Powerlink's Customer Panel Meeting

26 November 2020

Agenda

- Networking lunch
- Welcome and introductions
- Revenue Proposal Reference Group update
- 2023-27 Revenue Proposal update
- Afternoon tea break
- Powerlink Strategy 2021 onwards
- End of year thanks from Powerlink Chief Executive
- Meeting close

Revenue Proposal Reference Group update

Robyn Robinson
Council on the Ageing

Revenue Determination process update

Revenue Reset Team

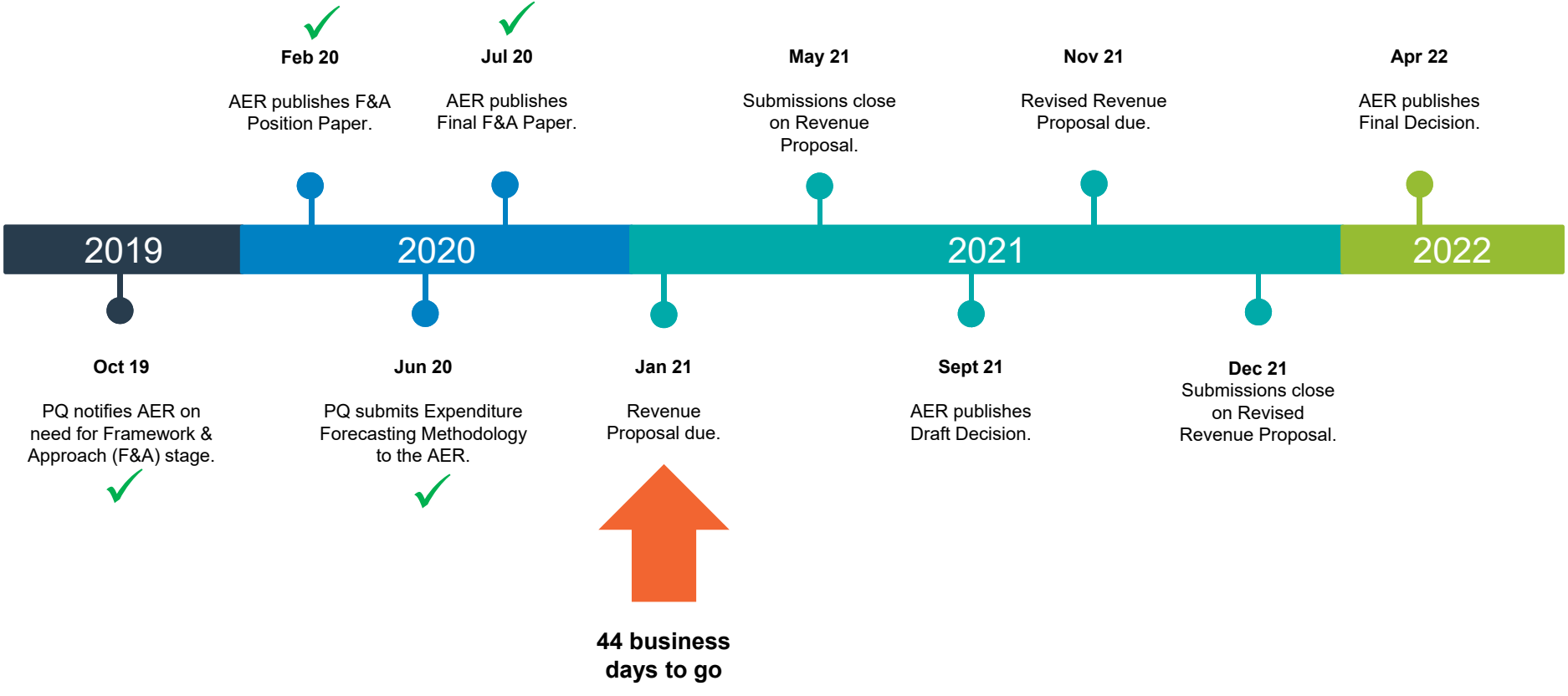
Purpose of this session

- Update on key Revenue Proposal forecasts.
- Overview of feedback on the draft Revenue Proposal and how we will respond.
- Transmission Pricing Consultation and Proposed Pricing Methodology update.

All figures are preliminary and indicative only. They do not represent Powerlink's final Revenue Proposal position.

Progress update

Regulatory milestones



Upcoming key milestones

Date	Activity
26 November 2020	• Final Customer Panel meeting prior to Revenue Proposal lodgement.
10 December 2020	• Final Revenue Proposal Reference Group (RPRG) meeting prior to Revenue Proposal lodgement – focus will be on evaluation of our Revenue Proposal engagement.
29 January 2021	• Powerlink lodges Revenue Proposal to AER.

<u>Key items outstanding:</u>

- Potential Regulatory Asset Base (RAB) inclusions/exclusions.
- Shared assets.

Revenue Proposal forecasts

Material changes since the draft Revenue Proposal

Topic	Draft Revenue Proposal forecast	Updated forecast November 2020
Operating expenditure (opex)	• 2018-22 actuals/forecast = $1,038.9 (excl. debt raising) • 2023-27 forecast = $1,038.9m (excl. debt raising) • No real growth target from 2018-22 • Productivity = 0.8%	• 2018-22 actuals/forecast = $1,029.4m* • **2023-27 forecast = $1,029.4m*** • No real growth target from 2018-22 maintained • Productivity = 0.7%
Capital expenditure (capex)	• 2018-22 actuals/forecast = $883.2m • 2023-27 forecast = $988.9m • Capex forecast to be $105.7m (12%) higher than 2018-22	• 2018-22 actuals/forecast = $883.0m • **2023-27 forecast = $865.3m forecast for 2023-27** • Capex forecast to be $17.7m (-2%) lower than 2018-22
Maximum Allowed Revenue (MAR)	• 2018-22 allowance = $3,921.3m • 2023-27 forecast = $3,382.2m • MAR forecast to be $539.1 (14%) lower than 2018-22	• 2018-22 allowance = $3,921.3m • 2023-27 forecast = $3,336.4m • **MAR forecast to be $584.9m (15%) lower than 2018-22**

*Excludes debt raising, movements in provisions and non-recurrent expenditure

Forecast update overview

Maximum Allowed Revenue

2018-22 - **$3921.3m**
2023-27 - **$3336.4m**

$584.9m (15%)

Rate of return

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

1.6%

Capital expenditure

2018-22 - **$883.0m**
2023-27 - **$865.3m**

$17.7m (2%)

Operating expenditure

2018-22 - **$1029.4m**
2023-27 - **$1029.4m**

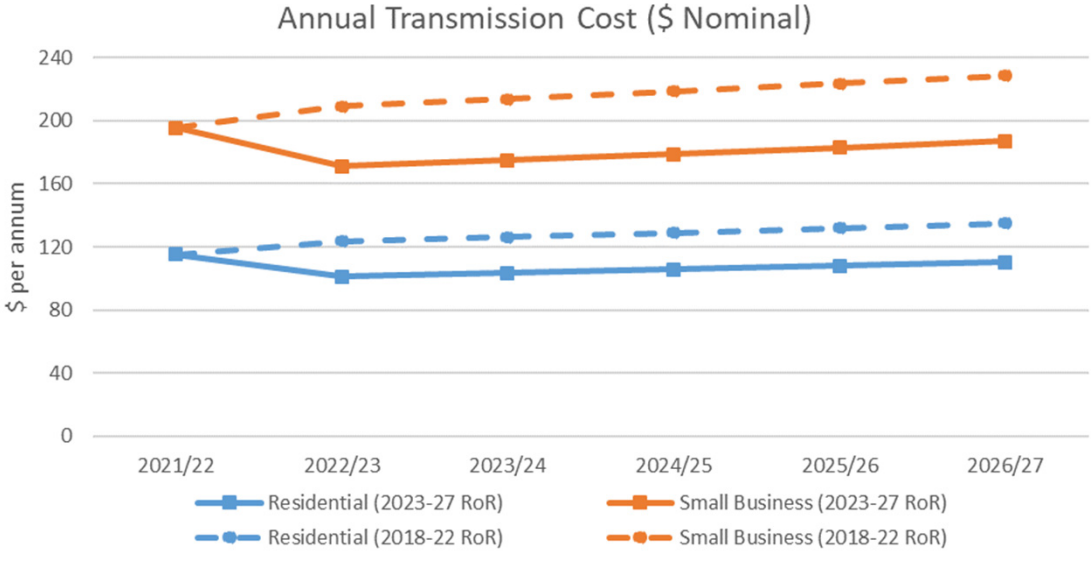
$0 difference - no real growth

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 / Weighted Average Cost of Capital (WACC) 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 are exclusive of debt raising costs, movements in provisions and non-recurrent expenditure.

Forecast impact on prices

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



- Indicative impact to the transmission component of electricity prices in the first year of the next regulatory period (2022/23) would be:
  - Residential: real reduction of ~$17 (14%), nominal reduction of ~$14 (12%).
  - Business: real reduction of ~$28 (14%), nominal reduction of ~$24 (12%).
- On average, transmission price increases for average residential households and small businesses will remain within CPI (assumed forecast of 2.25%) for the remainder of the regulatory period.
- If the current period Rate of Return was applied, the transmission component would increase by 5% (real) or 7% (nominal) in 2022/23.

[1] based on the 2019 Australian Energy Market Commission (AEMC) Electricity Price Trends Report, published December each year.
[2] based on the Queensland Competition Authority's (QCA) annual Tariff 11 (residential) median energy usage of 4,061kWh p.a.
[3] based on the QCA's annual Tariff 20 (small business) median energy usage of 6,831kWh p.a.

Capital expenditure

Key developments since the draft Revenue Proposal

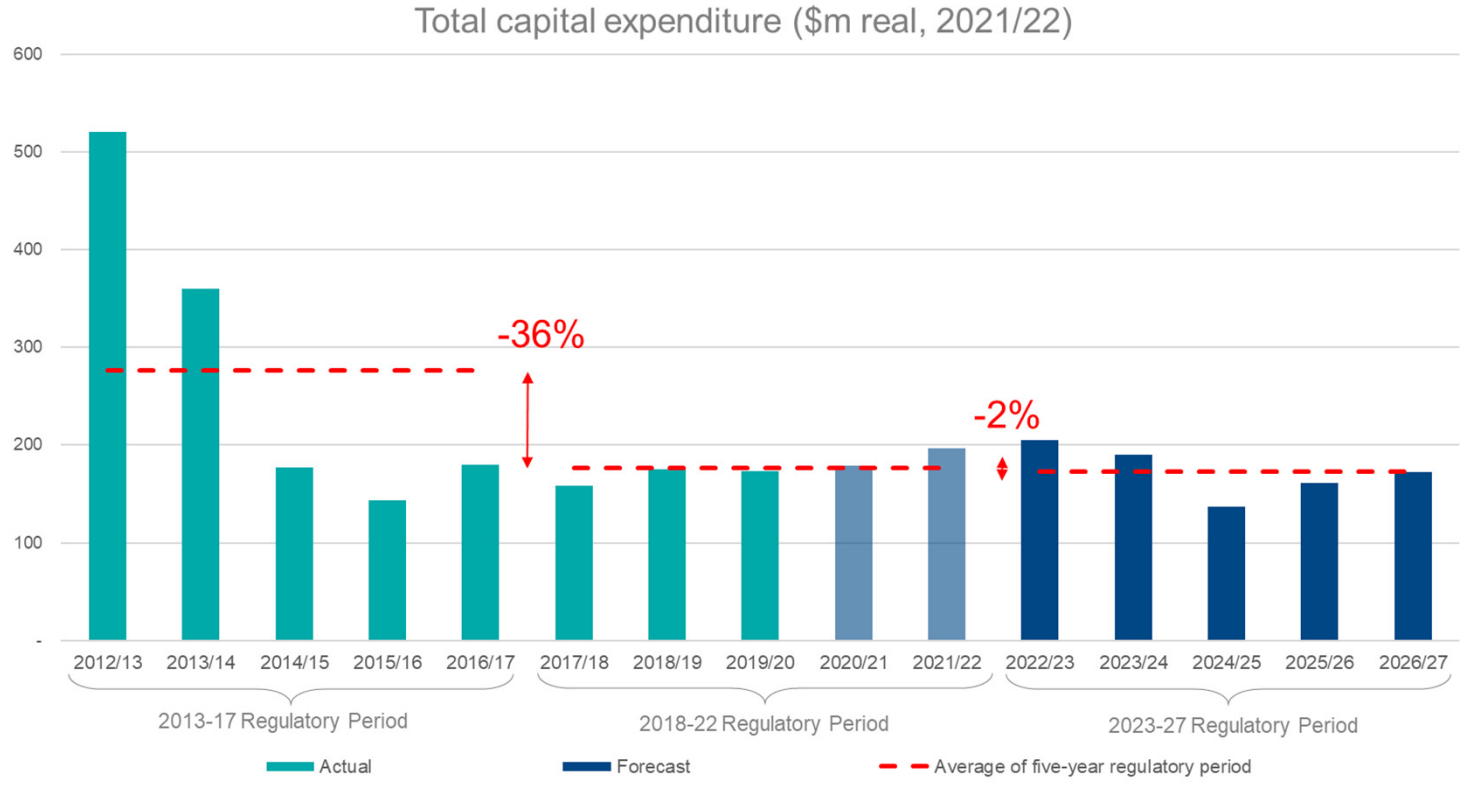
We have reduced our capex forecast by $123.6m (12.5%) since the draft Revenue Proposal.

Major items that have changed:

- Removed some bottom-up projects where the need for expenditure in the 2023-27 period could not be demonstrated.
- Critically reviewed the scope of major transmission line life extension projects.
- Recalibrated the mean replacement lives of assets in the Repex Model. Now slightly longer than the previous AER determination.
- Critically reviewed the unit costs for reinvestment projects, particularly secondary systems.
- Included some additional telecommunications and secondary systems projects where project estimates were not completed in time for the draft Revenue Proposal.

Capital expenditure forecast

Our forecast capital expenditure for 2023-27 is $17.7m (-2%) lower than 2018-22.



Draft Revenue Proposal feedback – capex

Topic	Customer feedback	Proposed Powerlink Response
Overall approach	Customers were concerned about the proposed 12% increase in capex.	Our ongoing process of refinement, testing and challenging, has identified some areas where cost reductions can be achieved, while still managing the risks to customer reliability of supply.
Hybrid+ forecasting approach	Customers support the Hybrid+ model in principle, but asked for further detail on what is forecast top-down vs. bottom-up.	We will provide a more detailed breakdown of what is forecast top-down vs. bottom-up in the Revenue Proposal.
Contingent projects	Customers need more information about contingent reinvestment triggers and contingent projects generally.	We are working to provide a draft of our contingent project triggers to the AER in advance of lodging our Revenue Proposal.
System strength	Customers query why they should fund investments to meet technical requirements that (in hindsight) have resulted from generator investment choices.	The recovery of costs to address fault level shortfalls from consumers has been a policy decision by the national energy rule maker (AEMC). We are not in a position to change this.
Scenario analysis	Request for more scenario analysis on matters such as demand forecasts, major flow path projections and REZ developments	Where pertinent, our Asset Management Plans identify how different scenarios influence investment options and timing. Many of these matters are relevant for proposed contingent projects and will be canvassed in the Contingent Projects Appendix.

Operating expenditure

Key developments since the draft Revenue Proposal

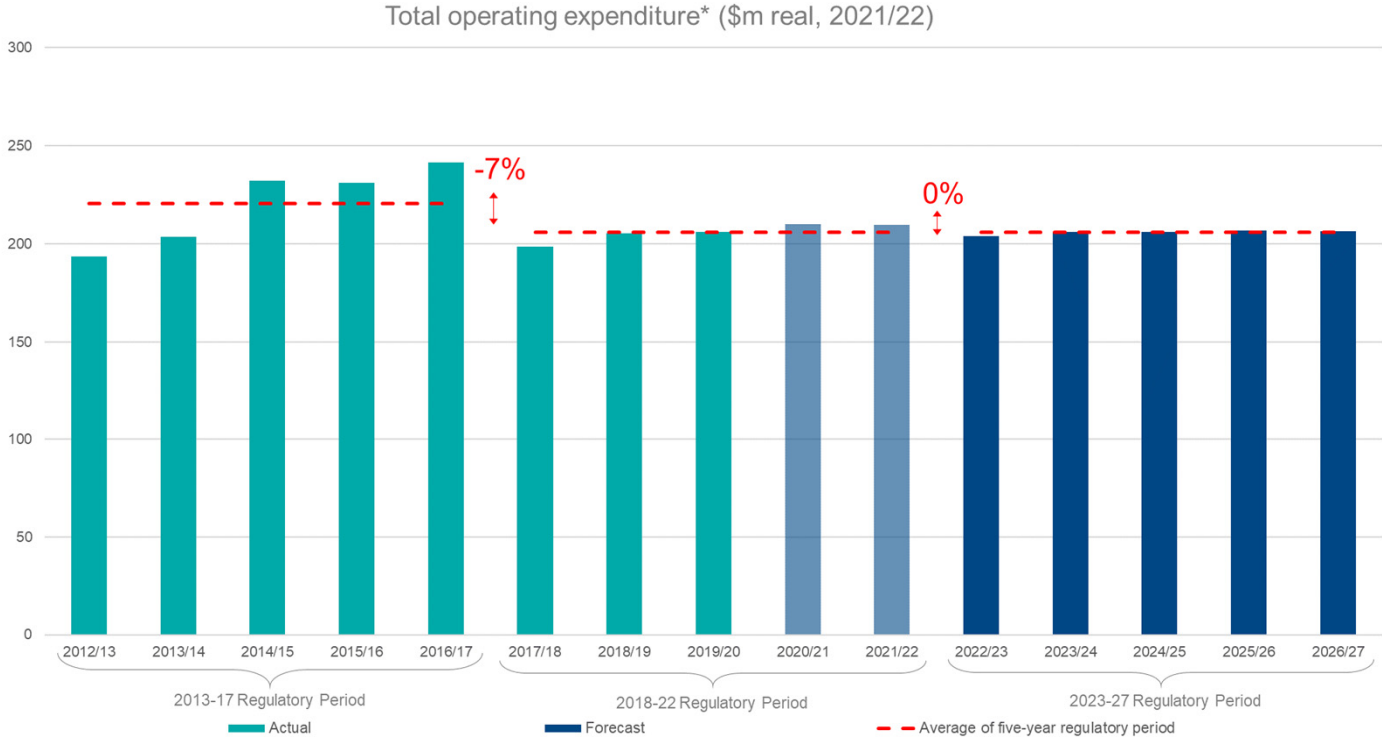
Our opex forecast has reduced by $9.5m (1%) since the draft Revenue Proposal.

- The opex forecast reduction is primarily due to an update to CPI for this regulatory period based on November 2020 CPI data[1], and adjustments to the opex model to account for movements in provisions.
- These updates reduced 2018-22 actual/forecast opex to $1,029.4m.*
- We have retained our no real growth in opex target for 2023-27, therefore our forecast for 2023-27 has also reduced to $1,029.4m*.
- Our productivity growth factor has reduced from ~0.8% to ~0.7%. This remains significantly higher than the industry benchmark average.

1 June 2021 quarter forecast reduced from 3% to 2.25% - RBA SMP, November 2020
* Excludes debt raising, movements in provisions and non-recurrent expenditure

Updated opex position

Our opex forecast for 2023-27 is $1,029.4m*, which represents no real growth from 2018-22.



* Excludes debt raising, movements in provisions and non-recurrent expenditure

Insurance Deep Dive summary

We have committed to further engagement on insurance costs over the 2023-27 regulatory period.

- Customers are concerned about rising insurance costs and increased risks.
- The hardening and volatile insurance market, extreme weather events and increasing pandemic and cyber risks are driving insurance premiums higher and put availability at risk.
- On 13 November, we held an insurance deep dive to discuss the trade-offs between costs and risks to help inform our considerations over the 2023-27 regulatory period.
- Cost pass throughs remain a concern for customers and we have committed to engage with our Customer Panel during the 2023-27 regulatory period on material changes in insurance costs and pass through applications (if required), prior to lodgement with the AER.

Draft Revenue Proposal customer feedback – opex

Topic	Customer feedback	Proposed Powerlink Response
Overall approach	Customers generally welcomed our no real growth approach and no step changes.	We have retained this approach, despite a further reduction in our actual/forecast opex for 2018-22.
Base year efficiency	Customers requested to see HoustonKemp's independent review of the efficiency of our opex base year prior to lodgement of our Revenue Proposal.	We will provide HoustonKemp's report to customers after the publication of the AER's 2020 Benchmarking Report at the end of November. We have provided a copy to the AER and the AER CCP already on a confidential basis.
Productivity	Requests for further information on our proposed productivity target and how we intend to meet this target. Provide more explanation about how IT spend may contribute to productivity	Our Revenue Proposal will include further detail on the potential productivity initiatives we have identified. We will also aim to provide further explanation about how our proposed IT initiatives will provide customer benefits in our Revenue Proposal.
Cost pass throughs	Customers are concerned cost pass through arrangements may be relied upon in period.	We will engage with customers on cost pass throughs prior to lodging an application to the AER within period.

Financials and incentive schemes

Key developments since the draft Revenue Proposal

Our MAR is forecast to reduce by a further $46m (8%) from the draft Revenue Proposal.

- The Rate of Return has reduced by a further 3 basis points to 4.44% due to a lower risk free rate.
- Our Regulatory Asset Base (RAB) is forecast to reduce in both real and nominal terms. In 2026/27, closing RAB is forecast to be $6,179m ($177m lower than the draft Revenue Proposal).
- MAR is forecast at $3,336.4m for the 2023-27 regulatory period, $46m lower than the draft Revenue Proposal.
- We must lodge our Revenue Proposal using the AER's existing inflation approach. If the methodology to forecast inflation from the AER's Draft position paper[1] was applied to our forecasts, MAR would increase by approximately $170m over the 2023-27 regulatory period.

[1] *AER, AER Draft position paper – Regulatory treatment of inflation, October 2020*

Rate of Return (RoR)

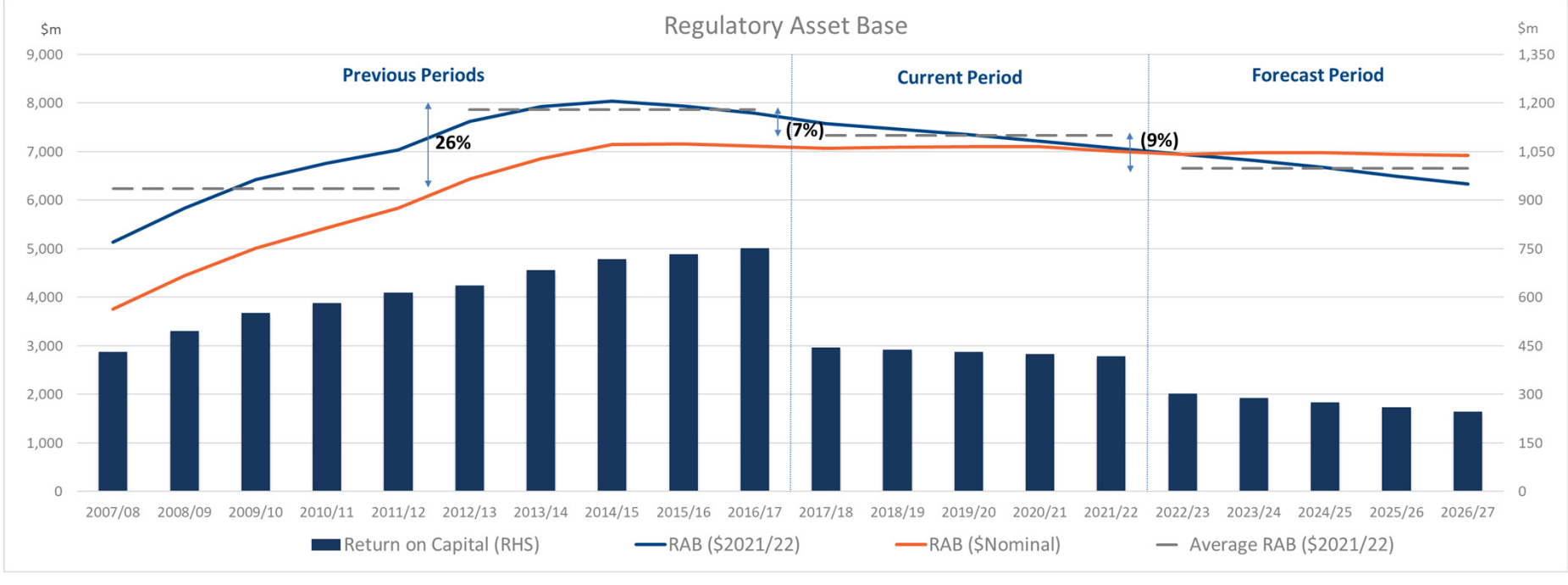
Our forecast RoR for the 2023-27 regulatory period is 4.44%.

Parameter	Base	Assumptions
Risk Free Rate (Rf)	0.82%	Rf based on recent 20 day averages.
Market Risk Premium (MRP)	6.10%	As per the AER's 2018 binding Rate of Return Instrument.
Equity Beta	0.6	As per the AER's 2018 binding Rate of Return Instrument.
Return on Equity	**4.48%**	
Return on Debt	**4.42%**	Cost of debt assumes Powerlink's prevailing rate for 2020/21 remains unchanged for the 2023-27 regulatory period.
WACC	**4.44%**	
Gamma	0.585	As per AER's 2018 binding Rate of Return Instrument.

- The RoR is ~1.6% lower than the current regulatory period.
- The reduction is primarily due to the current historic low interest rate environment.
- The RoR is 0.03% lower than the draft Revenue Proposal.

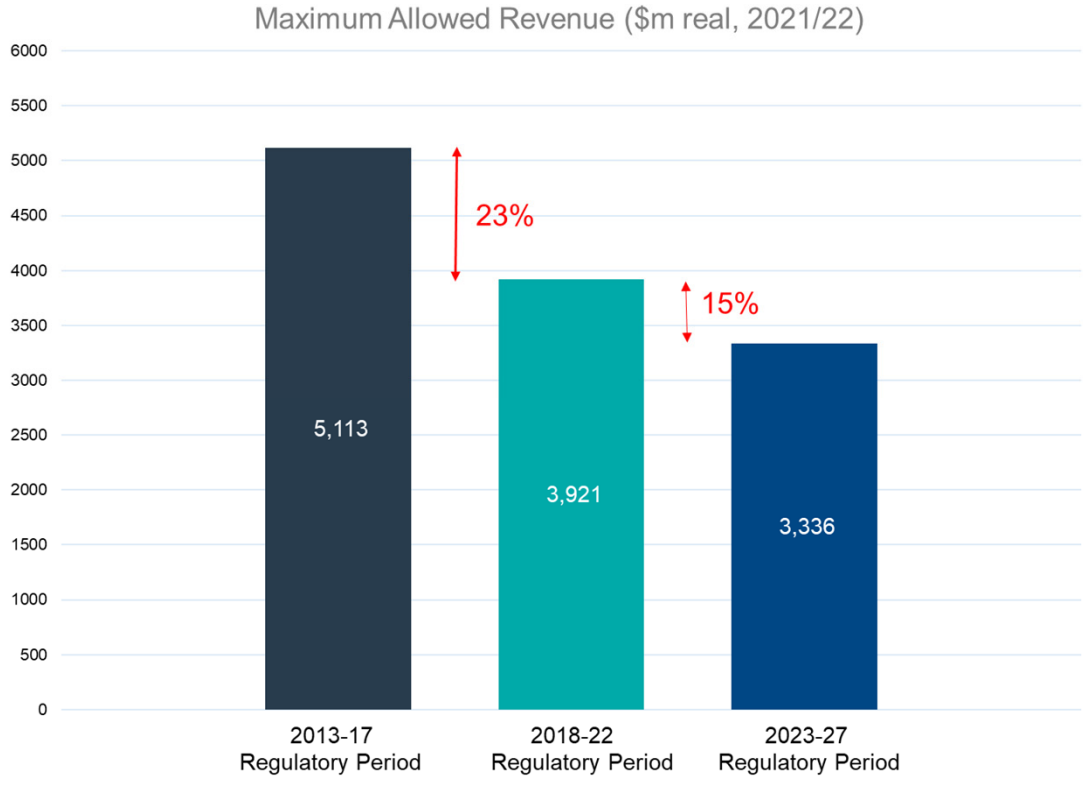
Regulatory Asset Base (RAB)

The RAB is forecast to decline in both real and nominal terms over the 2018-22 and 2023-27 regulatory periods.



Maximum Allowed Revenue (MAR)

Our forecast MAR for the 2023-27 regulatory period is $3,336.4m



- The reduction in MAR is primarily related to a reduction in the return on capital building-block (RAB*Rate of Return).

Incentive schemes – EBSS and CESS

Efficiency Benefit Sharing Scheme (EBSS)

- We have calculated the estimated net carryover amounts from the 2018-22 regulatory period as a revenue increment of $11.2m.
- Our draft Revenue Proposal included a EBSS revenue adjustment of $8.5m.
- The difference is due to the adjustment for movement in provisions and updated inflation forecast for the current regulatory period.

Capital Expenditure Sharing Scheme (CESS)

- We have calculated the estimated net carryover amounts for the 2018-22 regulatory period as a revenue adjustment of -$0.4m.
- Our draft Revenue Proposal included a CESS revenue adjustment of $0.4m.
- Difference is due to updated inflation forecast for the current regulatory period.

Draft Revenue Proposal customer feedback – financials

Topic	Customer feedback	Proposed Powerlink Response
Depreciation	Customers wanted more information on the proposed change in depreciation tracking approach.	We will provide an appendix to the Revenue Proposal to further explain our proposed change in depreciation tracking approach, and our work to 'smooth' the impact of the change in approach on customers.
Cost Allocation Methodology (CAM)	The Customer Panel requested a short presentation on the CAM.	We will arrange a discussion on the CAM for interested Customer Panel members. Due to timing constraints, will likely occur after the Revenue Proposal is lodged.
Inflation	Demonstrate the impact of the AER's Draft Position on Inflation in the Revenue Proposal.	We agree it is important to be open and transparent with customers about the potential impacts of the inflation review. We will include a comparison in the Revenue Proposal.

Proposed Pricing Methodology

Update on transmission pricing

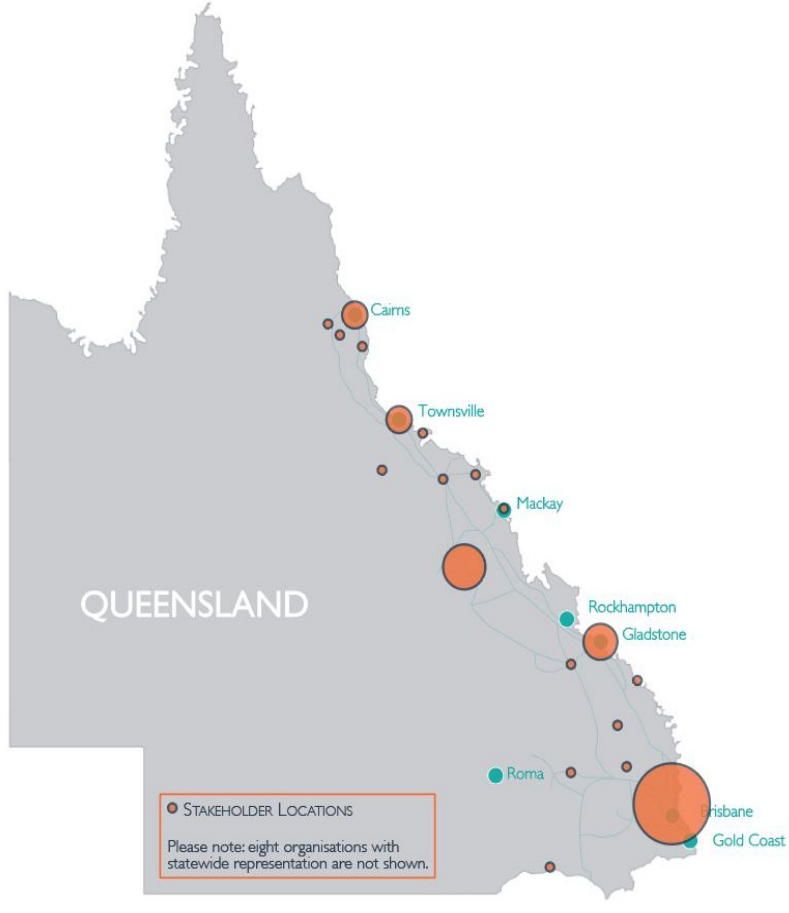
Final Positions Paper and marked-up Proposed Pricing Methodology published 18 November.

- In 2018, we commenced a review into our transmission pricing arrangements, which was prompted by customer input and changing expectations.
- Review involved extensive engagement with our customers (e.g. discussions with the Customer Panel, individual direct-connect customer meetings, webinar and publication of a Consultation Paper (July 2019) and Draft Positions Paper (August 2020) for feedback).
- We will propose changes to our 2023-27 Pricing Methodology to progressively transition customers towards locational charges based on peak demand only over the next two regulatory periods (or 10-years), commencing 1 July 2022.
- In the second half of 2021, we will progress discussions on other pricing related matters that the consultation has raised and can be addressed in the normal course of business.
- Other minor changes to our Pricing Methodology proposed include:
    - introduction of AEMO NTP fees;
    - additional references re: calculation of payments between multiple TNSPs; and
    - clarification of the application of excess demand charges.

Engagement

Engagement breadth – across Queensland

- Master stakeholder list of more than 450 contacts to send key documents and inviting them to participate in engagement activities.
- 20 one-on-one briefings with direct-connect customers (largely on transmission pricing), many of which are based in regional Queensland.
- Customers and stakeholders participated in our draft Revenue Proposal webinar (32 participants), Transmission Network Forum (250 participants) and Insurance Deep Dive (15 participants).
- We proactively contacted regional advocacy and economic bodies (e.g. Townsville Enterprise, Toowoomba Surat Basin Enterprise) to engagement opportunities.
- Revenue Proposal highlighted as part of broader briefings with more than 20 local governments (Mayors and CEOs) – and detailed briefings offered.
- Seek insights on key issues from landholders through our Stakeholder Perception Survey.
- Provision of information and promotion of engagement opportunities through the communication networks of advocacy groups (e.g. QFF and EUAA).
- Engagement on the Revenue Proposal is part of our broader BAU engagement.



Engagement breadth – across customer segments

In addition to customer segments represented in our numerous engagement activities, our Customer Panel membership enables breadth of engagement across customer segments.

Segment	Members of Powerlink's Customer Panel
Generators	• CS Energy. • Edify Energy.
Direct-connect customers and large energy users	• Aurizon. • BHP. • Energy Queensland. • Energy Users Association of Australia (EUAA). • Shell.
Agriculture	• Queensland Farmers Federation (QFF).
Mining and resources	• Queensland Resources Council (QRC).
End users and customers in vulnerable circumstances	• Council on the Ageing (COTA). • Energy Consumers Australia (up to August 2020). • St Vincent de Paul.
Science and research	• Commonwealth Scientific and Industrial Research Organisation (CSIRO).

Capable of acceptance

Our overarching goal is to achieve capable of acceptance of our Revenue Proposal.

- We proposed a set of potential capable of acceptance criteria in our draft Revenue Proposal for the AER to accept in its Draft Decision.
- Customer and AER feedback was to have regard to the Framework for Considering Customer Engagement, published by the AER as part of the recent Victorian DNSP draft decisions (refer to handout).
- The Framework suggested is reasonable, and will seek to assess ourselves against this in the Revenue Proposal.
- We also note Customer Panel feedback that *"members are of the opinion that it is too early to respond to the question (of capable of acceptance) at this stage and that it should be considered more fully once the Revenue Proposal has been lodged".*
- We are interested in how we can progress capable of acceptance of the Revenue Proposal.

Customer Panel discussion – capable of acceptance

Do Customer Panel members think the framework criteria (refer handout) is reasonable and appropriate?

If there was support from the Customer Panel, what could it look like as part of the Revenue Proposal (e.g. a letter from the full Customer Panel, an assessment against the framework criteria, or individual letters of support from Customer Panel members)?

Powerlink Strategy 2021 onwards

Kevin Kehl
Executive General Manager Corporate Development

Norike Ganhao
General Manager Strategy

Ian Lowry
General Manager Energy Markets

Discussion outline

Context

- Powerlink's 2016–2021 Strategy is coming to an end
- Working on a new Strategy for July 2021 onwards
- A time of rapid and complex change in the electricity industry
- Work done previously on Network Vision has helped shape our thinking and direction.

Network Vision – possible futures

A 30-year look forward…

Identified three key uncertainties:

1. Changing consumption patterns
2. Decarbonisation
3. Decentralisation

Leading to a range of possible futures.

Integrated Electricity Pathways

Current challenges

System strength

Network constraints

Network losses

Wholesale market / minimum demand

Strategic drivers

Rooftop PV
→ growth, control and curtailment

Energy storage
→ type, location and quantity

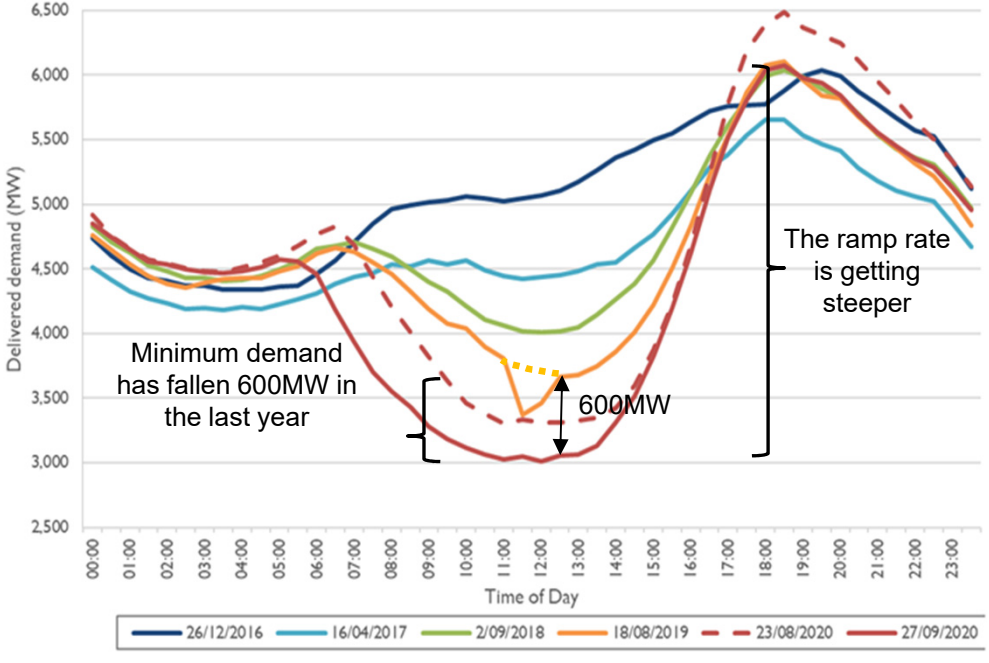
North Queensland Economic Development
→ value

Coal fired generation
→ operating profile and retirement

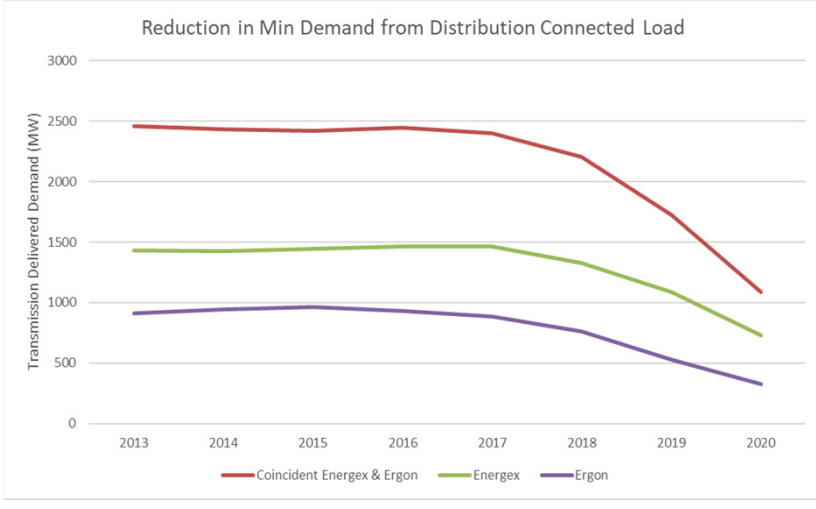
Load
→ attraction and closures

Renewables growth
→ policy aspiration

Minimum demand – strong rooftop PV growth



Transmission delivered annual minimum demand for the Queensland region



- Minimum demand on distribution network has dropped to nearly 1,000MW
- Minimum demand increasingly sensitive to directly connected industrial load

Queensland Renewable Energy Zones (QREZ)

Strong government support for QREZ development

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

Powerlink working to provide advice to government

- Network planning, market modelling and property analysis being conducted to inform potential REZ options, aligned with Integrated Electricity Pathways (IEP).

Integrated Electricity Pathways

- Continuation of work with Queensland Government.
- The Integrated Electricity Pathways (IEP) is a framing study to outline potential development options for Queensland's electricity supply system over a 30-year outlook.
- Development options will address the location and quantity of energy storage, future transmission investment, the impact of major load closures and/or additions and the impact of coal fired generation closures.
- Takes a more granular view of Queensland-specific issues related to rooftop PV growth, and coal generation operating profiles and losses.
- The IEP and associated market modelling will be used to:
  - support development of Powerlink's corporate strategy
  - provide advice to government, informing development of future energy policy
  - support input to the Australian Energy Market Operator's (AEMO's) 2022 Integrated System Plan (ISP) process.

Summary

Powerlink's work on the IEP, minimum demand and QREZ strategy reflects a broader re-positioning in terms of our corporate strategy:

- Expanded focus on guiding the market and on the long-term lowest cost development pathways for Queensland's energy supply system.
- Emphasis on taking a more proactive approach to influence national development plans, including AEMO's ISP.
- Key role in providing advice to Queensland Government to support energy policy development.

Programs of work to continue into 2021 and beyond focused on these key issues.

Our design principles for strategy development

Strategy 21++ will define our role in the future beyond 2021 and must:

- Be clear and provide **line of sight** (can you say what your strategy is?)
- Provide strategic **flexibility** and be **adaptive** (because the future is uncertain and the external environment is changing)
- Create **lasting change** (drives constructive culture and inspires people to create change and deliver on the purpose)
- An **inclusive** approach seeking out **diversity of thought**
- Be a **winning strategy** (not just in the game but winning)
- Keep **delivering value for customers**.

Strategic direction concepts

We exist for the benefit of Queensland and Queenslanders.

We need to step-up from our traditional role as a Transmission Network Service Provider to a role where Powerlink purposefully influences and ‘guides the market’ to drive value for customers.

A long-term view to creating a sustainable future for generations to come is important to us. We believe transmission plays an important part in creating the best outcome overall for customers.

We need to continue our focus on delivering to the current core value proposition of safety, reliability and affordability.

We are at the forefront of the energy transition, finding solutions as issues unfold in the industry. We seek world first solutions for customers by backing our people and harnessing diversity in our organisation.

Questions

We are seeking Customer Panel input on the following:

1. Do the strategic direction concepts align with your expectations of Powerlink?

2. How can we best engage with the Customer Panel and broader customers and stakeholders as the Integrated Electricity Pathways and strategy work progresses?

End of year thanks

Paul Simshauser
Chief Executive

Close and final thanks