

# Powerlink Queensland

## Energy Industry Update 2021

#pqupdate



1:30pm Welcome

1:35pm Transition to the Low Carbon Future

2:15pm 2023–27 Revenue Determination

2:55pm General business update

3:25pm Thanks and close

3:30pm Event concludes

# Transition to the Low Carbon Future

**Kevin Kehl**

Executive General Manager Energy Futures

**Jacqui Bridge**

General Manager Energy Markets



Powerlink's  
pathways  
to the low  
carbon  
future

**Powerlink's Strategy 21++**  
to guide us through the future pathways



**Integrated Electricity Pathways**  
our view of the journey and many choices

## ***Falling Minimum Demand***

- The most significant issue facing the sector today is the rapidly declining minimum demand – challenging the cost-effectiveness and security of the power system.

## ***NSW Electricity Infrastructure Roadmap (EIR) impact***

- Historically NSW has had an energy deficit and relied on significant energy exported from Queensland over Queensland-New South Wales Interconnector (QNI). Through the NSW EIR, NSW is expecting to deliver around 12GW of additional renewables by 2030.

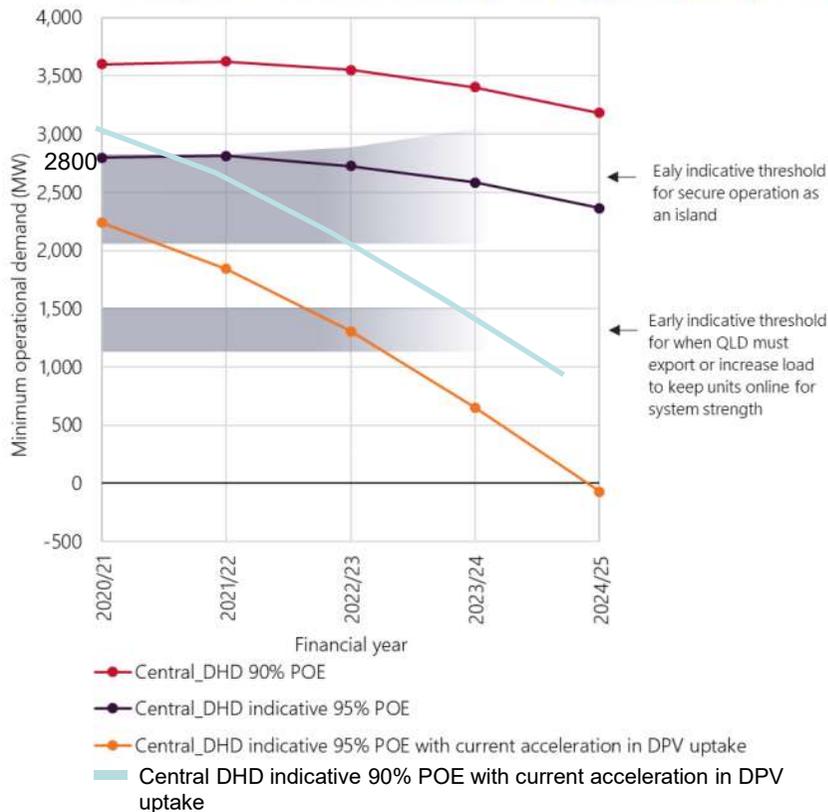
## ***Low cost, flexible storage is essential***

- Pumped hydro is an important firming solution given the scale of energy storage requirements in the foreseeable future. Supports future renewable development when combined with high capacity transmission. In the future its value is expected to increase as generation becomes more diverse.

## ***Strategic importance of base load in Queensland***

- As a result of declining minimum demand and reduced exports over QNI, base load is becoming increasingly important to power system economics and security. Many new loads will require a low cost, high capacity factor, firm energy supply.

Figure 12 Queensland minimum operational demand (sent-out) for Central Downside high DER 90%POE, with indicative 95% POE sensitivities and early indicative thresholds for operation as an island



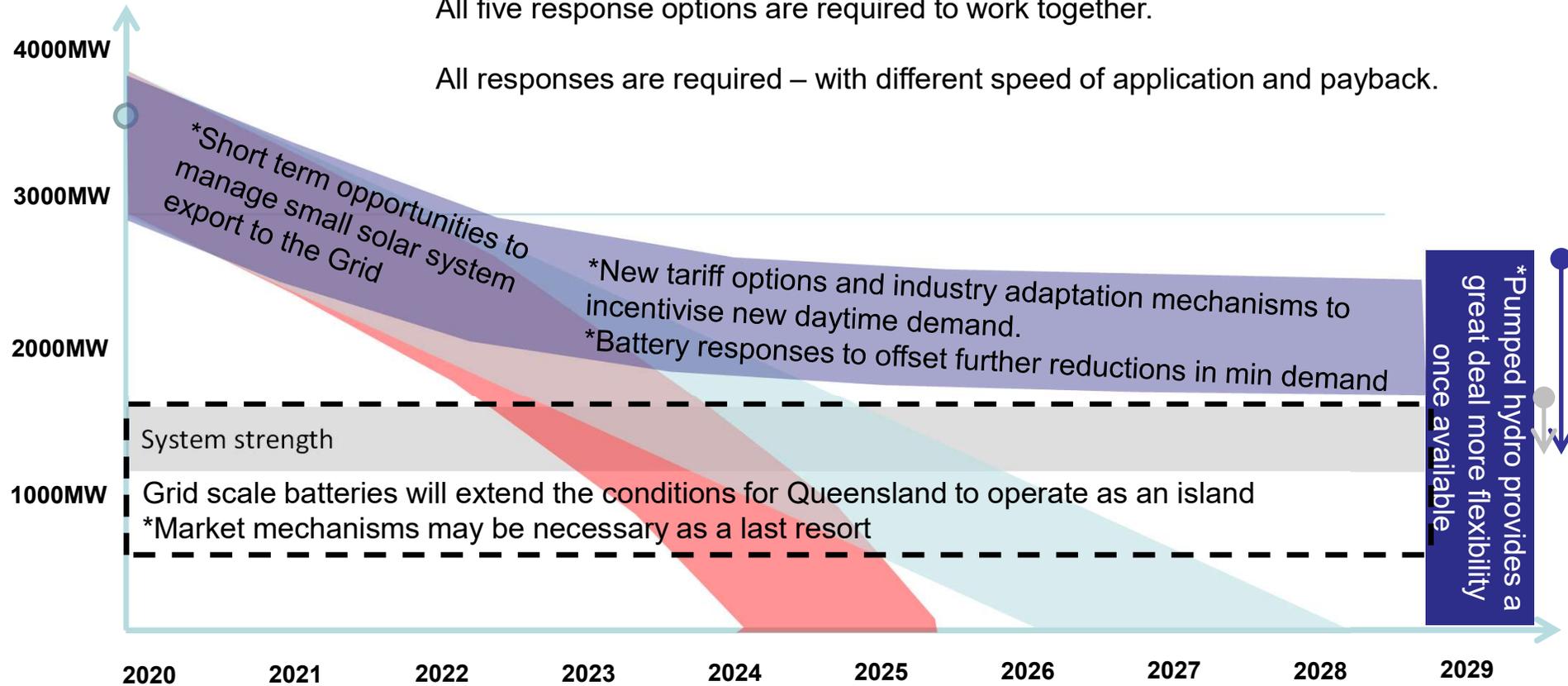
- 3004MW operational sent out demand, on 27 Sept 2020.
- 2800MW is top of the secure island band, therefore 804MW of headroom – as at 27 Sept 2020.
- Since this time approximately 300MW (5 months of 60MW per month) of rooftop solar has been installed, reducing min demand by around 200MW (notionally 2/3 conversion rate).
- Hence as at end of Feb 2021 the minimum demand headroom is around 600MW, which equates to about 13 months if rooftop PV installs remain constant.
- However, AEMO’s weather correction process suggests min demand could be significantly (up to 800MW) lower given the right weather (‘extremely mild’) is sizable variation.
- Rooftop PV installations have been trending upwards over recent years – if this continues the timing will be earlier.

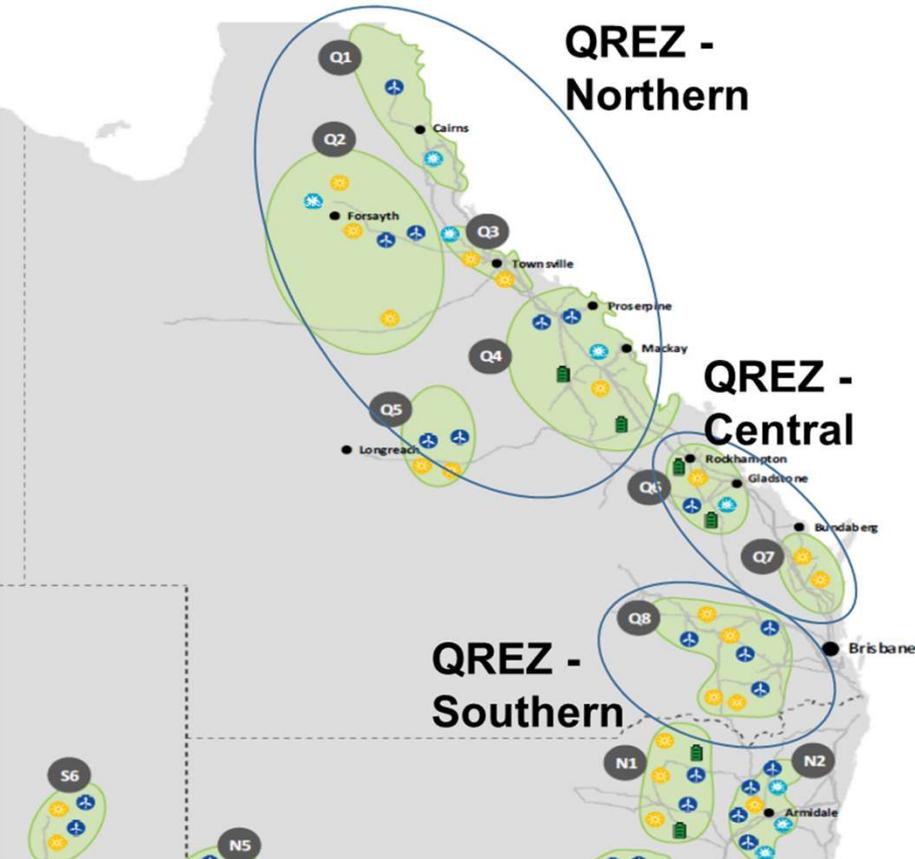
# Minimum Demand response options



All five response options are required to work together.

All responses are required – with different speed of application and payback.





- REZ's are most efficient when located adjacent to matched loads (minimise losses).
- Minimise investment per MWh to improve wholesale prices (utilise existing or low cost capacity).
- Secure foundation renewable generator to support investments.
- Seek diversity in generation energy sources (e.g. wind and solar) to maximise utilisation of infrastructure
- Minimise any capital funding from regulated end use customers (consumers)
- Powerlink has submitted its REZ Report to the Queensland Government.

**PURPOSE : Why our business exists and for whom**

**Connecting Queenslanders to a world class energy future**

**STRATEGIC OBJECTIVES : What we aim to achieve**

- Enable a transmission system to support the pathways to the low carbon future
- Support and influence the market change to secure the pathways
- Ensure customer value and needs are represented at all times
- Ensure our people, processes and resources are able to support the future pathways

**What we value and how we will behave**

Our values and behaviours will support this strategy with regular checking to ensure the strategy is achieving its objectives.

Questions?



# 2023-27 Revenue Proposal

Matthew Myers

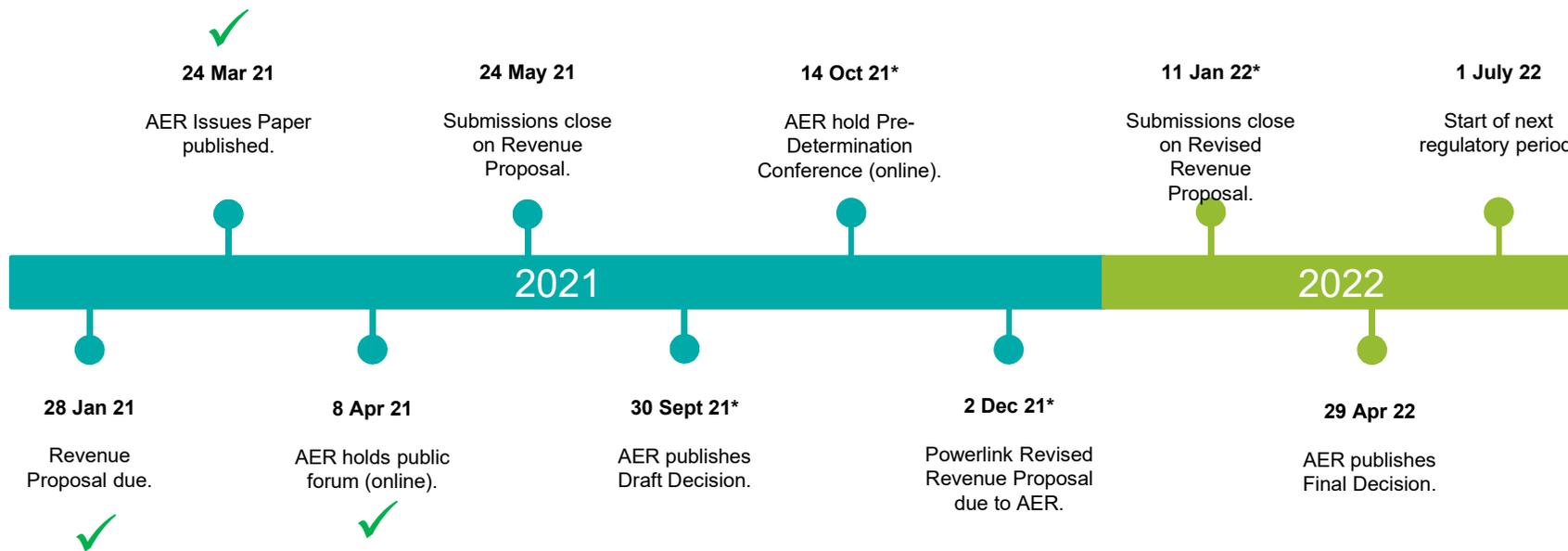
Manager Revenue Reset



- About the Revenue Determination process
- Powerlink's strategic focus:
  - our purpose; and
  - our aim to drive value for customers.
- Our Revenue Proposal:
  - our operating environment and Revenue Proposal approach;
  - customer engagement;
  - key forecasts; and
  - capable of acceptance.

- The annual revenue amount which Powerlink collects for its prescribed (regulated) services is determined by the Australian Energy Regulator (AER) through a revenue determination process every five years.
- ~80% of Powerlink's revenue comes from prescribed (regulated) services. Majority of the remaining amount of revenue comes from non-regulated services.
- Our current regulatory period runs from 1 July 2017 to 30 June 2022. Next regulatory period is 1 July 2022 to 30 June 2027.
- Powerlink provided its Revenue Proposal to the AER on 28 January 2021. The AER will make a Final Decision in April 2022.
- Transmission is about 9% of delivered electricity costs to consumers.

# Upcoming regulatory milestones



\* dates indicative.

A large, light gray circular graphic containing a map of Queensland. Overlaid on the map is a network of white lines representing power lines, with several circular nodes indicating key locations or substations. The text "Our strategic focus" is centered over this graphic.

# Our strategic focus

## Our purpose is to connect Queenslanders to a world-class energy future.

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In our regulated business, this means we:

- connect Queensland communities to safe, secure, reliable and affordable electricity services;
- meet and manage electricity demand through our regulated network; and
- drive value for customers.

Our Revenue Proposal and capable of acceptance approach reflect these objectives.

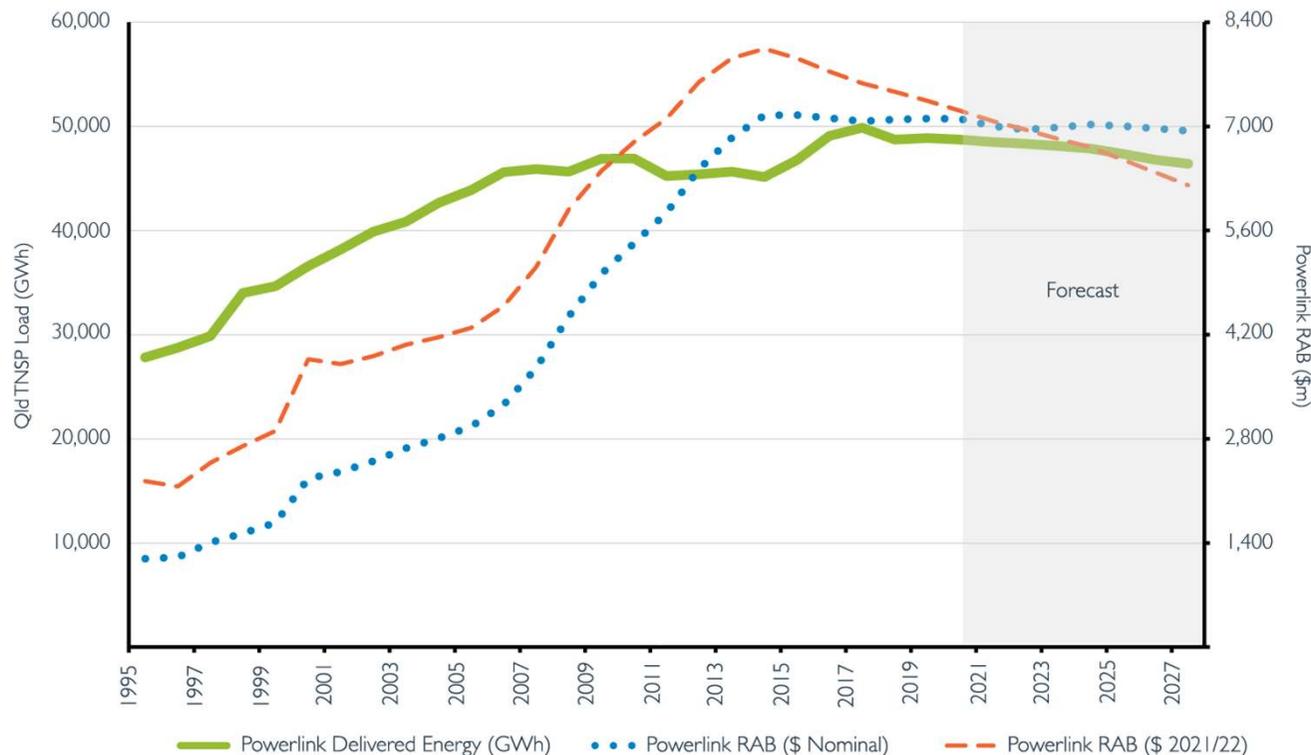
## Driving value for customers is at the core of our business and our Revenue Proposal.

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- Affordability – strong focus for this Revenue Proposal and our previous Revenue Proposal.
- Long-term aim – reduce bulk electricity prices to be among the lowest in the OECD.
- We continue to drive operating and capital expenditure efficiencies, resulting in a reduced RAB and electricity charges to customers.
- Build customer trust – act on their feedback and advocate for them.
- Culture of constructive discomfort to drive innovation and push boundaries.

**We are driving customer value and bending the RAB. The RAB is declining in both real and nominal terms.**

Powerlink forecast delivered energy (GWh) versus RAB



A large, light gray circular graphic containing a map of Queensland. Overlaid on the map is a network of white lines representing power lines, with several circular nodes indicating key locations or substations.

# Our Revenue Proposal

# Drivers of our business and Revenue Proposal



## Customer

- Affordability
- Price signals
- Customer choice



## Energy market

- Decarbonisation
- Decentralisation
- Demand disruption
- Digitisation



## Economic and financial

- COVID-19 impacts
- Resource scarcity



## Government policy and regulation

- Regulatory consultations
- Federal policies
- State policies



## Environment

- Increased extreme weather events

**Our goal has been to deliver a Revenue Proposal that is capable of acceptance by our customers, the AER and ourselves at the time of lodgement.**

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- Co-designed our engagement approach with customers and stakeholders.
- Undertaken meaningful, extensive and adaptive engagement.
- Ensured no surprises – for customers, stakeholders and the AER.
- Sought early and regular involvement from AER staff.
- Applied a transparent, rigorous and iterative approach – particularly to our key forecasts.
- Proposed an overall package that is reasonable, realistic and in the long-term interests of consumers.

# Impact of engagement

- Engagement was deep with many opportunities for input from May 2019 to January 2021.
- Feedback on our engagement approach has generally been positive.
- We have taken on board suggestions for improvement e.g. more regional involvement and diversity of our Customer Panel.



# Revenue Proposal forecasts at a glance



## Capital Expenditure

2018-22 \$891.3m  
2023-27 \$863.9m

↓ **\$27.4m (3%)**



## Operating Expenditure

2018-22 \$1,029.4m  
2023-27 \$1,029.4m

**\$0 difference  
(no real growth)**



## Rate of Return

2018-22 ~6%  
2023-27 ~4.44%

↓ **~1.5%**



## Maximum Allowed Revenue

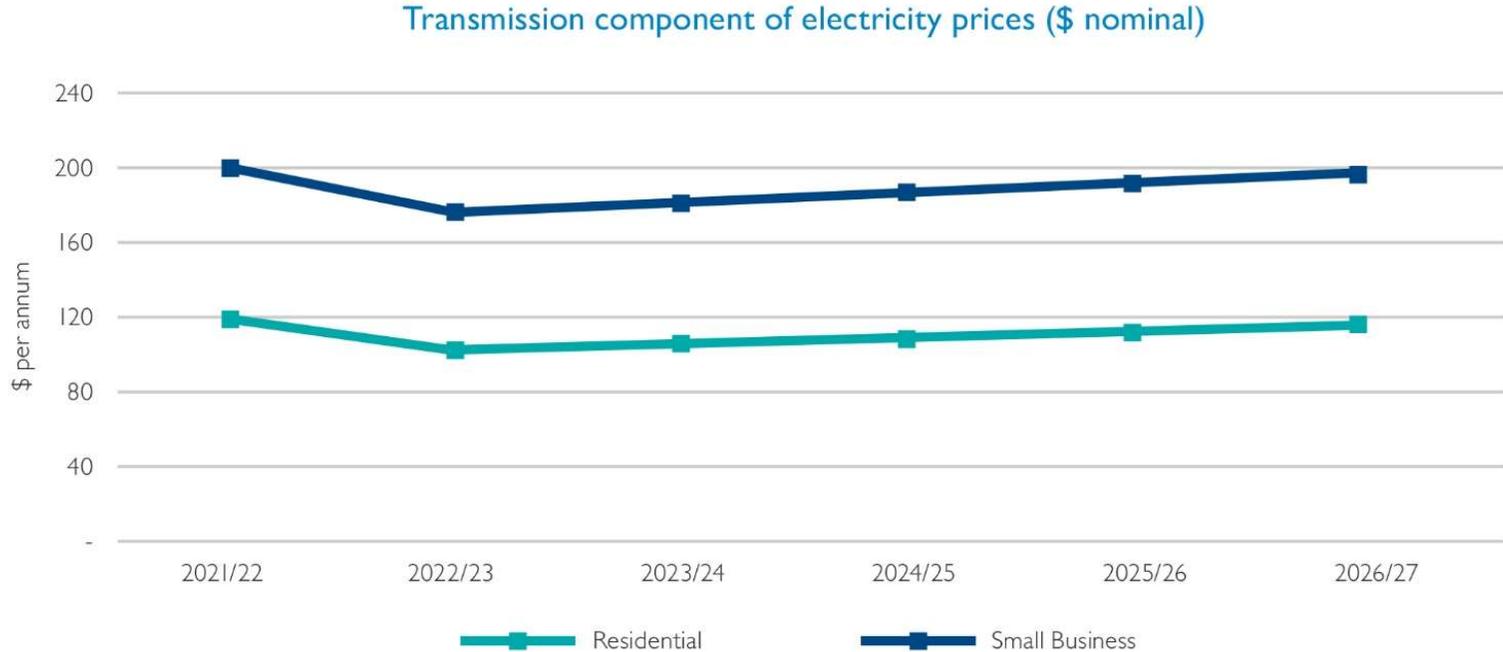
2018-22 \$3,921.3m  
2023-27 \$3,333.9m

↓ **\$587.4m (15%)**

### 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.

**Our forecasts will result in a reduction in transmission prices.**



## As an overall package, our Revenue Proposal is capable of acceptance.

### Customer Panel

- Engagement: genuine, consistent and deep.
- Transparent conversations and information.
- Influence has been high.
- Majority happy to declare the Revenue Proposal to be reasonable.

### AER Consumer Challenge Panel

- Iterative engagement approach.
- Influence has been observable.
- Powerlink is at the forefront of raising the bar on customer engagement.

CAPABLE OF  
**ACCEPTANCE**

### AER

- Encouraged by Powerlink's approach to date.
- Evidence of strong levels of consumer engagement thus far.
- Real reduction in total expenditure may provide the basis for a more constructive and efficient regulatory process.

### Powerlink

- Overall package – reasonable, realistic and in the long-term interests of consumers.
- Meaningful engagement and customer influence.
- Adjusted based on input along the way.
- Constructive discomfort targets.

## Submissions on our Revenue Proposal close 24 May 2021.

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- We welcome further input from our customers and stakeholders.
- Suggested reading on our [website](#):
  - Revenue Proposal
  - Revenue Proposal Overview
  - Customer overview documents
- More detailed information and documents are available on the AER's [website](#).

## Further information

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# POWERLINK CONSUMER ENGAGEMENT IN 2022-27 REVENUE RESET



Mark Grenning Energy Users Association of Australia

Stakeholder Update Webinar - 29 April 2021

- I am the Director of Policy & Regulation for EUAA since 2015 and member of the Australian Energy Regulator Consumer Challenge Panel since 2016
  - Extensive involvement in AER revenue resets over the last 5 years so I have a good perspective of what is best practice engagement
- I have been a member of the Powerlink Consumer Panel since 2015 and a member of the Revenue Proposal Reference Group (RPRG) - a subset of the Panel - since its inception in late 2019
  - Other members include Council for the Aging, Shell, Queensland Resources Council, Queensland Farmers Federation and CS Energy
- Role of the RPRG is an advisory group to engage more regularly and deeply with Powerlink as the proposal was developed drawing on IAP2 guidelines (inform, consult, involve, collaborate, empower)
  - In depth discussion of key parts of the Plan eg capex, opex, depreciation
  - Ensure customer/stakeholder perspectives and preferences are accurately identified
  - Report back to the Customer Panel which would make decisions on the proposal
  - 6 CP meetings, 10 RPRG meetings involving many 'deep dives' on a range of topics between mid 2019 and end 2020
- Aim of consumer engagement was to deliver a proposal that was 'capable of acceptance' by the AER, consumers and Powerlink

- All networks seek to improve on what they and other networks have done previously – the ‘bar’ is continually rising
- Powerlink’s 2022-27 process is certainly ‘best practice’
  - Built on excellent BAU engagement through its Customer Panel
  - Developed engagement plan through a co-design process – what was ‘fit for purpose’ given it is a TNSP (not a DNSP), large geographic spread; what is best form? what are key issues? where on IAP2 spectrum should engagement sit? (not everything needs to be collaborate)
- The result so far – process (see more detail [here](#)):
  - Genuine, transparent consistent and deep and transparent engagement – which began with development of the business narrative and continued through many stages
  - High-level efforts by Powerlink staff to engage meaningfully with us
  - CP clear influence as proposal developed eg co-design workshop, business narrative, draft plan, change in depreciation, capex/opex proposals
  - No issues which are still ‘on the table’, unlikely to be any surprises
- Not yet at the stage of unconditional ‘capable of acceptance’ – await advice from AER in Draft Decision esp is capex/opex ‘prudent and efficient’

# WHAT THAT MEANS FOR THE CONTENT OF THE PROPOSAL

- Key observation – while no doubt room to improve, the revenue proposal does not seem to be an ambit claim
- Impact of falling WACC clearly separated so focus on matters under Powerlink’s control
- Capex, opex, RAB heading in the right direction and laying basis for further improvement in 2027-32 (when WACC may well increase)
- Management willing to commit to significant improvement without knowing a clear pathway – but having confidence in the organisation to deliver
- All designed to enable an efficient reset process that does not deflect Powerlink from their core work to build and maintain an efficient transmission system in a challenging world

## **Next steps:**

- prepare a submission to the AER on the Proposal
- Continue engagement

**THANKYOU**

[www.euaa.com.au](http://www.euaa.com.au)

Questions?



# General Business Update

**Chris Evans**

General Manager Business Development

**Gerard Reilly**

Acting Executive General Manager People and Corporate Services

**Nicole Maguire**

General Manager Communications



- Powerlink has connected, or connecting, 21 renewable projects with combined maximum output of approx. 3000MW.
- As at March 2021, Powerlink had 27 renewable project applications representing approx. 6770MW of generation capacity.
- Not all applications will proceed through to delivery, but shows high level of activity across QLD.





- Australia's first pumped hydro project in 37 years – 250MW generation capacity.
- Development of a 184km, 275kV electricity transmission line and associated switching station to connect the project at Mt Fox in North Queensland.
- The 'Notice to Proceed' (NTP) was received at the end of March 2021.
- The project has a 34 month design, construction and commissioning period, with first power due early 2024

# Powerlink Battery Expression of Interest (EOI)



**Powerlink is testing interest from the market to partner in development of large scale batteries.**

## Why

- Network benefits of batteries:
  - Improves minimum demand with batteries charging when solar generating
  - Discharging batteries support ramp rates when solar stops generating
  - Able to provide other network support functions
  - Greater benefits can be achieved if batteries in “right” location
- Financial model for batteries are marginal:
  - Other states have seen Federal/State Government support, or specific Regulated support functions
  - Powerlink aiming for no cost outcome for Regulated customers

## Where

- Sites being reviewed:
  - Asset capacity to support batteries
  - Best locations to maximise network benefits

## When

- *EOI closed last Friday – very good response*
- Short-list EOI responses – April
- Validate EOI information – May
- Prepare tender – June
- Release tender – July





- Renewed focus on community engagement and building our positive social licence to operate in areas where our network is located.
- Initially working on corporate level Community Engagement Strategy for Powerlink.
- To be followed by pilot operational Community Engagement Plan in areas where we have significant operations and maintenance activities coming up.
- Limited ongoing community presence in some regions – need to strengthen our position, build social licence to operate and trust.
- Aligned with Energy Charter principles.

- 2021 marks our third year as a founding signatory to the Energy Charter.
- Involved in a number of #BetterTogether initiatives including:
  - Better Practice Landowner Engagement
  - Customer Voice @ Board
  - Know Your Customers and Communities
  - Transitioning Communities
  - Future Energy Skills
- Powerlink also Chairs (with Horizon Power) the *Industry Working Group* and Co-Chairs the Measures, Metrics and Maturity Working Group.



## ***Cairns Area Forum – 26 May 2021***

- Overview of work Powerlink has coming up in the region.
- Opportunity to engage with regional key stakeholders.
- Invite to be released in the coming week.

## ***Transmission Network Forum – 3 September 2021***

- Powerlink's flagship engagement forum.
- Invite to be issued in the coming months.



Questions?



Thanks & close

Let us know your thoughts:

