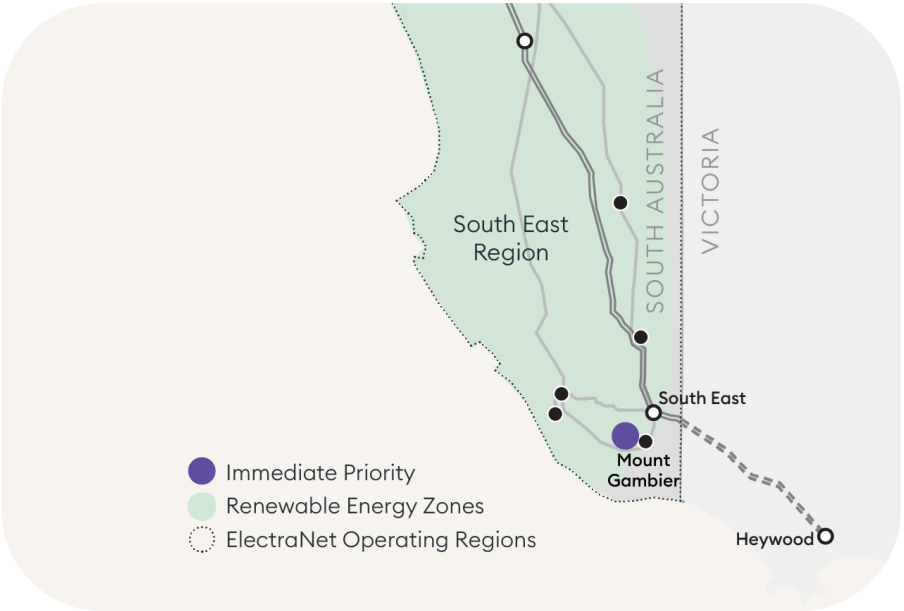
Bottom Line

- This will enable ElectraNet to maintain a reliable supply of electricity to Blanche and Mount Gambier beyond 2031/2032
- If not, ElectraNet will be in breach of its ETC obligations and there is potential for unserved energy at Blanche and Mount Gambier

Scope Overview

Replacement of 25 MVA transformer at Mount Gambier with a 60 MVA transformer in October 2031

- Replace 25 MVA transformer with 60 MVA transformer
- Retain 25 MVA transformer as system spare and potential replacement for other connection points that require augmentation (2033-38)



electranet

Portfolio: Substations, Lines **~176M**

Securing supply to the Northern Suburbs (EC.15776, 15907, 15709)

Business Case

The need for this project is driven by:

- **Load growth moving north:** Parafield Gardens West can meet short-medium term need, but Outer North housing growth may shift demand toward Munno Para, beyond what Parafield Gardens West upgrades can efficiently supply.
- **Security constraint:** loss of either existing 275 kV line requires tripping the Munno Para transformer, limiting secure capacity and growth.
- **Ageing asset risk:** Para–Munno Para (built 1968) is nearing end of design life, with increasing likelihood and consequence of failure.
- **Long-term system planning**: An element of Mid North Reinforcement program to strengthen the Mid North–Adelaide corridor and maximise easement efficiency.
- **Portfolio:** Strategic transmission reinforcement to enable Northern Suburbs growth and support broader Mid North–Adelaide supply capacity and security.

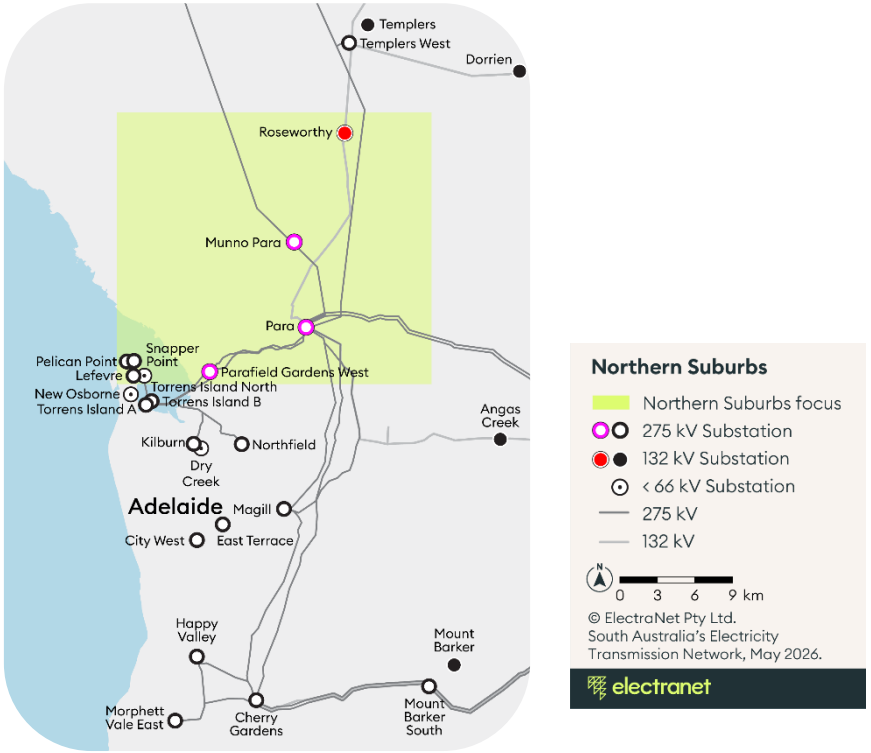
Bottom Line

- Following this proposal is expected to secure supply, meet load growth efficiently, and reduce outage risk.
- If not, risks include constrained Outer North growth, ongoing security limits, and rising failure risk from ageing assets

Scope Overview

Three identified needs in the same region that are insufficiently certain.

- Replace 180 MVA transformer with 225 MVA at Parafield Gardens West (~$25M)
- Secure easement (~$13M) and construct a second line between Para and Munno Para (~$88M)
- Establish new substation at Kingsford for SAPN connection (~$50M)



electranet

Portfolio: Substations, Lines **~$240M**

EC.15829 – Resolving Connection Issues in the South East

Business Case

The need for this project is driven by:

- **Connection interest in the South East:** Substantial generators and loads have begun the connections process, including Connection Enquiries
- **Difficulty connecting between Tailem Bend and South East:** The series capacitors at Black Range increased Heywood limits, but have made connection complex and expensive
- **Overall system planning and generation portfolio**: Opening up this region to generators (and loads) provides SA with a greater diversity of renewable generation at times of daily maximum demand which is critical to lowest system cost
- **Interconnector support:** Several identified options could increase interconnector flows along Heywood

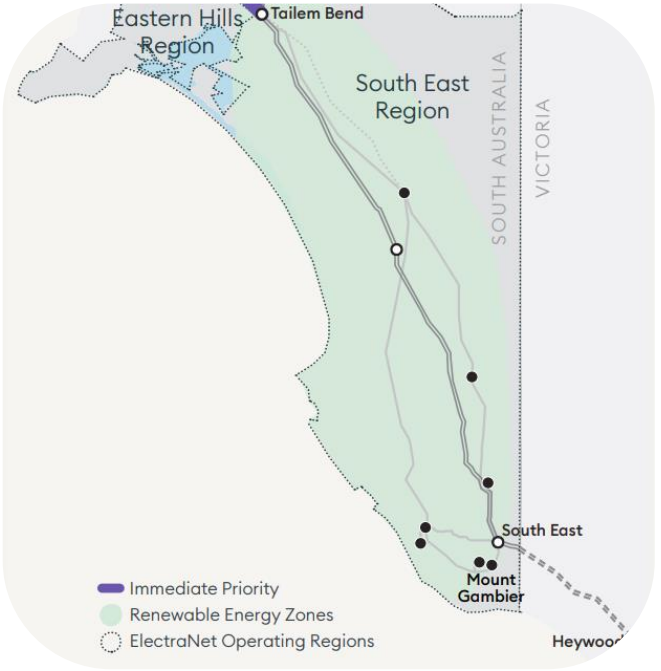
Bottom Line

- This proposal creates opportunity for load and generation to be connected in one of South Australia's key REZs, diversifying supply, reducing risk and improving market outcomes
- If not, there will continue to be reduced access for generation and load in the South East

Scope Overview

Three potential options identified along the same corridor.

1. Install capacitors at Black Range, create reactive control scheme, tie-in a new switching station north and south of Black Range
2. Create reactive control scheme, build new 275 kV double circuit from Black Range to South East
3. Install modular power flow controller at Black Range



electranet

Portfolio: Network **$various**

Contingent Projects

Portfolio Overview

The below details a high-level summary of the Network Contingent Projects, for each of which optioneering is being conducted and a set of triggers is being developed. These proposals are subject to sufficient uncertainty to make them a better fit as Contingent projects rather than ex ante.

Project Number	Project Name	Cost estimate	Rationale
EC.15709	Kingsford 275/66 kV connection point	$50m	Identified in SAPN Joint Planning as preferred option for supplying Concordia growth area (GARP). May join Northern Suburbs meshed network.
EC.15841	Yorke Peninsula	$400m	Prospect of major load connecting, augmentation will be required to increase N-1 line capacity to Hummocks. Best long-term solution is 275 kV line(s) from Blyth West. Requires 275/132 kV TFs at Hummocks, has been accommodated for in rebuild.
Various	Other connection points that may require augmentation	Single TF $20-25M Multiple TF ~$30-35M	▪ Metro West (1 / 2 TF) ▪ Metro South (1 TF) ▪ Mt Barker (1 TF) ▪ Baroota (2 TF) ▪ Davenport West (2 TF)
	NTx components	**$250-400M total**	**In the absence of NTx there are a series of necessary augmentations to be made to the network in the 2028-33 period**
EC.15209	Second Templers West Transformer	$~60M	Increase transfer capacity between the north of SA and Metro Adelaide to support new generation in the north of SA and generation retirements in the Metropolitan area
EC.15831	Bundey System Strength Improvement	$~30-90M	Balancing system security and operational complexity given volume of generation connecting at Bundey. Options include RAS or new circuits Bundey – Robertstown (S5.1.8 - non-credible contingency emergency control)
EC.15900	Establish Globe Derby Switching Station	$115M	Supports remaining dispatchable Metro generation, provides new bushfire-independent injection point for Greater Adelaide. Future SAPN connection point, Metro reactive plant.

Break

10 minutes

electranet

Capex 2 Deep Dive – Security/Compliance Session 3: Sample of key projects

Michael Wong & Laurie Antal
Network Portfolio and Planning

electranet

What is a “Reliability Corrective Action Project”

ElectraNet is SA’s TNSP, planning and operating the high-voltage transmission network

- ElectraNet owns and operates South Australia’s transmission network and is the State’s principal TNSP.
- Our role spans long-term planning, network development, and day-to-day operation of the grid.

The NER set reliability standards; AEMO operates the system within those limits

- The National Electricity Rules define the reliability and security outcomes the system must meet.
- AEMO operates the power system in real time, while ElectraNet ensures the network can meet those requirements.

Corrective actions manage reliability risks as the network approaches operating limits

- Corrective actions include constraints, switching, control schemes and other operational tools.
- They are a key mechanism that allows ElectraNet and AEMO to safely maximise utilisation of existing network capacity, particularly during high demand or high renewable output periods.

Excessive reliance on corrective actions creates risk, cost and operability challenges

- Frequent corrective actions signal that the network is operating close to its efficient limits.
- Over-reliance can increase costs, complexity, and exposure to operational and human risk.

Reliability projects are identified when corrective actions are no longer suitable

- At that point, planning obligations require ElectraNet to consider network or non-network investment.
- These are **“Reliability Corrective Action Projects”** that restore headroom so reliability is delivered structurally, not operationally.
- They are an investment by a TNSP in respect of its transmission network for the purpose of meeting the service standards linked to the technical requirements of schedule 5.1 or in applicable regulatory instruments and supply standards and which may consist of network options or non-network options.

electranet

Portfolio: Security & Compliance **~$54 M**

EC.15822 - Transmission Network Voltage Control Enhancement 2029-33

Business Case

The need for this project is driven by:

- A forecasted growth in load in the greater Adelaide region that will increase the required reactive power to maintain stable voltage levels.
- Given the recent forecasts, ElectraNet have identified there is insufficient reactive power margins and strengthening voltage control across the 275 kV network.
- Therefore, this works is required to maintain voltage levels and stability in accordance with S5.1a.4 (voltage) and S5.1.8 (stability) clauses in the NER.
- The installation of this plant will also enable better utilisationof the transmission network and increases import/export capability and support in maintaining a more stable and secure operating state, avoiding constraints on critical infrastructure such as the Heywood Interconnector.

Bottom Line

- This project is essential to ensure the Network is operated compliant to the NER requirements for voltage level and stability due to the forecasted growth of the Network.

Scope Overview

- Install 2 x 100 Mvar capacitor banks in the Adelaide Metro region on the 275 kV network.
- Install 1 x 50 Mvar reactor in the South-East region on the 275 kV network.
- Include all associated connection, switching, protection, monitoring, control, and civil works.
- Upgrade and coordinate automatic switching of reactive power devices across the transmission network
- Implement secondary system upgrades (control, protection, monitoring) across multiple substations
- Enable automated tap changer control at ~30 SAPN connection sites

100 Mvar 275 kV capacitor

electranet

Portfolio: Security & Compliance | **~$28 M**

EC.15827 - South Australia Intra-Area Separation Prevention Scheme

Business Case

The need for this project is driven by:

- An AEMO recommendation in the 2023 General Power System Risk Review (GPSRR).
- The recommendation was for ElectraNet to investigate the suitability of a Remedial Action Scheme (RAS/SPS) to prevent cascading failures (in accordance with S5.1.8 of the NER).
- ElectraNet have investigated and determined manual operating protocols are insufficient.
- Therefore, a RAS is required in the Mid North to prevent multiple credible contingencies from causing uncontrolled cascading outages.
- The scheme also allows for more efficient network utilisation by unlocking constraints, utilising controlled tripping during unplanned outages to stabalise the network and significantly reduced complexities for real time network operators.

Bottom Line

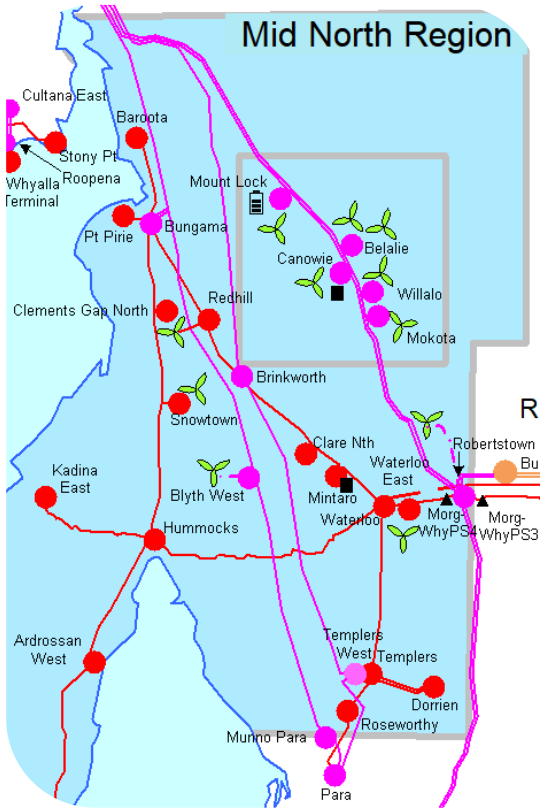
- In the absence of this RAS, foreseeable multiple contingency events in the Mid-North of South Australia will continue to risk uncontrolled intra-area separation, potentially causing widespread and sustained outages.

Scope Overview

- Power system studies/modelling to define instability conditions, triggers, and required actions.
- Design of a synchrophasor-based wide area RAS including detection logic and control strategies.
- Installation of redundant central controllers, station controllers, and high-speed communications infrastructure.
- Integration with generators, BESS, and major loads to enable fast tripping and control actions.
- Testing, Commissioning, SCADA integration and operational procedures.

"AEMO has identified the potential need for a RAS to manage South Australia intra-regional separation. Therefore, to reduce the likelihood that multiple trips due to lightning or other risk factors in South Australia result in severe cascading failures, AEMO recommends, in accordance with NER S5.1.8, that ElectraNet investigates the suitability of a RAS to prevent South Australia intra-regional separation."

- 2023 GPSRR



Mid-North Region (SA)

electranet

Capex 2 Deep Dive – Corporate Building Options

John O'Dea
Chief Financial Officer

electranet

Open dialogue and reflections for RRRG members

Leanne Muffet & Greg McCarron

electranet

Questions the RRRG is starting to ask

Beyond accessibility, reliability, affordability what does the consumer need ...

a) Does the investment serve the long-term interests of consumers?

b) Are consumers paying no more than necessary for the benefits received?

c) When are net consumer benefits expected to materialise ... within 10, 15, or more than 20 years?

d) Are costs and benefits equitably distributed across low-income, regional, and vulnerable households?

e) Have credible non-network alternatives (e.g., demand response, storage, distributed energy) been fully assessed?

f) What trade-offs exist (e.g., cost vs. speed, environmental vs. social impact), and how are they justified from a consumer perspective?

g) Would a well-informed consumer support this decision, and has meaningful stakeholder engagement been conducted?

h) What is the consumer cost of delay, and how does it compare to the cost of timely implementation?

i) How does the revenue reset ensure a fair allocation of legacy costs across past, present, and future consumers?

Towards a PRP

Landing a capex forecast for the PRP

We have now discussed capex forecasting and projects in:

- Replacement (Brett, March)
- ICT (Brent and Alain, April)
- Network (Michael and Laurie today)
- Augmentation (Brad, Luke and Tom today)

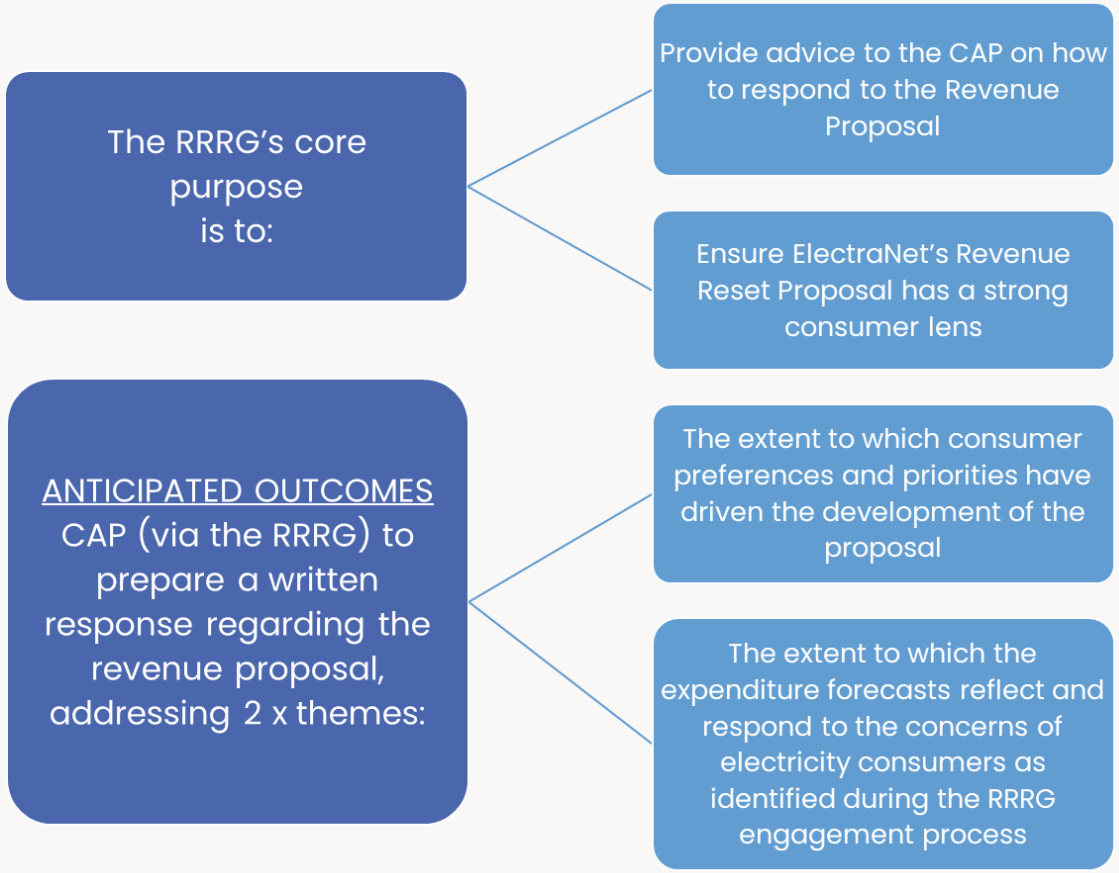
You have insights into

- How we prepare forecasts
- How we seek to defer ‘unnecessary’ expenditure

Landing a capex forecast for the PRP

You have told us:

- Need time to reflect and consider whether the views and expectations of consumers are reflected
- Important to consider fairness/ equity
  - Over time
  - Over groups of consumers
- Important to remain aware of cost of living pressures/ avoid unnecessary pressure on power prices
- Need to balance cost with risk rather than eliminating risk entirely
  - Importance of explaining 'why now'
  - Support for lifecycle based decision making



Landing a capex forecast for the PRP

Our next step is to publish a Preliminary Revenue Proposal in July

- Explain to consumers in reasonably plain English
  - Summary of the Revenue Proposal
  - Describe how we are engaging with consumers and have sought (will seek) to address concerns raised through engagement
  - Describe key risks and benefits fo the Proposal for consumers
  - Comparison of revenue cap in current and future periods

To do this we need to land capex and opex forecasts

Landing a capex forecast for the PRP

Bottom up capex forecast

- Explain to consumers in reasonably plain English
  - Summary of the Revenue Proposal
  - Describe how we are engaging with consumers and have sought (will seek) to address concerns raised through engagement
  - Describe key risks and benefits fo the Proposal for consumers
  - Comparison of revenue cap in current and future periods

To do this we need to land capex and opex forecasts

Bottom up Capex forecast →

- Something needs to be done

By category	#	m
Inventory/Spares	2	25
Security/Compliance	34	646
Replacement	42	1,004
Refurbishment	4	91
Augmentation	25	703
Facilities	16	238
Easements/Land	1	42
Connection	1	-
Information Technology	26	331
	151	3,080
Real cost escalation @ 30%		924
Total		4,004

A top down approach

Recently Powerlink (Qld) and AusNet Services (Vic) have submitted their proposals

Both propose uplift relative to current period

- PLQ – ~70% uplift
- ANT – ~115% uplift

Neither includes augmentation expenditure

- Standalone processes involving Government entities

Powerlink and AusNet have their own drivers and their own needs

- Not a basis for making forecasts
- Can give a sense as to what might be reasonable

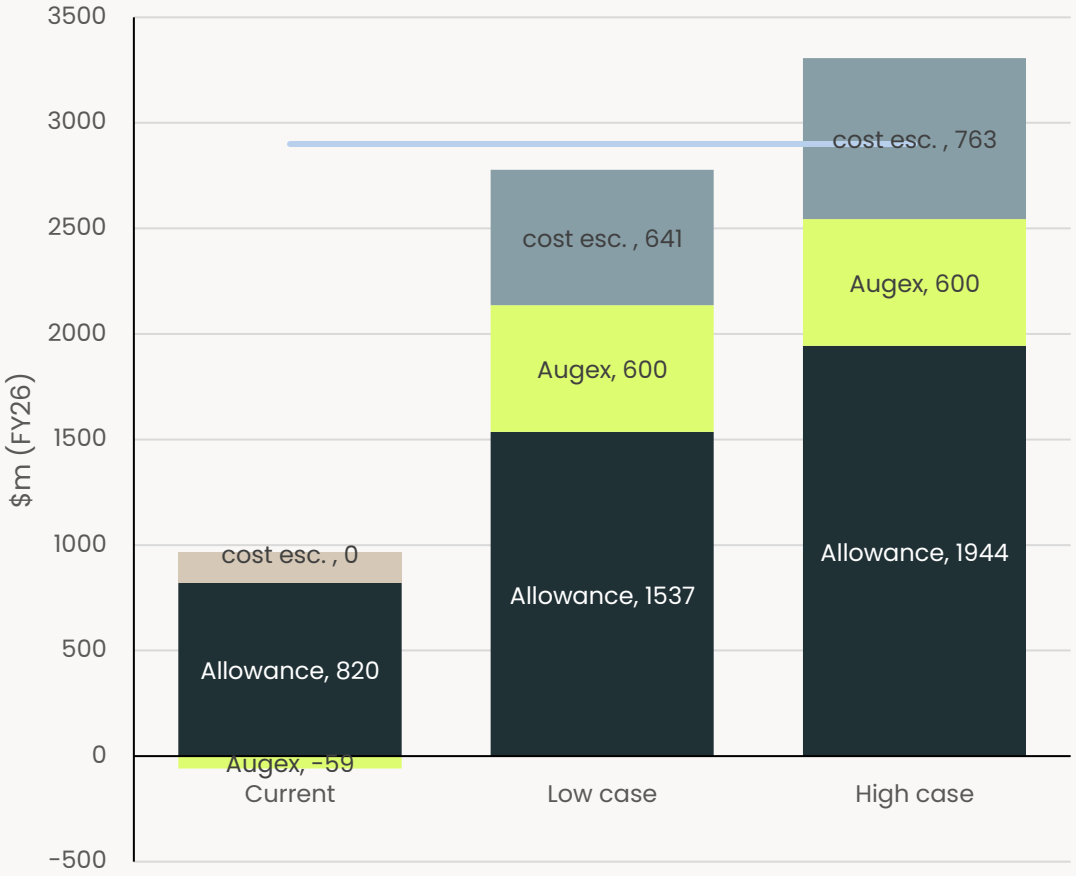
Capex forecast for Preliminary Revenue Proposal

Proposing to constrain our bottom-up forecast to the range implied by PLQ/ ANT

- Add augmentation (discussed today) at nom. $600m
- Account for *real price escalation*

Real price escalation

- Estimates of what it costs now are not fit for purpose
- Delivery costs growing at ~8% p.a. in recent years
- Efficient cost of delivering projects *when they need to be delivered*
- Working to find a suitable way to allocate cost risk risks



AOB

Jeremy Tustin

electranet