

ElectraNet Consumer Advisory Panel Meeting

2 July 2021

10:30am – 12:30pm

Meeting Agenda

Date: Friday, 2 July 2021, 10:30am to 12:30pm

Location: ElectraNet Office: East Terrace

Item	Agenda Item	Responsible Person	Time Allocated
1.	Welcome	Rainer Korte	5 min
2.	Meeting notes from 23 February 2021 & 6 April 2021 <i>for APPROVAL</i>		
3.	Major Projects Update <i>for INFORMATION - followed by Q&A</i>	Rainer Korte	15 min
4.	Commitment to Genuine Customer Engagement <i>for INFORMATION</i>	Gordon Jardine, Chairman Steve Masters, CE	10 min
5.	Revenue Reset: Early Engagement <i>for CONSULTATION and DECISION</i>	Simon Appleby	20 min
6.	Revenue Reset: Preliminary Revenue Proposal Briefing <i>for CONSULTATION & DECISION</i>	Rainer Korte Jeremy Tustin	30 min
7.	Open Discussion Forum	Rainer Korte	30 min
8.	Wrap up and next steps	Rainer Korte	10 min

Major Projects Update

Rainer Korte, Group Executive Asset Management

Major Projects Update



Site of PEC new 330/ 275kV substation near Robertstown in SA

Major Projects Update

Main Grid System Strength

- Project nearing completion with commissioning of all four synchronous condensers in July 2021

Eyre Peninsula Reinforcement (EP Link)

- Major construction works now underway
- Planned completion by end 2022

Project EnergyConnect

- AER contingent project approvals 28 May 2021
- ElectraNet and TransGrid Board Final Investment Decisions concluded 4 June 2021
- Construction to start later in 2021 with commissioning underway in 2023



Synchronous condensers at Davenport and Robertstown



Commencement of Eyre Peninsula major construction works 20 May 2021

Commitment to Genuine Engagement

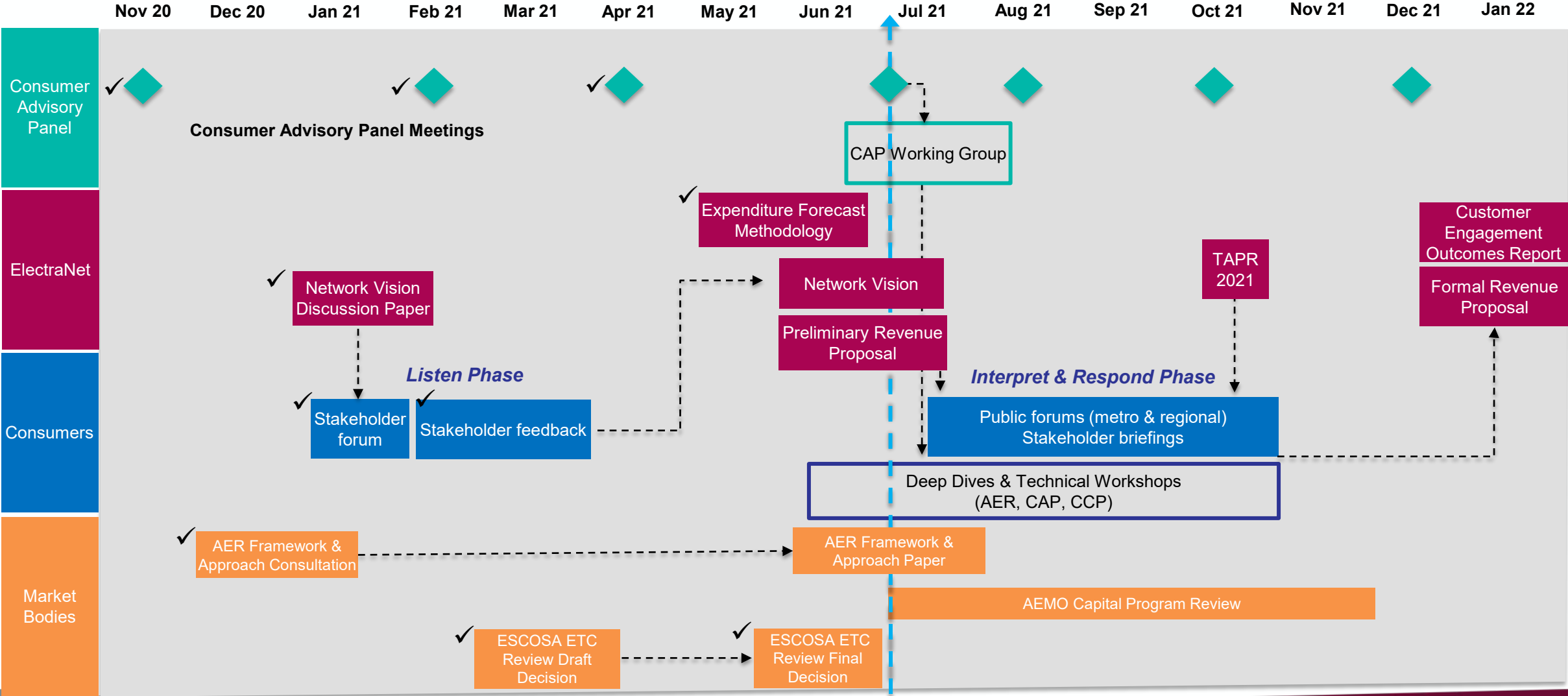
Mr Gordon Jardine, ElectraNet Chairman

Mr Steve Masters, Chief Executive

Revenue Reset: Early Engagement

Simon Appleby, Manager Regulation & Investment Planning

Early Engagement Approach



We are here

Proposed CAP Working Group

Responsibilities

Partner with ElectraNet in forming the final 2023-2028 Revenue Proposal by:

- Reviewing ElectraNet's Preliminary Revenue Proposal (PRP) and identifying topics for engagement
- Participating in deep dive workshops on topics identified by the Working Group
- Engaging with AER technical representatives on relevant matters considered in the PRP
- Seeking independent advice on matters relating to the PRP, if required
- Providing feedback, guidance and input on the matters covered
- Reporting back to the CAP on the outcomes of the deep dive workshop sessions including:
 - Areas reviewed
 - Feedback and input provided
 - The 'capability of acceptance' of the proposals by customers and stakeholders

Proposed CAP Working Group

Membership

Mark Henley

David Headberry

Mark Sutton

Vikram Kenjle

Each meeting would also be attended as required by:

- ElectraNet representatives
- AER technical representatives and observers
- AER CCP Members (when available)

Indicative Topics

To be identified by Working Group

- Capital expenditure forecast
- Asset cost-risk decision making framework
- Economic assessments
- Operating expenditure forecast
- IT Strategy
- Revenue building blocks (e.g. depreciation)

CAP Working Group - Indicative Meeting Schedule

Session	Purpose	Timing
CAP Meeting 20	<ul style="list-style-type: none"> Establish CAP Working Group Overview of the PRP 	2 July 2021
WG Meeting 1	<ul style="list-style-type: none"> Detailed review of PRP & identification of initial focus areas for deep dives Agree next steps and forward meeting schedule 	Week beginning 19 July 2021
WG Meeting 2	<ul style="list-style-type: none"> Deep dive: Areas of interest as identified above 	Week beginning 2 August 2021
CAP Meeting 21	<ul style="list-style-type: none"> Briefing by WG on outcomes of deep dive workshops Briefing by AER on progress of early engagement process 	10 August 2021
WG Meeting 3	<ul style="list-style-type: none"> Deep dive: Areas of interest as identified above 	Week beginning 23 August 2021
WG Meeting 4	<ul style="list-style-type: none"> Deep dive: Areas of interest as identified above 	Week beginning 6 September 2021
WG Meeting 5	<ul style="list-style-type: none"> Deep dive: Areas of interest as identified above 	Week beginning 27 September 2021
CAP Meeting 22	<ul style="list-style-type: none"> ElectraNet update on Revenue Proposal and recent developments Review feedback on PRP and proposed responses to issues raised Agree next steps 	12 October 2021
WG Meeting 6	<ul style="list-style-type: none"> Deep dive: Areas of interest as identified above Capability of acceptance of proposals 	Week beginning 18 October 2021
CAP Meeting 23	<ul style="list-style-type: none"> Review of finalised Revenue Proposal 	7 December 2021

Indicative Public Engagement Schedule

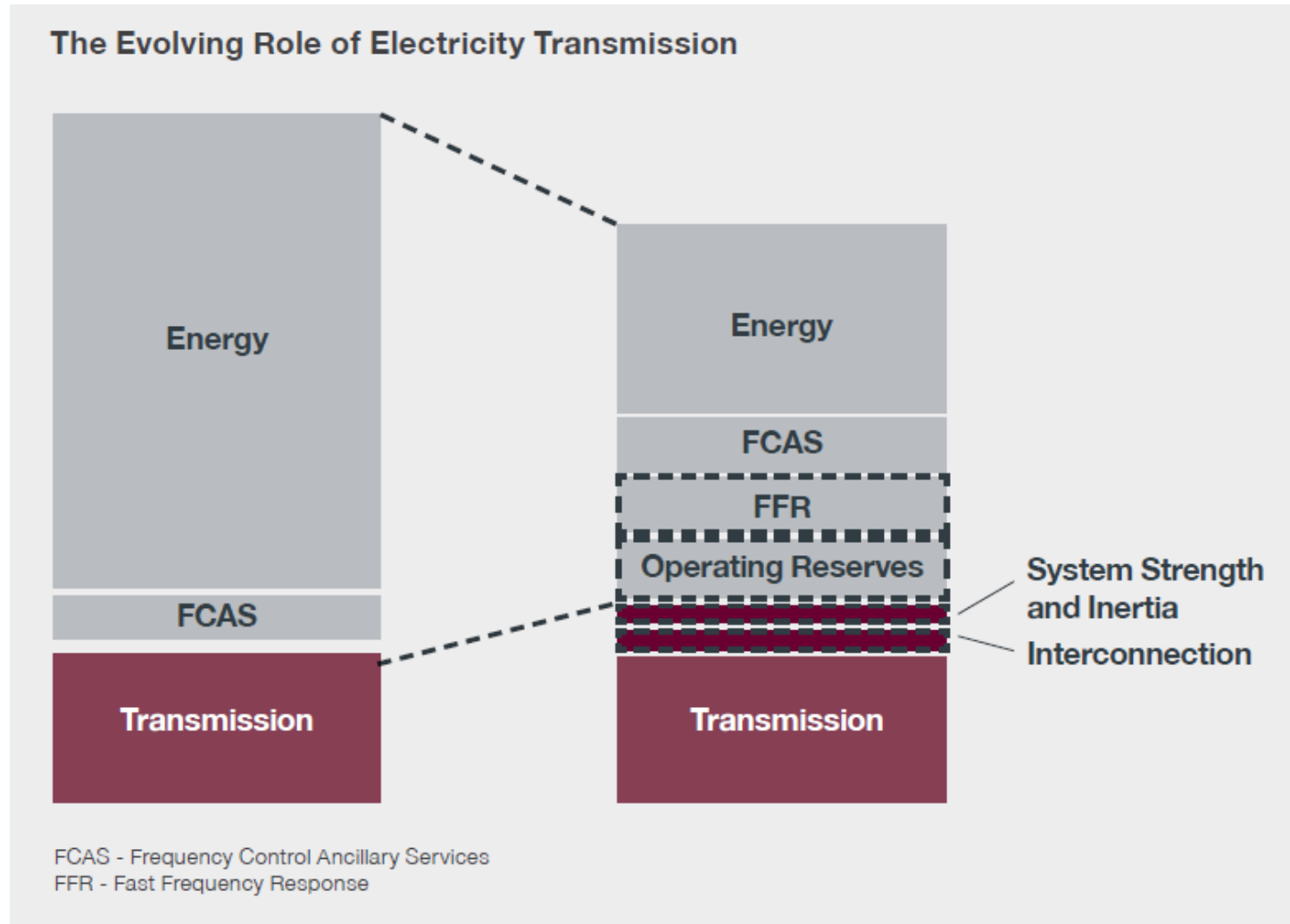
Event	Timing
Stakeholder webinar on Network Vision Discussion Paper	Feb 2021 (complete)
Comments close on Network Vision	March 2021 (complete)
Release of Preliminary Revenue Proposal <ul style="list-style-type: none"> ➤ Issue stakeholder notice and letter to direct connect customers ➤ 1-1 stakeholder briefings to be held 	week beginning 12 July 2021
Stakeholder forum / webinar on PRP (format TBD)	mid-August 2021
Regional forums to be held, subject to interest (e.g. Riverland)	late August 2021
Individual stakeholder briefings and roundtables, subject to interest	Aug/Sep 2021
Written feedback due on PRP (8 week period)	10 Sep 2021
Publication of customer engagement outcomes report and formal Revenue Proposal	Jan 2022

Revenue Reset: Preliminary Revenue Proposal

Rainer Korte, Group Executive Asset Management

Jeremy Tustin, Regulated Investment Manager

Context – the network is playing an increasingly important role



- As traditional generators retire, the system services required to run the power system are increasingly being ‘unbundled’ from the wholesale energy market
- The role of transmission is expanding to provide services that help drive down total energy costs
- Landmark ISP projects like Project EnergyConnect and Main Grid System Strength lead to higher transmission charges that are more than offset by overall electricity price reductions (PEC is expected to save about \$100 in annual household electricity bills)

Preliminary Revenue Proposal overview

1. ElectraNet will continue to balance the need for reliable and affordable power supply in a rapidly changing power system environment
2. In the coming period we will return to a 'business as usual' footing:
 - Capex outlook – significant reduction in headline spend with capex forecast close to historic trend excluding major ISP projects
 - Opex outlook – underlying opex steady, with external factors driving additional costs
3. Revenue outlook – stable overall, with declines in rate of return offsetting increases in RAB
4. Price outlook – ongoing decline in energy throughput continues to place pressure on unit prices
5. Modest transmission price increases due to major strategic projects in 2019-2023 which support the transition to renewable energy and drive down overall customer electricity bills – no similar large investments planned for next period

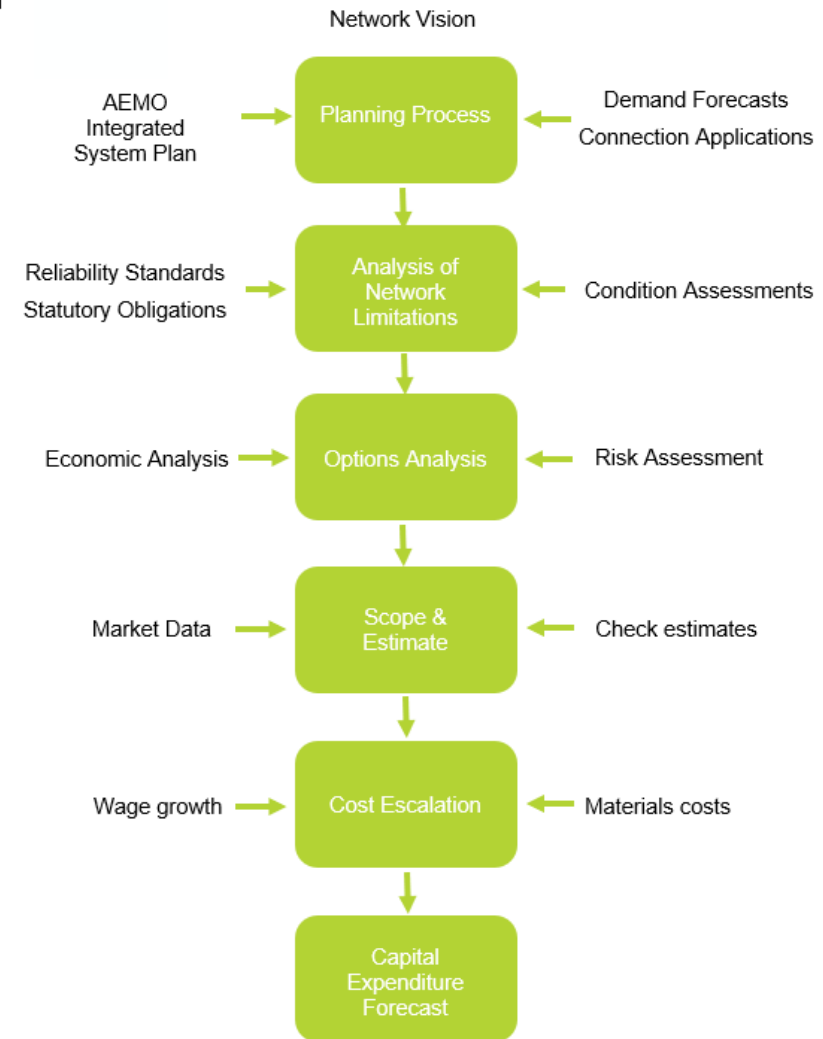
Capex forecast

- Proposed approach to capex
 - We are aiming for a well-tested, evidence based forecast that reflects the preferences of our stakeholders and is capable of acceptance through the formal regulatory process
 - We have identified all projects we believe provide a net benefit to customers
 - We have excluded projects shown not to be economic/net beneficial to customers
- We expect stakeholder engagement to influence the further development of our expenditure forecasts
- Capex forecast is presented as flat profile at this stage pending further development of delivery profile

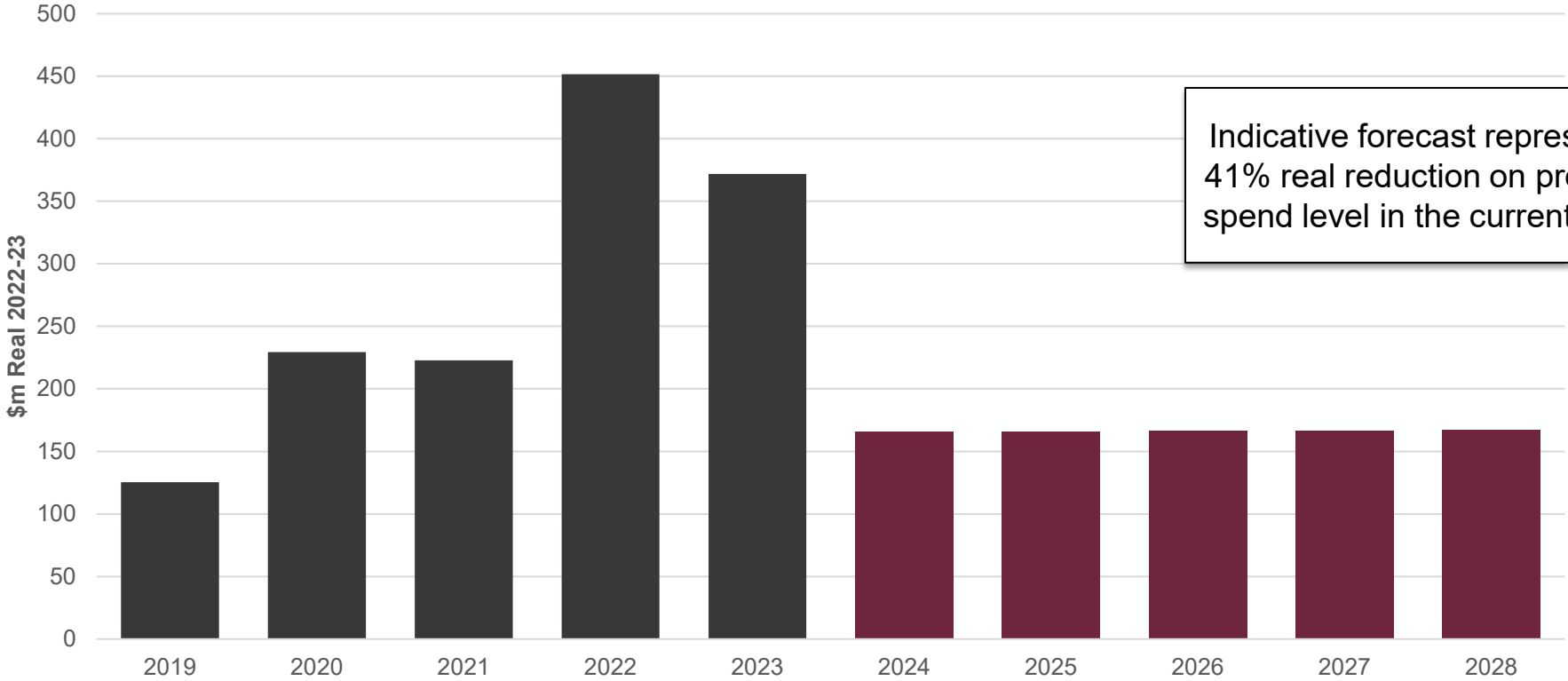


Expenditure forecast methodology

- Submitted to AER 30 June 2021
 - Unchanged from 2019-2023 period
- Bottom-up capex forecasting
 - Economic risk-based approach in line with AER's Industry Practice Note
 - Risk cost inputs approved by ElectraNet Board
- Base step trend Opex forecast
 - Parameters proposed in PRP
 - Specific step changes identified
- Cost escalation based on external advice



Indicative Capital Expenditure Forecast



Indicative forecast represents a 41% real reduction on projected spend level in the current period

(\$m 2022-23)	2019-23 (Allowance)	2024-28 (Forecast)	% Variance	\$m Variance
Capital Expenditure	1,400	832	(41%)	(579)

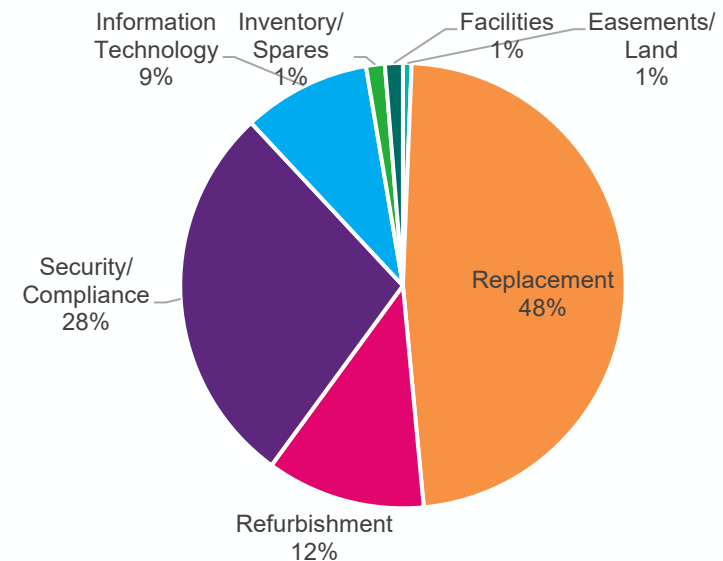
Indicative capex forecast - breakdown

- The indicative capex forecast for FY24 - FY28 is 41% lower than the current regulatory period
- The capital program is largely driven by replacement, refurbishment and security / compliance requirements

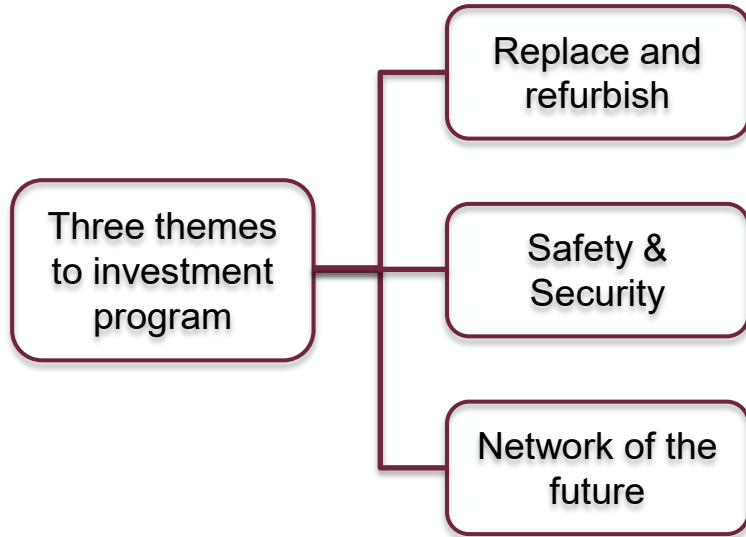
Capital expenditure forecast comparison (\$m 2022-23)

Category	2019-23 Allowance	2024-28 Proposal	\$m change
Augmentation	510	0	-513.3
Connection	7	0	-6.9
Easements/Land	0	5	5.3
Replacement	484	398	-93.3
Refurbishment	95	96	1.7
Security/Compliance	235	233	-3.9
Information Technology	51	77	27.9
Inventory/Spares	12	11	-0.9
Facilities	6	11	4.6
Total	1400	832	-579

Capital expenditure forecast breakdown FY24-FY28



Capex drivers and illustrative project examples



Majority of capital expenditure program is focused on life extension of assets nearing end of life through refurbishment and replacement of individual components, avoiding wholesale rebuilds

- **Substation asset replacements** – replace individual assets including instrument transformers, circuit breakers and insulators based on condition and risk to ensure ongoing reliability at least cost.
- **Line refurbishment projects** – targeted replacement of conductors and insulators on key lines to maintain service levels, avoid full rebuild and extend useful life.
- **Avian fire start mitigation** – install equipment to prevent large birds from landing near conductors, protecting the birds and reducing fire risk.
- **Transmission tower anti climb** – install anti-climb equipment on selected towers where this is not currently in place to improve public safety.
- **Substation drainage projects** – upgrade sites where drainage is in poor condition and in need of frequent maintenance to ensure ongoing reliability and prevent environmental problems while containing maintenance costs.

Capex – Indicative contingent projects

Projects are indicative for consultation purposes only and will continue to be developed for the formal Revenue Proposal

Project *	Description	Trigger	Indicative cost (\$m)
Upper South East Network Augmentation (ISP project)	This project would increase transfer capacity between Tailem Bend and Adelaide to allow for greater imports and exports of renewable energy.	The ISP has identified a possible timing in the 2030s triggered by renewable investment. Renewable developments around the South East REZ of around 400 MW may trigger this project earlier than identified in the ISP.	30 -50
Eyre Peninsula Upgrade	This project allows for the upgrade of the northern section of the Eyre Peninsula line from 132 kV to 275 kV to serve higher loads, which is accommodated in the design.	A load increase of 50MW, most likely from mining operations, would require an upgrade in the capacity of the line. The ISP may also identify a need for the upgrade if there is substantial renewable or hydrogen development in the region.	50 – 90
Main Grid System Strength Support	This project allows for the delivery of additional system strength and/ or dynamic voltage control capability on the transmission network through the installation of additional synchronous condensers.	The ongoing growth in non-synchronous generation coupled with higher proposed system strength standards may trigger the need for this project.	80 – 120
Project EnergyConnect Upgrade	This project allows for an increase in the effective transfer capacity of Project EnergyConnect through control schemes and/ or frequency response capability.	Sufficient renewable generation development would trigger the need for the upgrade based on expected market benefits from lower dispatch costs.	100 – 150
Robertstown to Metro Transfer Capacity Increase (ISP Project)	This project would increase transfer capacity between Robertstown and Adelaide to allow for delivery of increased renewable generation from the mid-north.	The ISP forecasts that augmentation in the mid-north is required once around 1,000 MW of new solar or wind generation is connected north of Adelaide.	200 – 250

* Projects triggers are outside of ElectraNet’s control

Opex Forecast - overview

- Operating environment has increased in complexity driving expenditure requirements above the AER allowance in current period
- Changes outside of our control are driving a further modest step change in opex requirements from underlying spend levels
- Opex outlook is otherwise steady, with shift in spend towards operating and maintaining a larger and more complex network, as the energy transition is driving a requirement for additional system security services
- Efficient costs remain higher in SA due to lack of scale, large geographical area and low population density



Opex step change

- Opex base step trend forecasts are based on:
 - Efficient base year
 - Rate of change re output growth factors
 - Step changes for recurrent cost changes beyond our control
- Step changes driven by:
 - Cyber security obligation
 - Insurance premium increases and self-insurance increases
 - Opex cost of adopting cloud computing
 - New obligations introduced through rule changes

Requirement	Indicative Forecast (\$m 2022-23)
Insurance / self-insurance	6 – 8
Cyber	2.5 - 3.5
Cloud	1 – 2
Rule changes	0.5 - 1.5
Total	10 - 14

Open Discussion Forum

Rainer Korte, Group Executive Asset Management

Wrap up and next steps

Rainer Korte, Group Executive Asset Management

Wrap up and next steps

- Working Group Meetings to commence July 2021
- Next Consumer Advisory Panel meeting 10 August 2021

Thank You