Powerlink's Customer Panel Meeting

18 March 2021

Agenda

- Powerlink Strategy 2021 onwards
- Update from Revenue Proposal Reference Group (RPRG)
- Revenue Determination process update
- RIT-T update
- Afternoon tea
- Tour of Operations and Service Delivery's forensic laboratory

Powerlink Strategy 2021 onwards

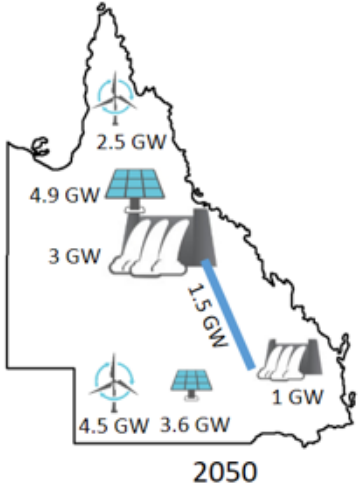
Paul Simshauser
Chief Executive

Context

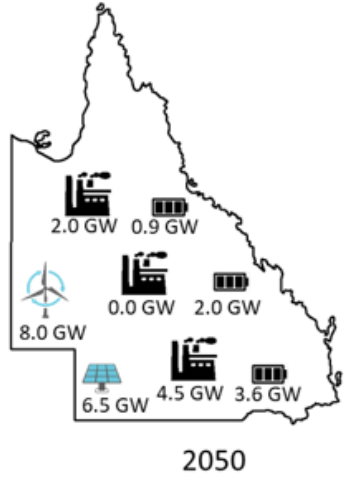
- Powerlink is facing a fundamental transformation of the energy sector and is preparing for this new role through our strategy development.
- Key to strategy development is forecasting the energy sector and market need over the next few decades.
- Powerlink started this with the Network Vision which has led to our Integrated Electricity Pathways (IEP) work.
- The key findings to date from the IEP are helping us frame our business strategy.

IEP overview

Pathway for development of pumped hydro and high voltage direct current (HVDC)



Pathway for development of batteries and gas



- Market direction will depend on influences, incentives and choices of our customers.
- Outcomes could vary significantly depending on input assumptions and these are only two of many pathways.
- Storage is an integral element of all plausible future pathways, whether it is pumped hydro with high capacity links, or local battery storage supported by smaller synchronous generation.

Common findings across IEP

- Finding 1 Falling minimum demand
- Finding 2 NSW Energy Infrastructure Roadmap (EIR) has implications for the National Electricity Market
- Finding 3 Renewable Energy Zones (REZs) need a different business model
- Finding 4 Deep storage is essential for low-cost coal transition
- Finding 5 Strategic importance of base loads in Queensland.

Strategy

PURPOSE: Why our business exists and for whom

Connecting Queenslanders to a world class energy future

STRATEGIC OBJECTIVES: What we aim to achieve

- **Guide the Market**
- **Be the Renewable Super Grid**
- **Drive Value for Customers**
- **Unleash our Potential**

We have defined what success looks like so we can measure our progress on achieving our objectives.

What we do

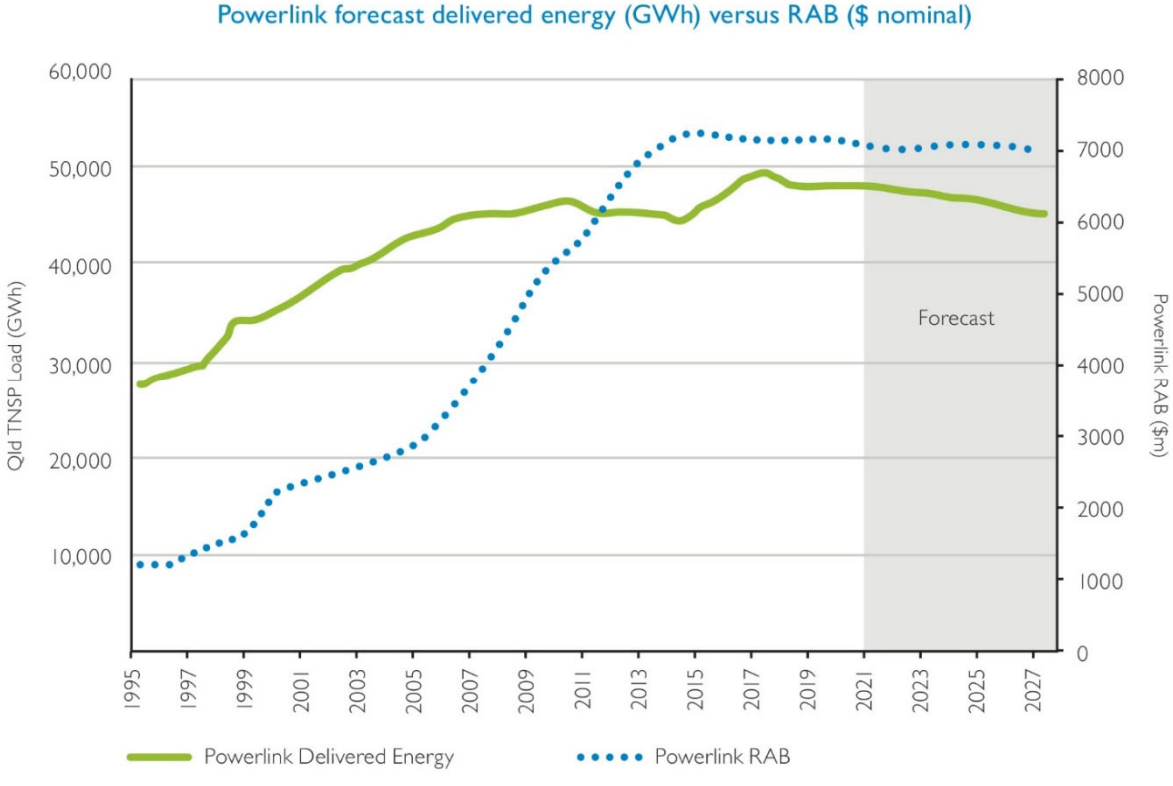
- **Regulated Business**
- **Non-Regulated Business**
- **Power System Transformation**

What we value and how we will behave

- **Accountability**
- **Customer**
- **Teamwork**
- **Safety**

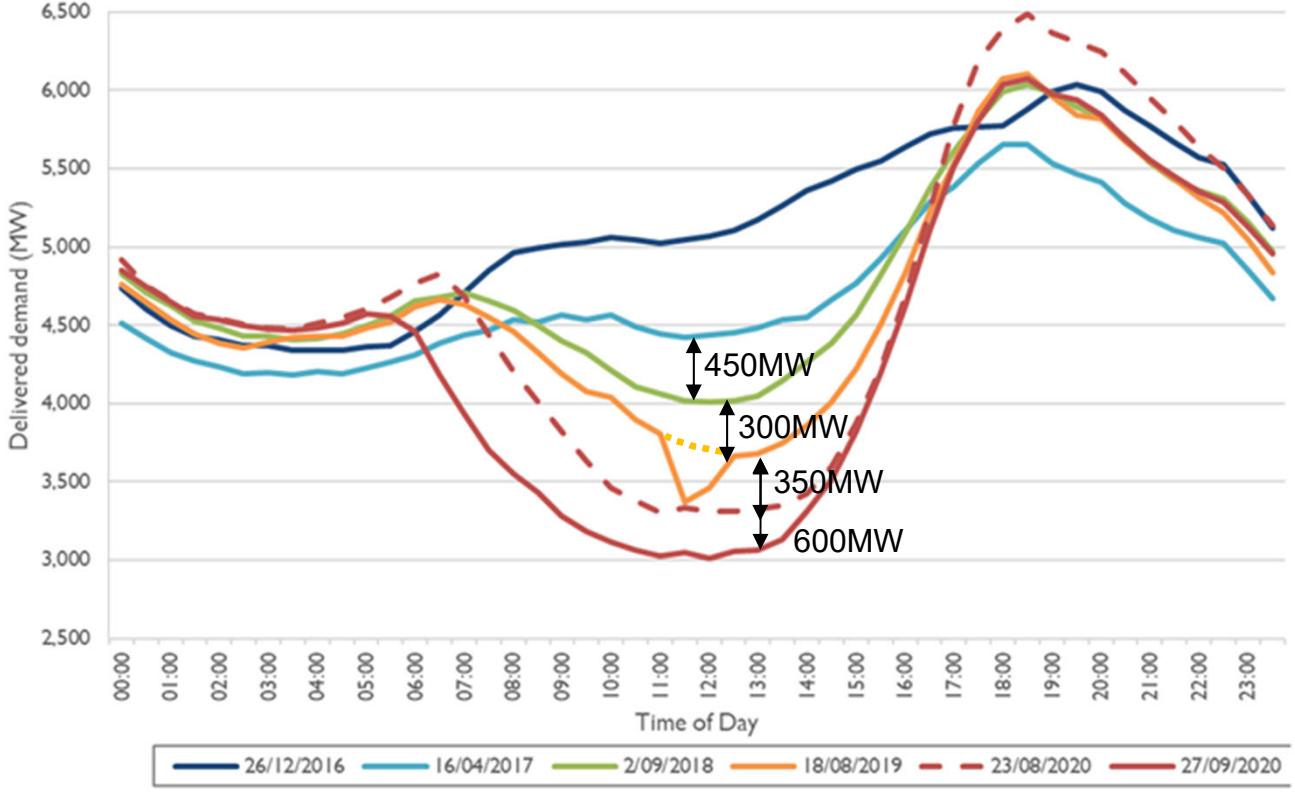
Regulatory Asset Base

We have an objective to bend the RAB to drive customer value and become a world-class TNSP.



Minimum demand

Transmission delivered annual minimum demand for the Queensland region



Queensland Renewable Energy Zones (QREZ)

Strong government support for QREZ development

- $145M to develop three REZs – Northern, Central and Southern Queensland.
- REZs help meet Queensland Renewable Energy Target of 50% by 2030 and net zero emissions by 2050.
- REZs focus on regional development.

Powerlink has provided preliminary advice to government

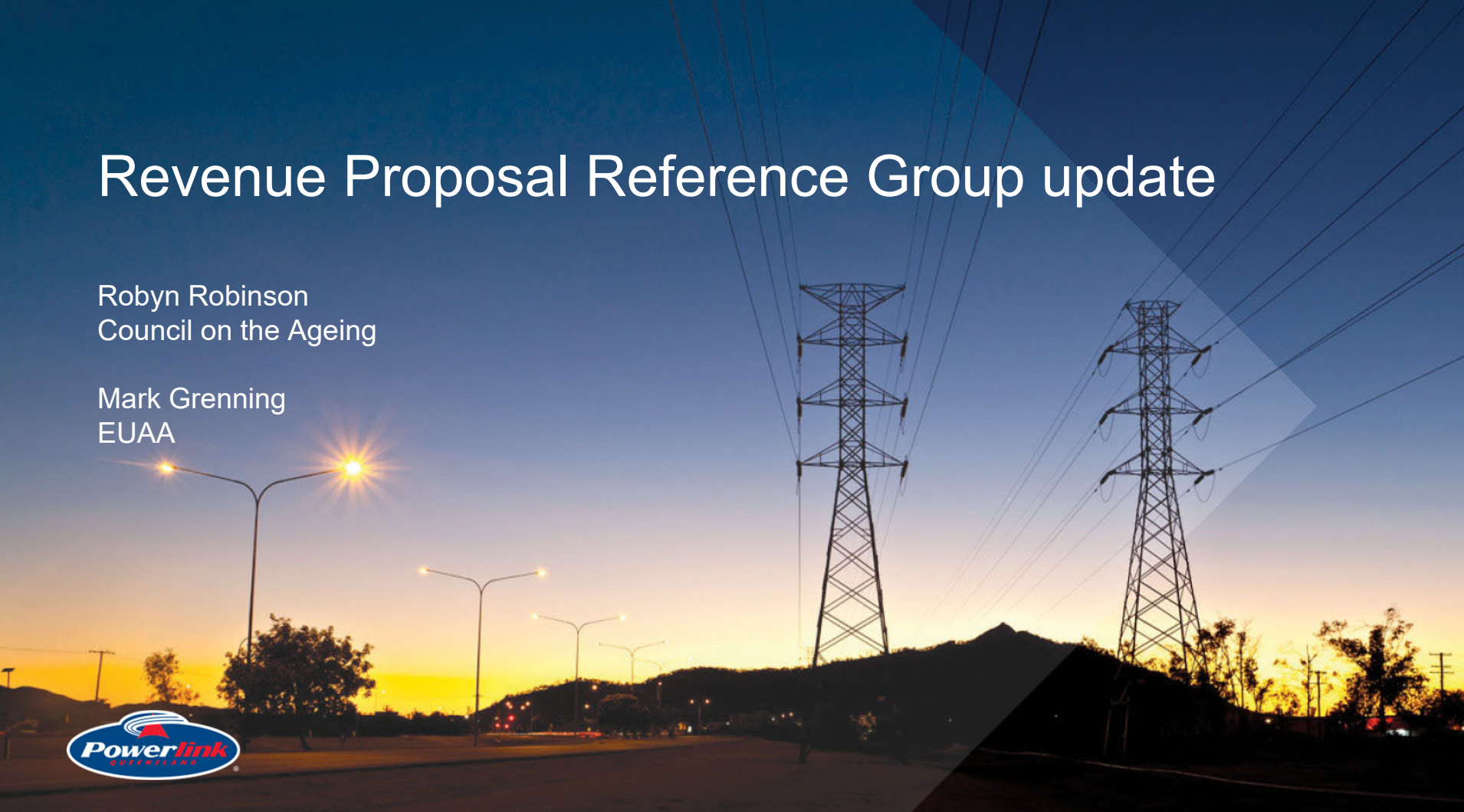
- Network planning, market modelling and property analysis being conducted to inform potential REZ options, aligned with IEP work.
- Subsequent development is not straightforward regarding the NSW EIR.
- REZ costs should not *default* to electricity consumers.

Questions?

Revenue Proposal Reference Group update

Robyn Robinson
Council on the Ageing

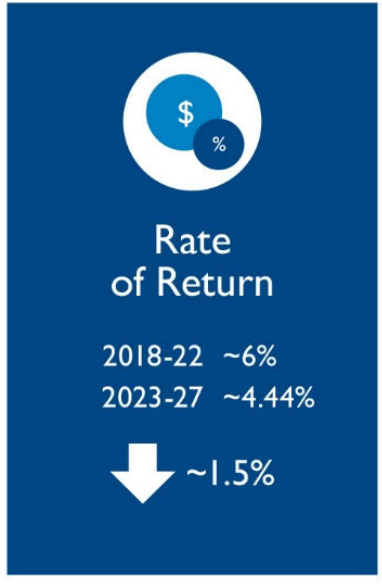
Mark Grenning
EUAA

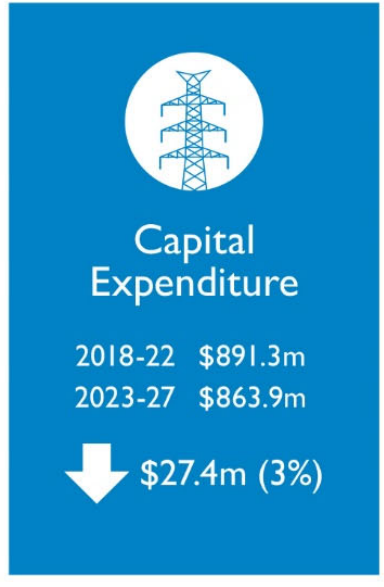


Revenue Determination process update

Matthew Myers
Manager Revenue Reset

Revenue Proposal forecasts at a glance

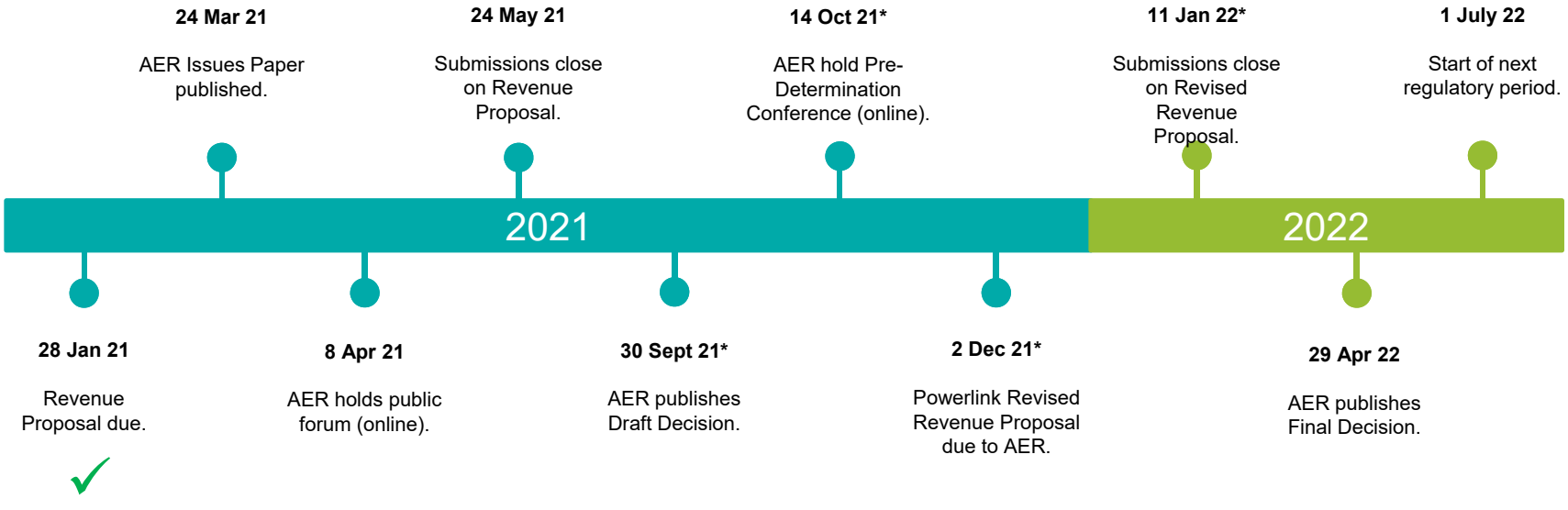




Notes:

- All figures are in $m real, 2021/22 and are for the full five-year regulatory period.
- MAR is compared to the AER allowance for the 2018-22 regulatory period.
- Rate of return is nominal vanilla.
- Capital and operating expenditure are compared to the actuals/forecast for the 2018-22 regulatory period.
- Capital expenditure figures are net of disposals.
- Operating expenditure figures reflect underlying operating expenditure, which excludes movements in provisions, Network Capability Incentive Parameter Action Plan (NCIPAP) project costs, debt raising and network support costs.

Upcoming regulatory milestones



* dates indicative.

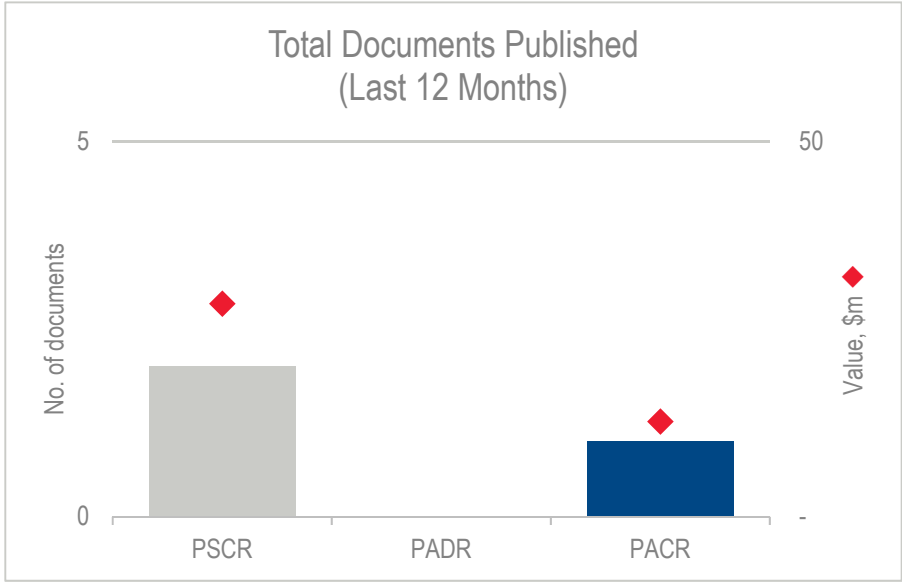
Customer overview documents

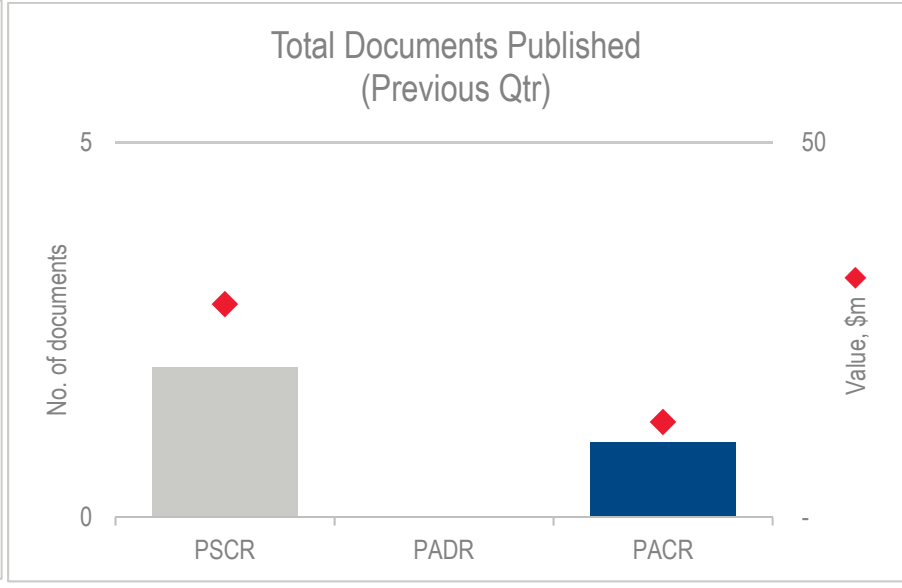
- Nine customer overview documents have been published on our website so far. These cover:
  - Revenue Proposal – chapter highlights
  - Revenue determination process
  - Capex forecasting methodology
  - Opex forecasting methodology
  - Rate of Return
  - Repex modelling
  - Incentive schemes
  - Transmission pricing
  - RIT-T process.

Update on RIT-T for replacement projects

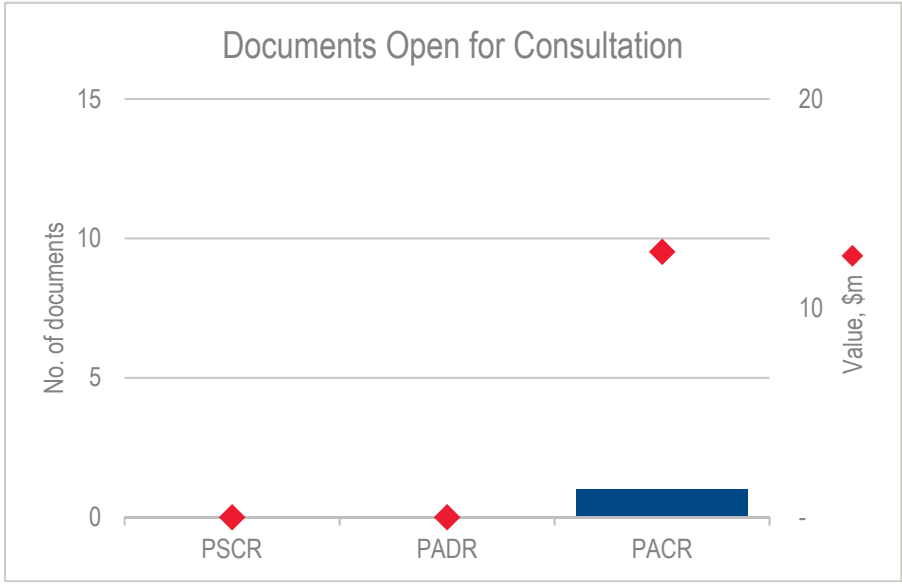
Glen Titman
A/Manager Network & Alternate Solutions

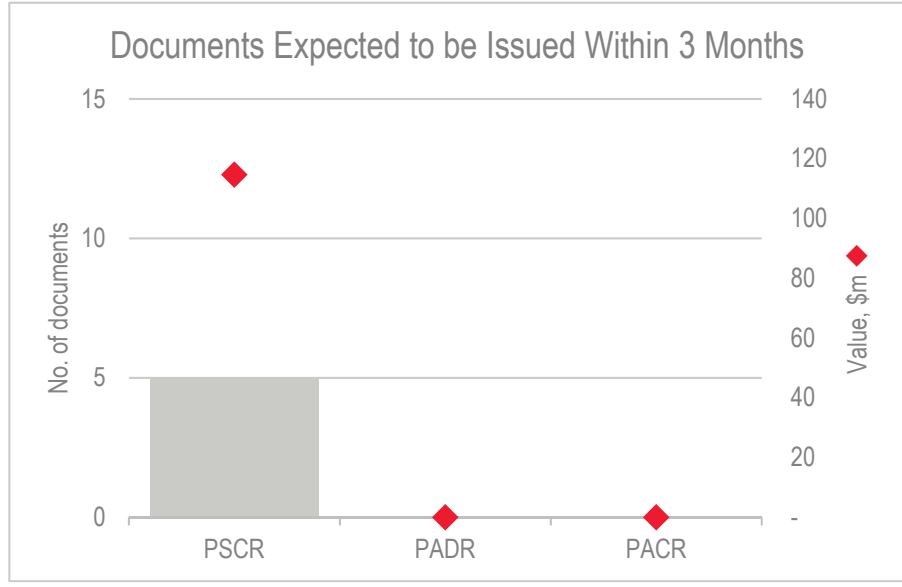
RIT-T consultations in progress and upcoming





RIT-T consultations in progress and upcoming





RIT-T consultations in progress and upcoming

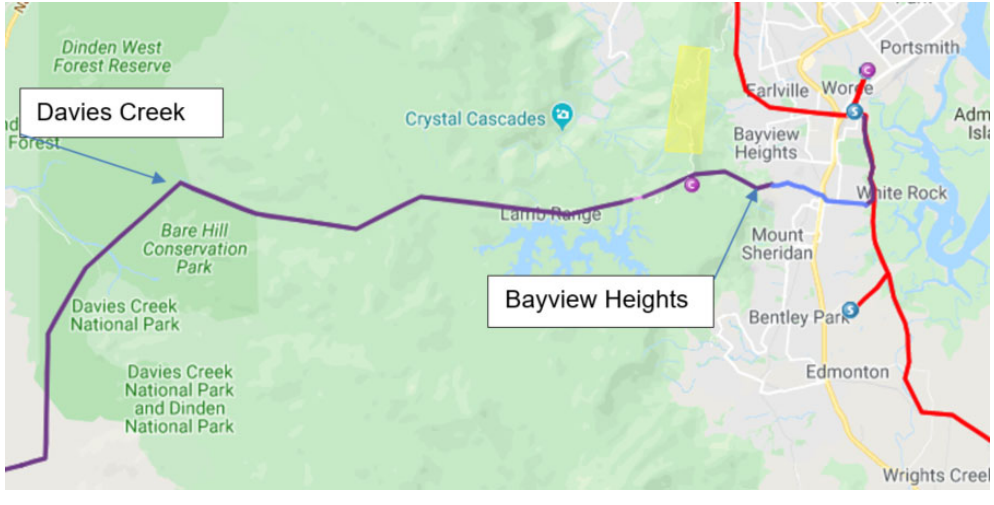
Engagement level	Project characteristics	RIT-T consultations	Proposed engagement activities
Minor (PADR Exempt)	• Non-network options unlikely • No material market benefits identified • Preferred option <$41 million	• Maintain transfer capability and reliability of supply at Redbank Plains • Managing voltages in SEQ • Nebo transformer replacement • Addressing the secondary systems risks at Chalumbin	• Notification to Powerlink Non-Network Engagement Stakeholder Register • AEMO Notice and summary • Publication of RIT-T project details on Powerlink website • Dedicated email contact to Customer Panel members • Alerts through Powerlink's Twitter and LinkedIn accounts
Normal	• Minor network reconfiguration / material impact on network users • Possibility of non-network options • Material market benefits identified	• Reliability of supply in the Cairns Region Stage 1	In addition to engagement activities at minor level: • Webinars • Stakeholder briefings • Discussion at Powerlink's Customer Panel
Complex	• Network reconfiguration / material impact on multiple network users • Likelihood of non-network options • Significant market benefits identified		In addition to engagement activities at normal level: • Stakeholder engagement plan • Phone calls to key stakeholders • Emails to all identified stakeholders • Dedicated engagement forum to seek feedback on options

RIT-T update – Managing voltages in SEQ

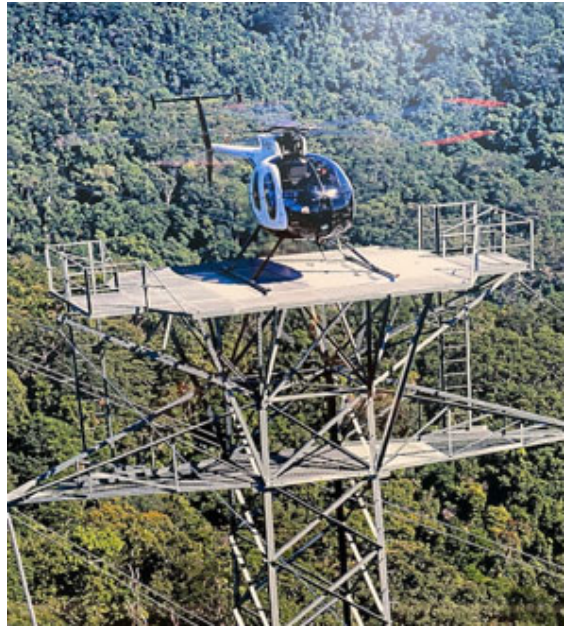
- Need is driven by voltage control issues on distribution and transmission networks.
  - Realisation of light loads due to uptake of rooftop solar
  - Reducing operation of synchronous generators
  - Improving load power factor
  - Changes in generation patterns.
- Temporary contract with synchronous generator to be used in the interim to address the need.
- While there is a possibility of non-network solutions to meet some of the need, no submissions were received during the recent RIT-T for CQ.
- Any non-network solution would still require the implementation of at least one or two reactors to address need within the required timeframes.
- Two-stage RIT-T to commence in April.

RIT-T update – Maintaining reliability of supply in the Cairns region

- RIT-T to be delivered in two stages with different need dates.
- Critical built section to be addressed first between Bayview Heights and Davies Creek. Structures traversing approximately 16km through the World Heritage listed Wet Tropics area.
- Further works on remainder of built sections between Chalumbin and Woree to be delayed three years based on condition.



RIT-T update – Maintaining reliability of supply in the Cairns region



- Structures within built section ~75 metres tall traversing over the tree canopy
- Heavily vegetated making for difficult access
- Constraints on acquiring additional easements within protected Wet Tropics area
- Three-stage RIT-T to commence in March.

Afternoon tea break

Tour of Operations and Service Delivery's forensic laboratory

Brody Ward
Primary Systems Support Engineer

Close and thanks