Consumer Advisory Panel

18 September 2020

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Welcome

Rainer Korte, Group Executive Asset Management

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Meeting Agenda

Date:	**Friday, 18 September 2020, 1pm – 2pm**
Meeting Purpose:	ElectraNet Consumer Advisory Panel (CAP) Meeting
Meeting Location:	Video/Teleconference Call
Attending:	See Attendance List
Apologies:	

Item:	Agenda Item:	Responsible:	Time Allocated:
1	Welcome	Rainer Korte	5 minutes
2	Project EnergyConnect - Updated Cost Benefit Assessment	Rainer Korte	20 minutes
3	Project EnergyConnect - Contingent Project Application	Simon Appleby	20 minutes
4	Eyre Peninsula Reinforcement Project - update	Rainer Korte	5 minutes
5	Revenue Reset and Consumer Engagement - update	Simon Appleby	5 minutes
6	Wrap up and next steps	Rainer Korte	5 minutes
7	Next Meeting – November 2020 (TBC)		

Project EnergyConnect: Updated Cost Benefit Analysis

Rainer Korte, Group Executive Asset Management

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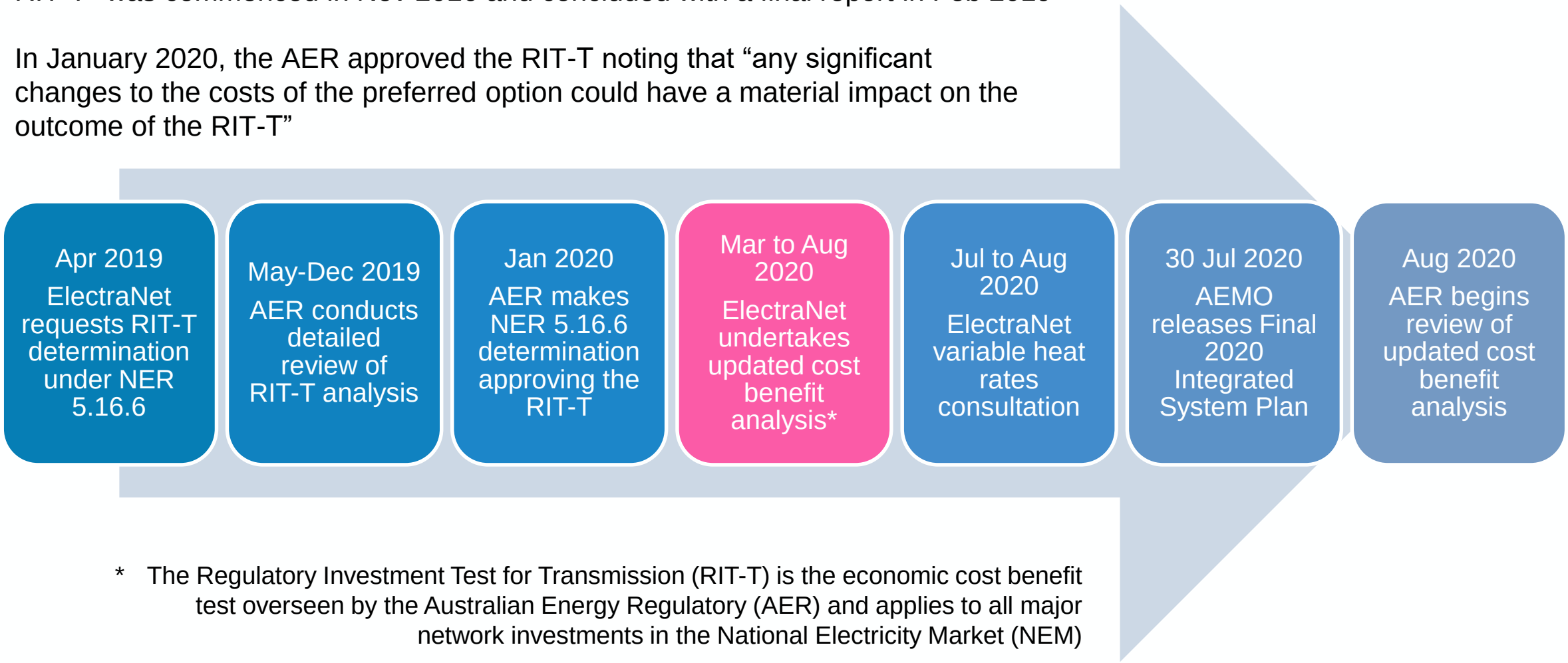
Context of Updated Cost Benefit Analysis

RIT-T* was commenced in Nov 2016 and concluded with a final report in Feb 2019

In January 2020, the AER approved the RIT-T noting that “any significant changes to the costs of the preferred option could have a material impact on the outcome of the RIT-T”



* The Regulatory Investment Test for Transmission (RIT-T) is the economic cost benefit test overseen by the Australian Energy Regulatory (AER) and applies to all major network investments in the National Electricity Market (NEM)

Project EnergyConnect: Updated Cost Benefit Analysis

Introduction: Why?

- The National Electricity Rules (NER) require ElectraNet to consider whether, in its reasonable opinion, there has been a “material change in circumstances” that might lead to a change in the preferred option and thereby potentially require reapplication of the RIT-T.
- In the event of material changes in costs or benefits, the AER expects ElectraNet to consider the impacts on the outcomes of the RIT-T, and to provide evidence of that consideration to the AER, including updated analysis demonstrating whether the preferred option continues to be the preferred option.
- Since the RIT-T was concluded in February 2019 there have been significant changes in both project costs and benefits from those assessed in the RIT-T.
- ElectraNet has therefore investigated whether there has been a “material change of circumstances” that would change the outcome of the RIT-T, taking into account new information on both costs and benefits, and working closely with the AEMO to align with the Final 2020 Integrated System Plan (ISP).

Project EnergyConnect: Updated Cost Benefit Analysis

Results

- **Project EnergyConnect (PEC) continues to deliver positive net market benefits and remains the preferred option**
- The gross (total) benefits of PEC are significantly higher than the sensitivity reported in the AER's January 2020 RIT-T Determination, up from $1,246m to $1,866m in present value terms
- Capital costs have also increased, rising from $1.53bn to $2.43bn ($2018-19) (equivalent to $977m and $1,620m in present value terms respectively)
- The net market benefits is $201m based on the scenario considered after considering the latest benefits and costs for the project
- PEC continues to deliver positive net benefits at capital costs of up to over $2.7bn ($2018-19)

Project EnergyConnect: Updated Cost Benefit Analysis

Results – continued

- The closest ranked alternative option assessed in the RIT-T, Victorian Option D, delivers minimal positive net benefits
- Later delivery of VNI West, which is the expected outcome in the majority of future scenarios, increases expected benefits by between $115m and $176m
- Increased benefits could be expected under the majority of future scenarios in the ISP
- A range of further unquantified benefits are also expected to be delivered through improved power system resilience
- This underscores AEMO's recognition of PEC as an "essential foundational measure" to address emerging system security risks that are growing year on year

Project EnergyConnect: Updated Cost Benefit Analysis

Updated modelling input assumptions

ElectraNet has aligned the updated cost benefit analysis with the Final 2020 ISP, working closely with the AEMO.

Changes to key input assumptions contributing to increased benefits:

- Forecast delivered gas prices to Adelaide have increased
- Capital cost estimates for large scale energy storage have increased
- New committed generation along the anticipated path of PEC has been confirmed
- Snowy 2.0 and HumeLink are now committed ISP projects leading to a twofold effect where Project EnergyConnect provides a direct link between Snowy 2.0's deep storages and an improvement in access between PEC and Sydney
- Committed and forecast retirement of SA generators including the retirement of Osborne in 2023 and various other dispatchable plant in South Australia during the 2030s

Project EnergyConnect: Updated Cost Benefit Analysis

Costs

- Capital costs have also increased, rising from $1.53bn to $2.43bn ($2018-19) – detailed in next section (CPA update)
- There is a general increase in transmission costs being experienced across the NEM, with AEMO reporting an approximate 30% increase in transmission capital costs in its 2020 ISP
- ElectraNet and TransGrid are committed to delivering PEC at the lowest possible cost to customers
- We have been working through competitive procurement processes with construction contractors to firm up capital cost estimates that will form the basis of contingent project funding applications to the AER
- This updated cost benefit analysis uses the costs available as at 7 September 2020

Project EnergyConnect: Updated Cost Benefit Analysis

Next Steps

- Updated cost benefit analysis was submitted to AER on 14 September 2020
- ElectraNet and TransGrid to submit Contingent Project Applications (CPAs) to AER on 30 September 2020, subject to Board approvals
- Stakeholder update via Webinar expected 30 September 2020 (TBC)
- AER contingent project decision is expected to be completed by end 2020

Project EnergyConnect: Contingent Project Application

Simon Appleby, Manager Regulation & Investment Planning

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Project EnergyConnect: Contingent Project Application

Purpose

- The CPA to the AER seeks the expenditure and revenue required to deliver the SA component of the Project, as the final step in the regulatory approval process
- A final CPA will be lodged by TransGrid at the same time (subject to Board approval)
- The capital costs for the Project have been updated to reflect the outcomes of detailed project planning and competitive procurement processes based on prevailing market costs
- Majority of project costs are based on market pricing, providing confidence that the capital expenditure forecast reflects the efficient and prudent costs of delivering the project
- The capital expenditure forecast for the South Australian portion of Project is $474 million ($2017-18)

Project EnergyConnect: Contingent Project Application

Cost Comparison

($m 2017-18)	PACR (Feb 2019)	Updated estimate (Sep 2020)
SA component	374	474

- Based on competitive procurement outcomes, the updated CPA capital expenditure forecast is $474m ($2017-18) (market pricing makes up over 75% of this amount)
- The CPA forecast is higher than the estimate in the PACR by around 27% (22% excluding risk)
- In line with general movements in transmission costs seen in the 2020 ISP (30%)
- Upward movements in project cost include:
  - Adjustment to line route length for environmental concerns and cultural heritage issues
  - Inter-network testing
  - Third transformer required at Bundey Substation following more detailed studies
  - A probabilistic assessment of risks on the project has also been undertaken

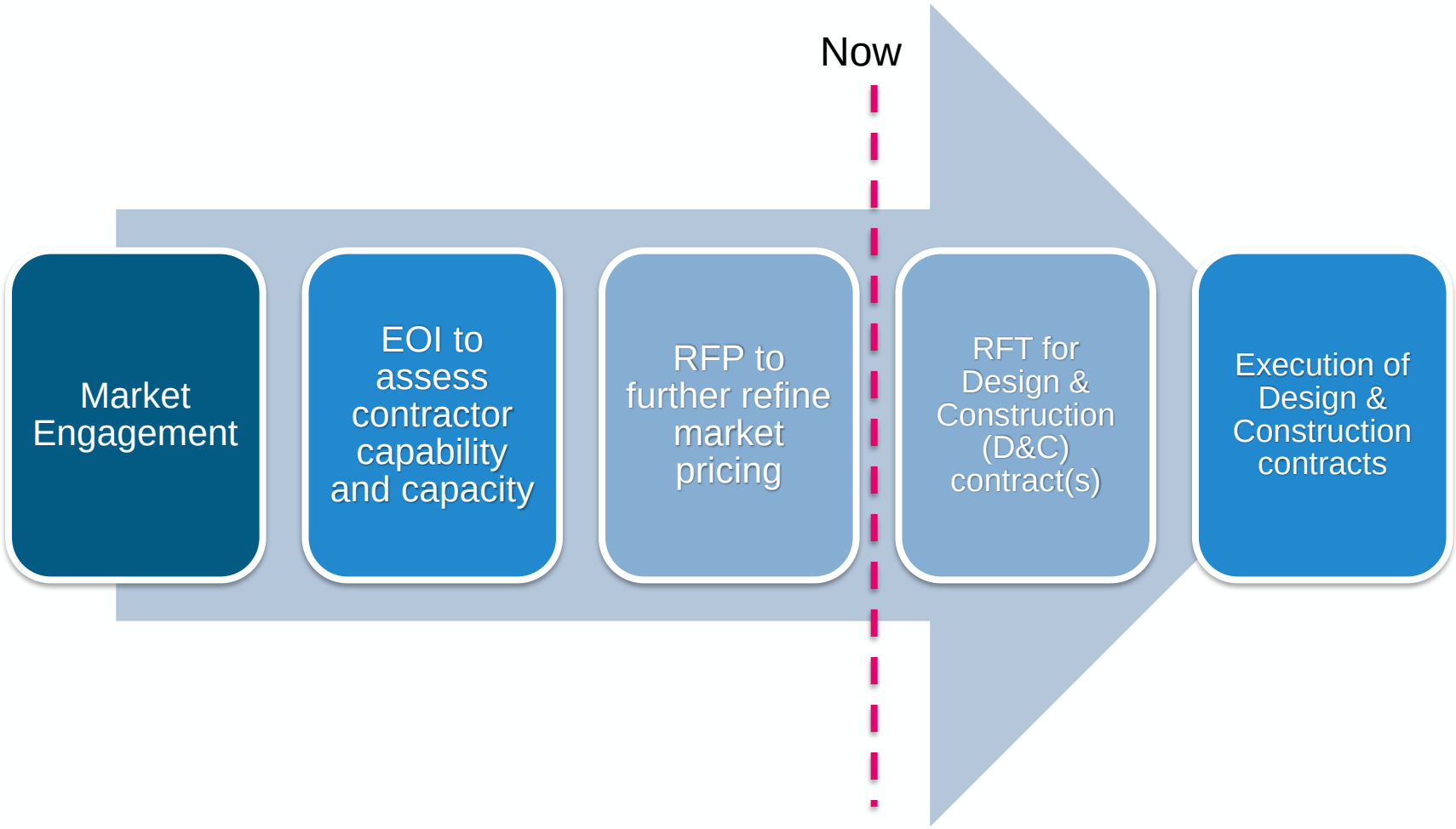
Project EnergyConnect: Contingent Project Application

Cost Breakdown

Item	$m (2017-18)	Basis of Forecast
Transmission line works	259	Market pricing from credible competing vendors
Substation works	108	Market pricing from credible competing vendors
Land access & approvals	20	Independent valuations of easement costs and forecast environmental and cultural heritage requirements
Project delivery costs	35	Reflects current delivered costs and benchmarks based on detailed resource assessment
Special Protection Scheme	19	Independent estimate of expected scope and cost of the scheme
Inter-network testing	13	Estimate of testing costs and requirements developed with TransGrid and AEMO
Project risk	16	Detailed probabilistic risk assessment (reflecting a P50 estimate).
Total	**471**	

Excludes prior period expenditure of $3.4m

Project EnergyConnect: ElectraNet procurement process

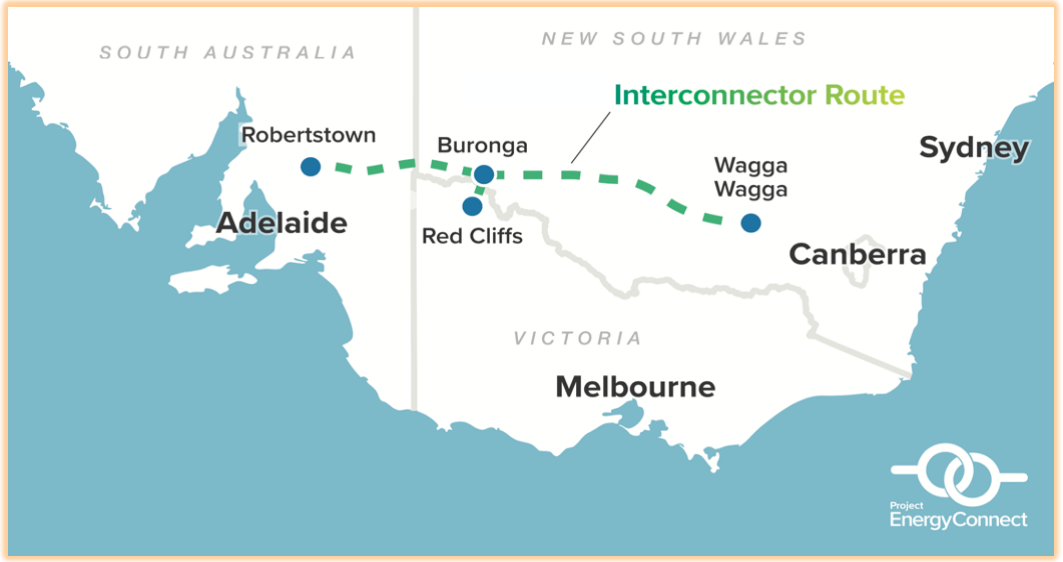


- Strategy
  - Drive least cost outcomes
  - Early contractor involvement to reduce risk
  - Correctly allocate and price risks
- Majority of project costs covered by competitive market pricing (> 75%)

Project EnergyConnect: Contingent Project Application

Summary

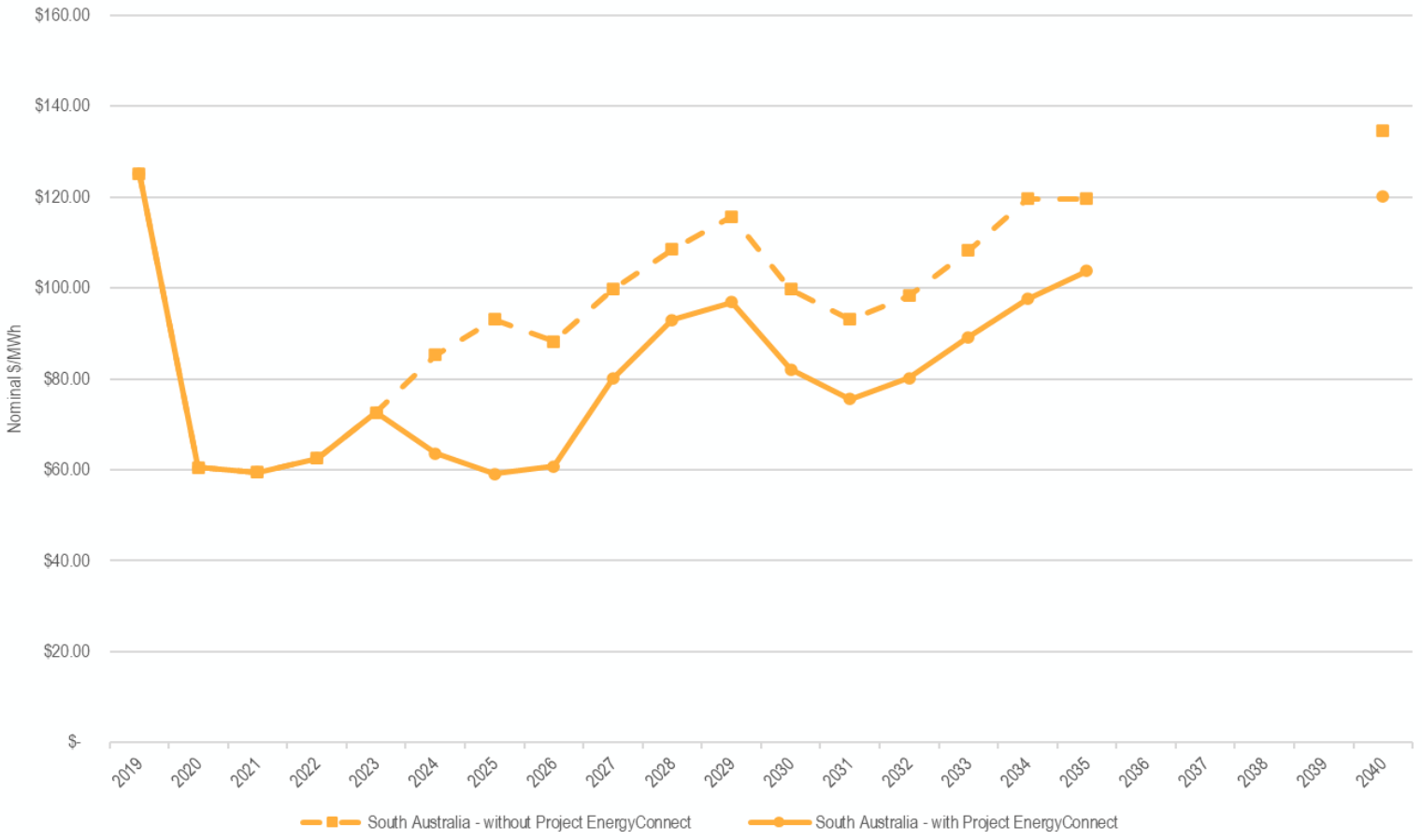
Component	Value ($m)
Capital expenditure forecast ($2017-18)	471
Operating expenditure forecast ($2017-18)	0.4
Revenue requirement 2018-2023 ($nominal)	5.4



- The capital expenditure forecast excludes prior period expenditure associated with the RIT-T assessment ($3.4m)
- Operating expenditure requirements are minimal, largely relating to specialist engineering resources required for the management of new Special Protection Schemes
- The project results in an estimated increase in annual network costs of approximately $10 for a residential customer, but produces a far larger reduction in wholesale energy costs

Project EnergyConnect: Customer Price Impacts

Wholesale Price Impact of PEC



Source: ACIL Allen

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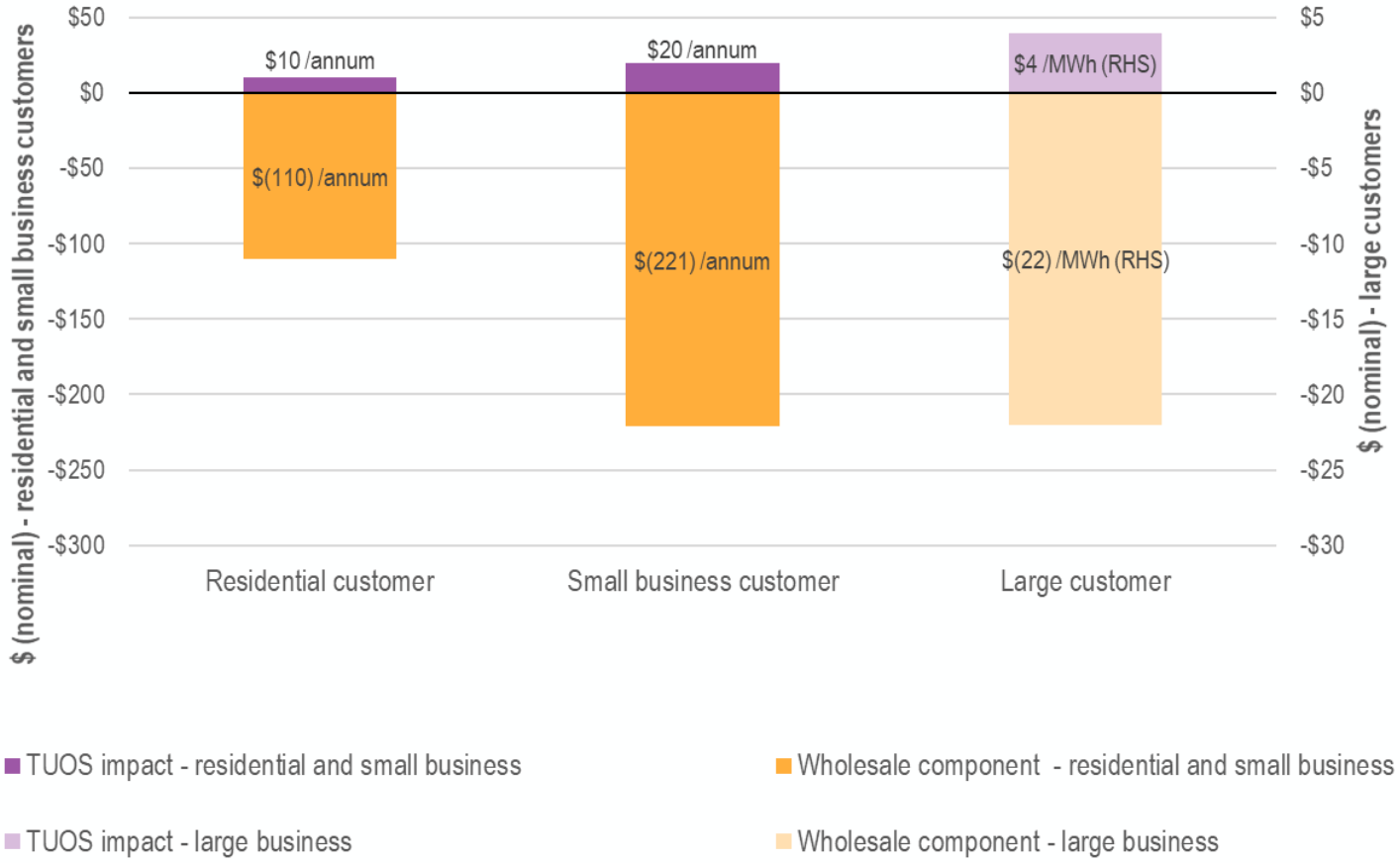
Project EnergyConnect: Customer Price Impacts

Estimated Bill Impacts



Projected annual savings to 2030:

- $100 per household
- $200 per small business customer
- $18/MWh for large customers

Source: ACIL Allen

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Next Steps

Indicative Date	Key Milestone
30 September 2020	Lodgement of Contingent Project Application
October-November 2020	AER assessment and engagement on application
December 2020	AER decision on CPA (subject to AER assessment process)
June 2022	Commencement of construction
December 2023	Completion of construction

Eyre Peninsula Reinforcement Project - Update

Rainer Korte, Group Executive Asset Management

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Current Status

Indicative date	Key milestone
May 2020	Contingent Project Application lodged
June-August 2020	AER assessment and engagement on application
September 2020	AER decision on CPA
April 2021	Contractor commencement on site
December 2022	Delivery of project

Revenue Reset & Consumer Engagement - Update

Simon Appleby, Manager Regulation & Investment Planning

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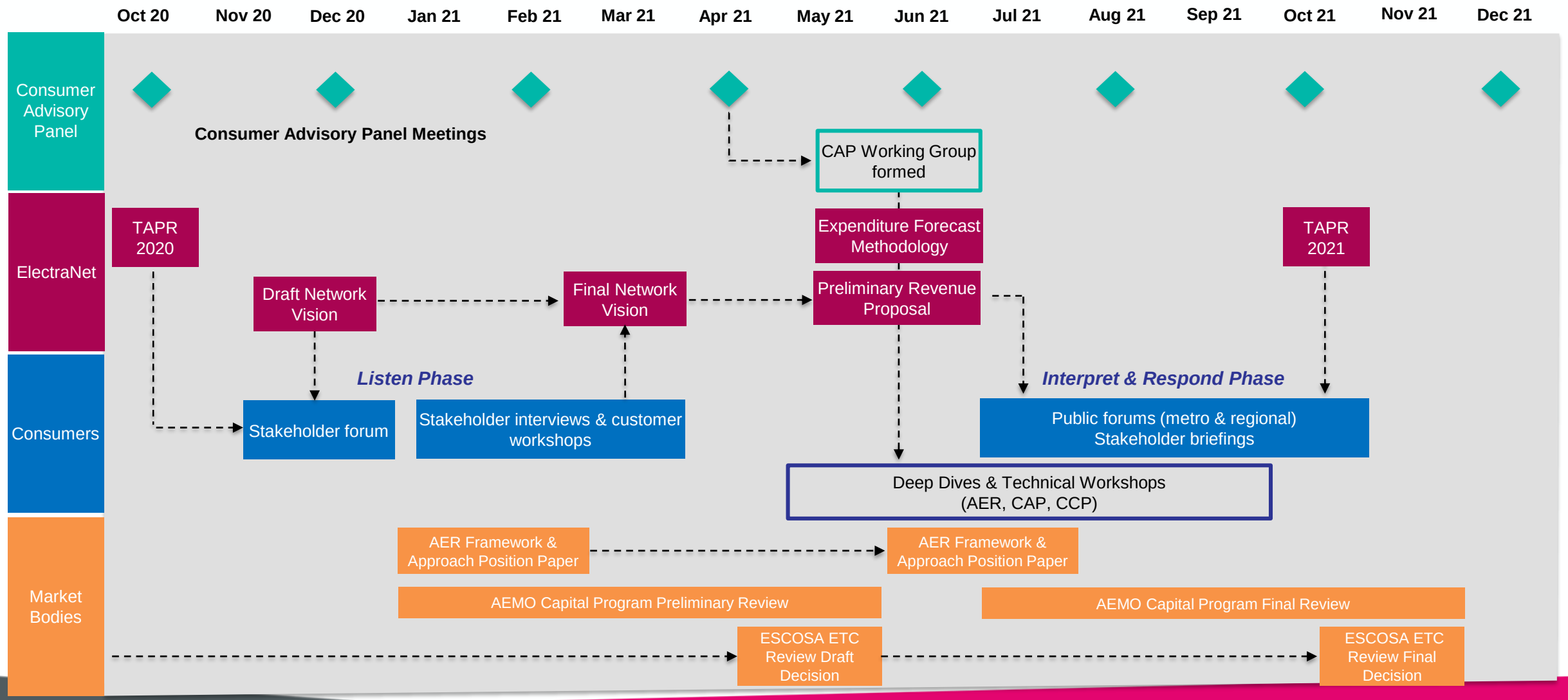
Indicative Early Engagement Program: 2023-2028 Revenue Proposal



Wrap Up & Next Steps

Rainer Korte, Group Executive Asset Management

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Questions?