

# 2023-27 Revenue Proposal

## Draft Revenue Proposal Webinar

19 October 2020



- Provide an overview of Powerlink's draft Revenue Proposal forecasts.
- The feedback period for the draft Revenue Proposal is open until 30 October 2020.
- All figures are preliminary and indicative only. They do not represent Powerlink's final Revenue Proposal position.

## Housekeeping

- The session is being recorded and will be uploaded for other interested customers/stakeholders to view on our website.
- Please remain on mute at all times. The moderator will mute participants if required.
- Questions can be posted into the chat and the webinar moderator will ask questions of presenters at the end of each presentation segment. All participants can see all questions.
- If we do not get to your question today, we will respond to your questions outside of the session, and you can always ask us questions outside of the session if you wish.

A large, light gray circular graphic containing a map of Queensland, Australia. The map shows the state's outline and a network of white lines representing power lines, with several small white circles indicating specific nodes or substations along the network.

# Chief Executive introduction

# Business and operating environment



Decarbonisation



Decentralisation



Digitisation



Demand disruption



# Draft Revenue Proposal overview



# 2023-27 Revenue Proposal



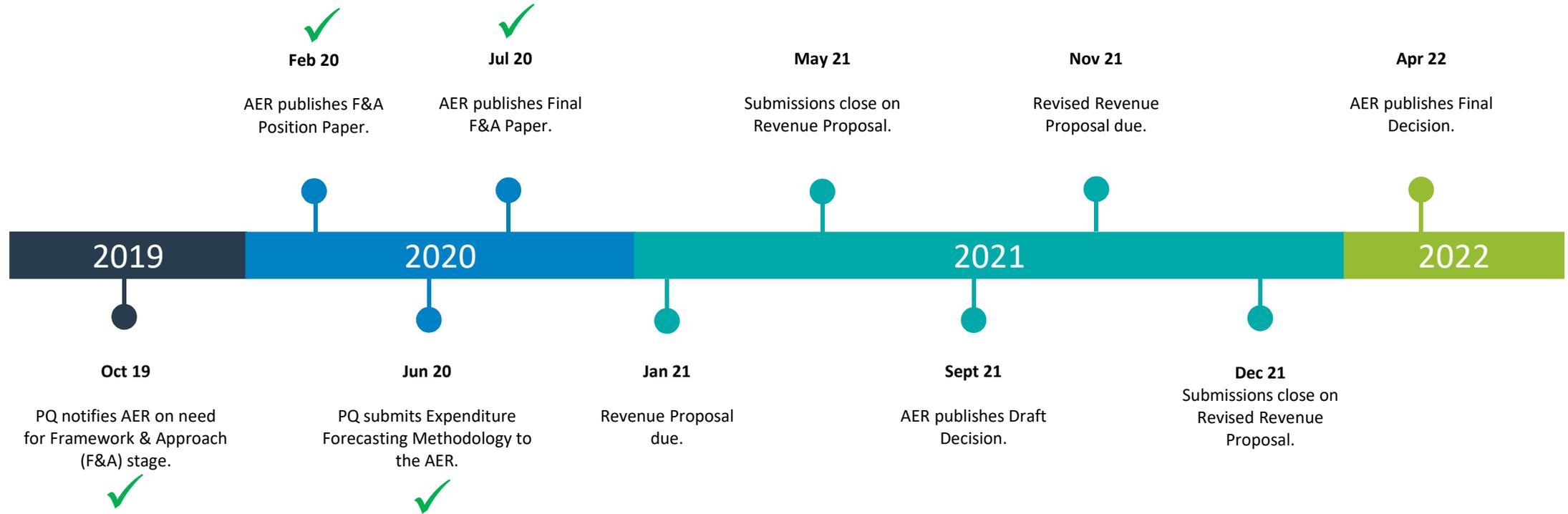
- ✓ Customers
- ✓ AER
- ✓ Powerlink



Generation	41%
Transmission	8%
Distribution	36%
Retail and other	10%
Environmental policies	5%



# Regulatory milestones



# Revenue Proposal engagement to date



## ***Co-design workshop***

**40 participants** to inform engagement approach

## ***Customer Panel***

Revenue proposal update at **three** meetings

## ***Australian Energy Regulator (AER) & AER Consumer Challenge Panel***

## ***Revenue Proposal Reference Group (RPRG)***

**Eight** meetings conducted

### **Current members:**

- Energy Users Association of Australia
- Queensland Farmers Federation
- Shell
- CS Energy
- Council on the Ageing

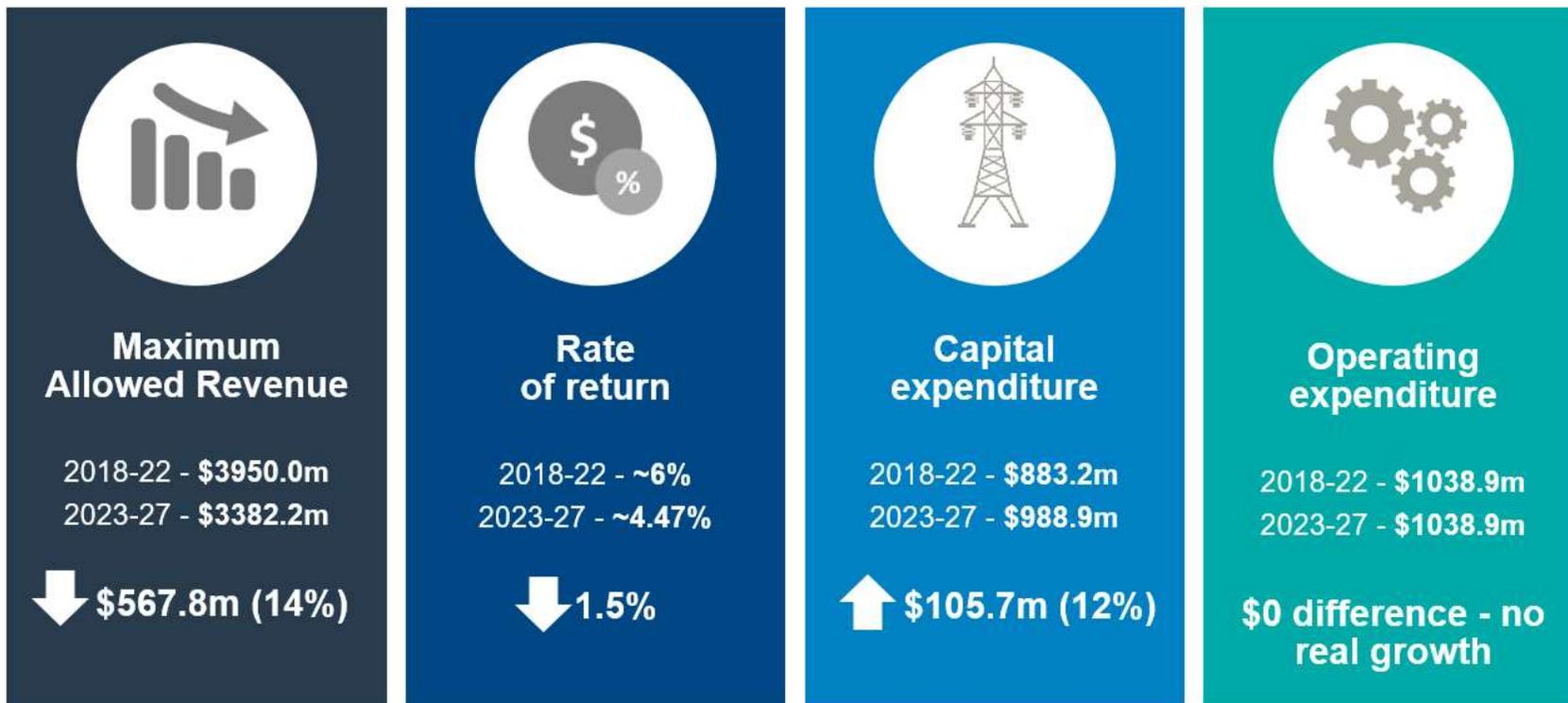
## ***Preliminary Positions & Forecasts Paper (PPFP)***

Provided to **150 +** stakeholders

## ***One-on-one briefings***

Direct connect customers & previous Revenue Proposal submitters

# Draft Revenue Proposal forecast overview



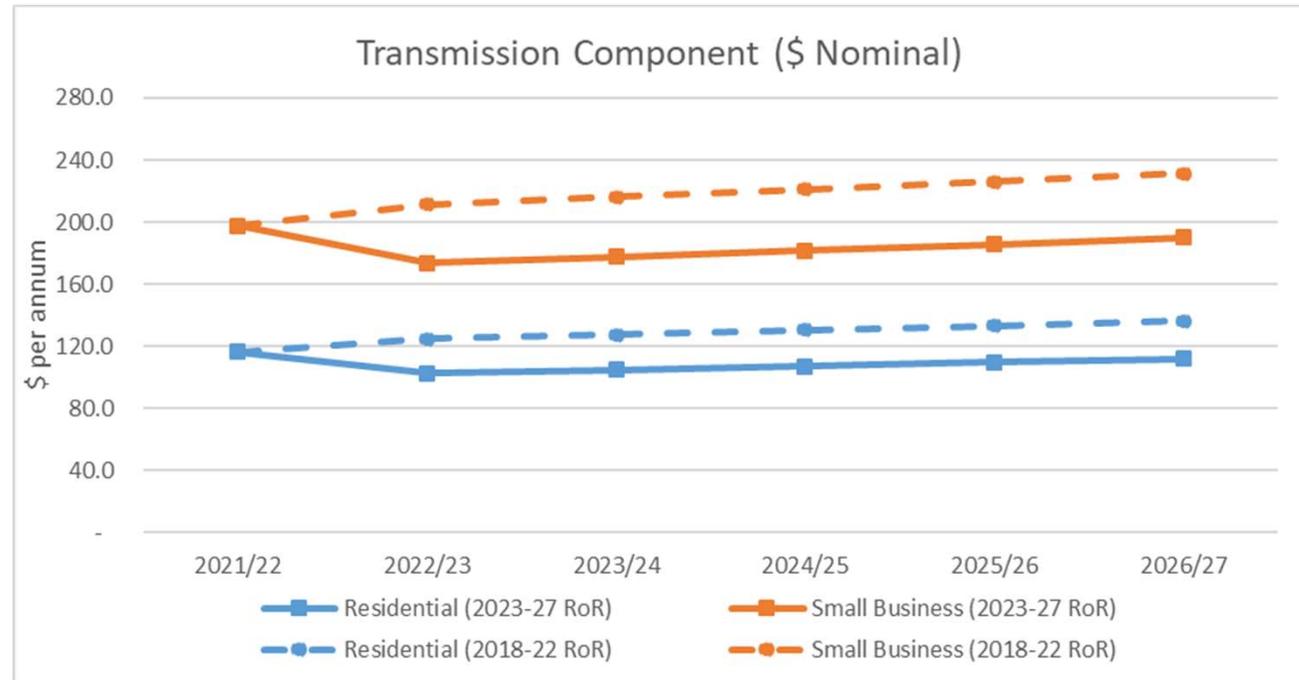
## Notes:

- All figures are in \$m (2021/22 real) and are for the full five-year regulatory period.
- Maximum Allowed Revenue is compared to the AER allowance for the 2018-22 regulatory period.
- Rate of return / Weighted Average Cost of Capital (WACC) is nominal vanilla.
- Capex and opex are now compared to the actuals/forecast for the 2018-22 regulatory period.
- Capex figures are net of disposals.
- Opex figures are exclusive of debt raising.

# Forecast impact on prices



- Our contribution to the average electricity bill is ~8% for households and small businesses.
- Our draft Revenue Proposal would provide a 12% nominal reduction in the transmission component of electricity prices in 2022/23. This equates to \$14 for residential customers and \$24 for small business customers.
- On average, transmission price increases will be within CPI (assumed 2.25%) for the remainder of the regulatory period.
- Based on customer feedback, we have also modelled the impact if the current rate of return was applied. The transmission component would increase in nominal terms by 7% in 2022/23.



# Capital expenditure (capex)

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

## 2018-22 Regulatory Period

Actual/forecast capital expenditure is **\$883.2m**. This is **\$16.5m (1.8%)** lower than the AER's allowance.

## 2023-27 Regulatory Period

Forecast capital expenditure is **\$988.9m**, which is **\$105.7m (12%)** higher than current regulatory period actuals/forecast.

## Key risks/drivers

The increase in capital expenditure is due to ongoing reinvestment needed to maintain security, reliability and quality of supply as our assets continue to age.

We have proposed contingent network reinvestment projects to balance investment risks for customers and Powerlink.

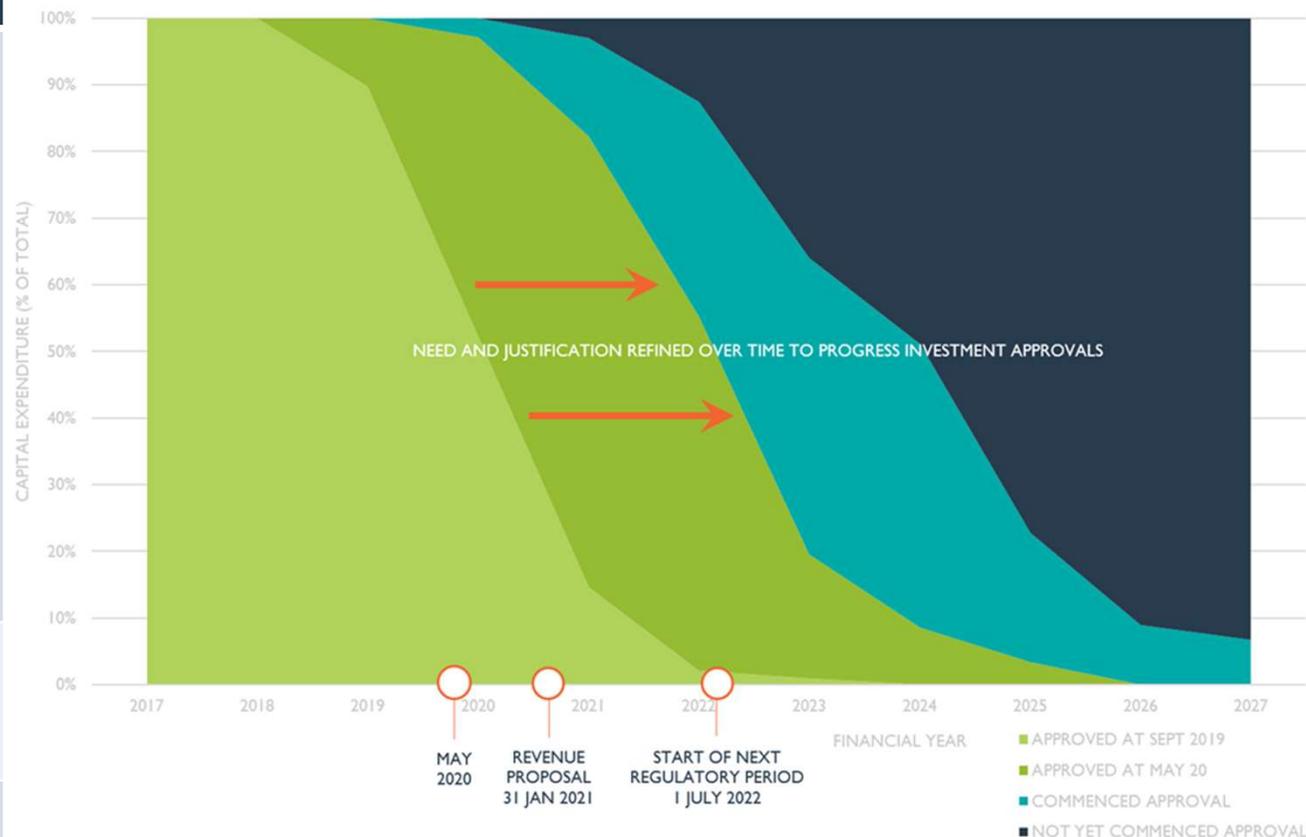
## Forecasting Approach

Our forecasts have been developed based on a **Hybrid+** forecasting approach, which integrates top-down and bottom-up methods.

# Hybrid+ forecasting approach



Approach	Application of approach
Bottom-up	<ul style="list-style-type: none"> <li>Approved projects.</li> <li>Load-driven capital expenditure.</li> <li>Power transformer and Static VAR Compensator (SVC) reinvestment.</li> <li>Any major one-off expenditure needs.</li> <li>System services such as system strength and inertia.</li> <li>Significant network projects (indicative threshold of &gt; \$10 million project cost).</li> <li>Contingent projects (note: not part of the ex-ante capital expenditure forecast. This may include ISP projects).</li> </ul>
Top-down	<ul style="list-style-type: none"> <li>Network assets including transmission lines, substations (excluding transformers which are bottom-up) and secondary systems and telecommunications.</li> </ul>
Trend analysis	<ul style="list-style-type: none"> <li>Security / compliance.</li> <li>Other network capital expenditure.</li> </ul>

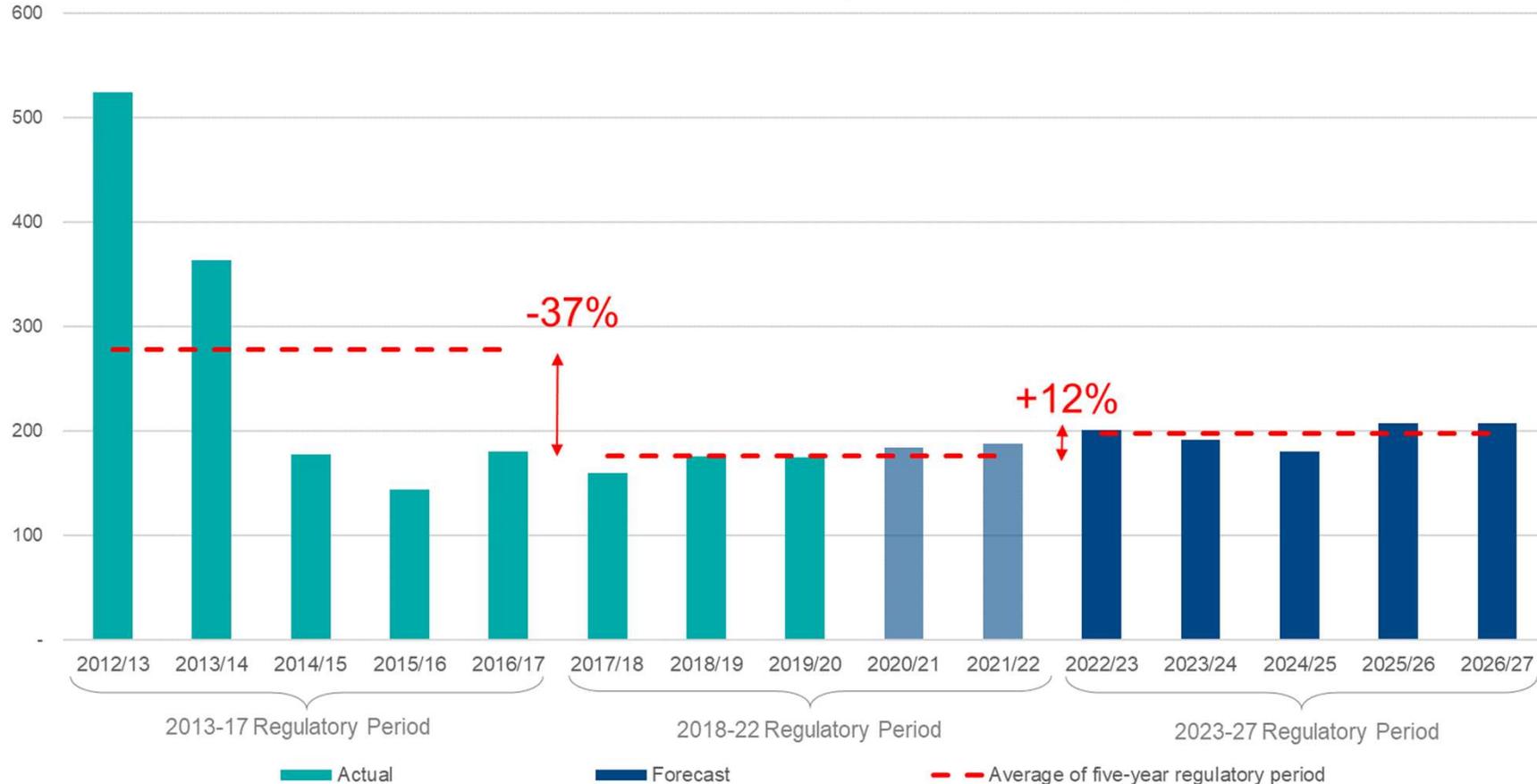


# Total capex

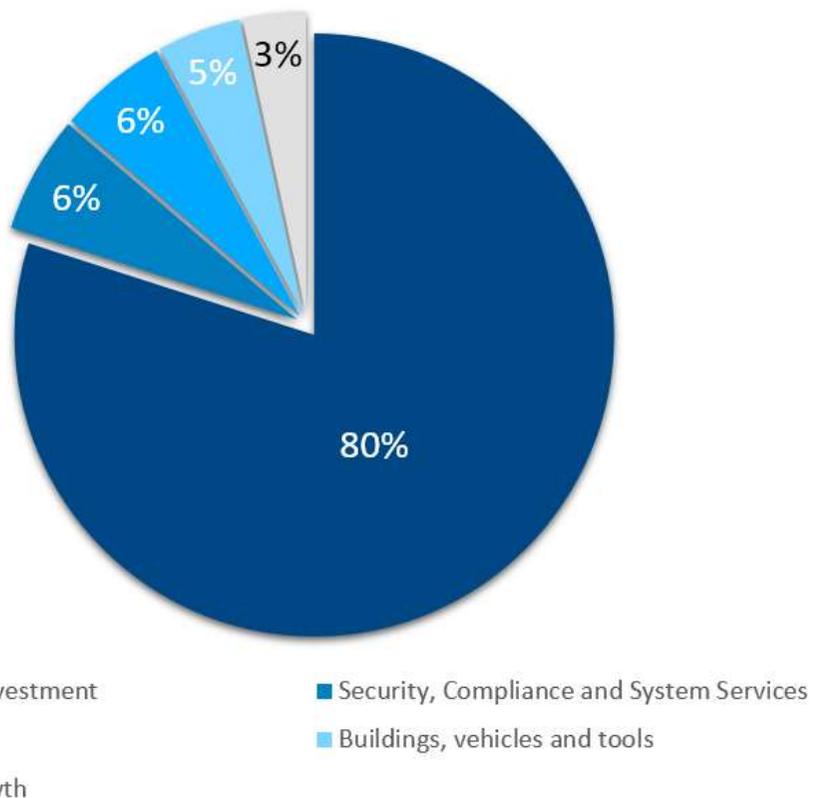


- 2018-22 actuals/forecast - **\$883.2m** (\$16.5m or 1.8%) lower than the AER's allowance.
- 2023-27 forecast - **\$988.9m** (\$105.7m or 12%) higher than actuals/forecast for 2018-22.

Total capital expenditure (\$m real, 2021/22)



# Key capex drivers in the 2023-27 regulatory period



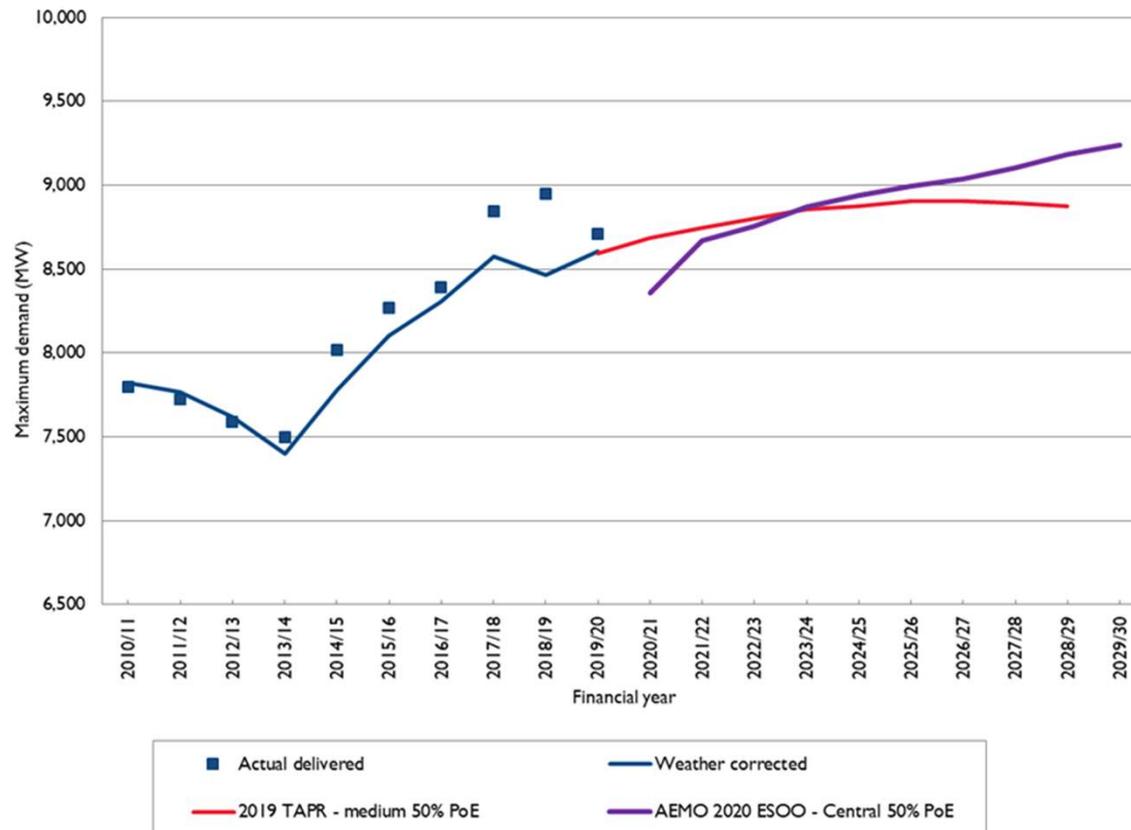
- Transmission line reinvestment remains the main driver.
- Progressive obsolescence and un-supportability of digital technologies in our telecommunications and secondary systems are also significant drivers of reinvestment expenditure.
- System services<sup>1</sup> is a newly identified category of capex driver and we currently forecast to spend \$18m on reactive power equipment to manage voltage levels.
- Our non-network capital expenditure forecast (e.g. IT and our office refit project) is \$5.6m (5.1%) less than actual/forecast expenditure in the current regulatory period.

## Notes:

<sup>1</sup> Investments to meet overall power system performance standards and support the secure operation of the power system. This includes the provision of system strength services and inertia services.

We have adopted the Central Scenario forecast from AEMO's 2020 Electricity Statement of Opportunities.

There is only one project (\$2.4m) in the draft Revenue Proposal driven by increased demand at a DNSP connection point.

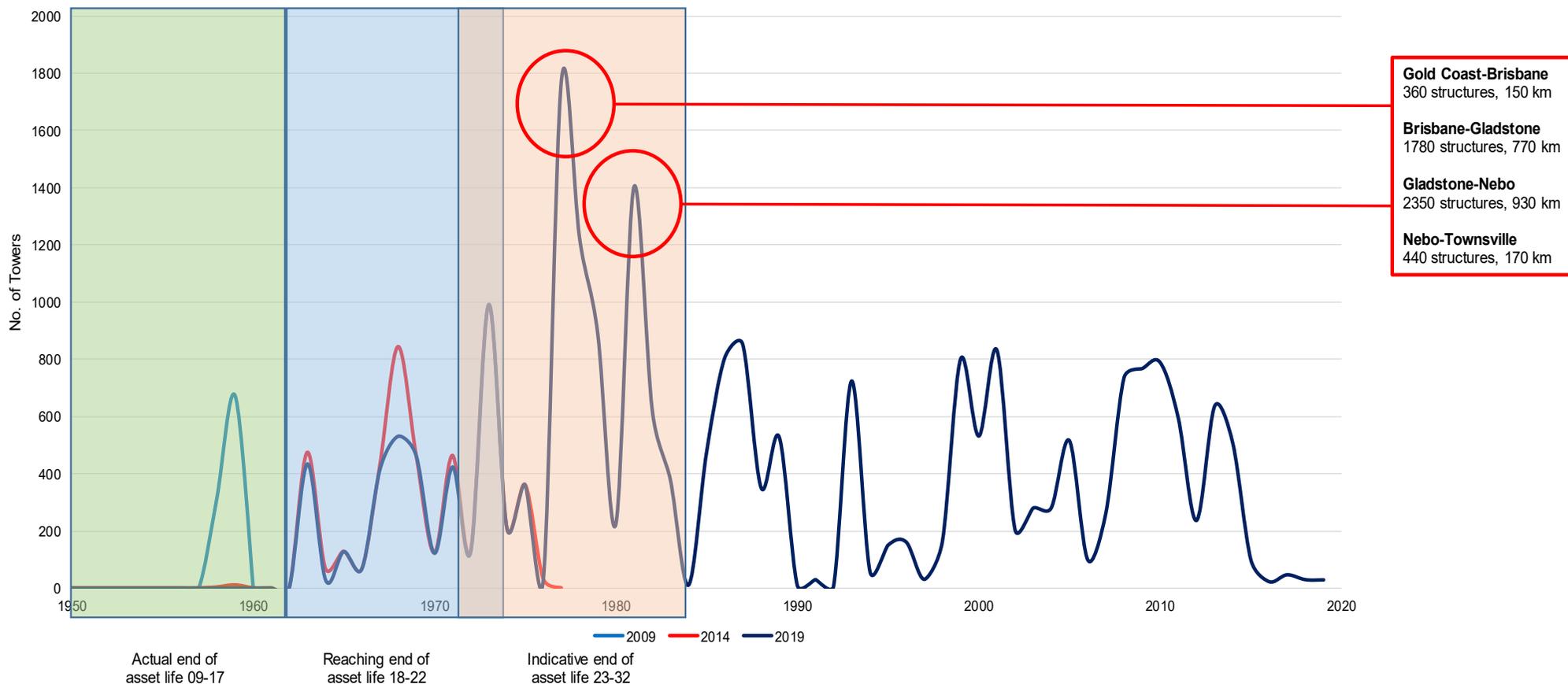


This graph compares Powerlink's 2019 TAPR medium economic outlook demand forecast with AEMO's 2020 ESOO Central Scenario.

- AEMO 2020 ESOO forecast factors in an expected reduction due to COVID-19 pandemic impacts during 2020/21 summer.
- Longer term growth in forecast maximum demand is recognising that additional energy efficiency measures contribute less to reducing future peak demand.

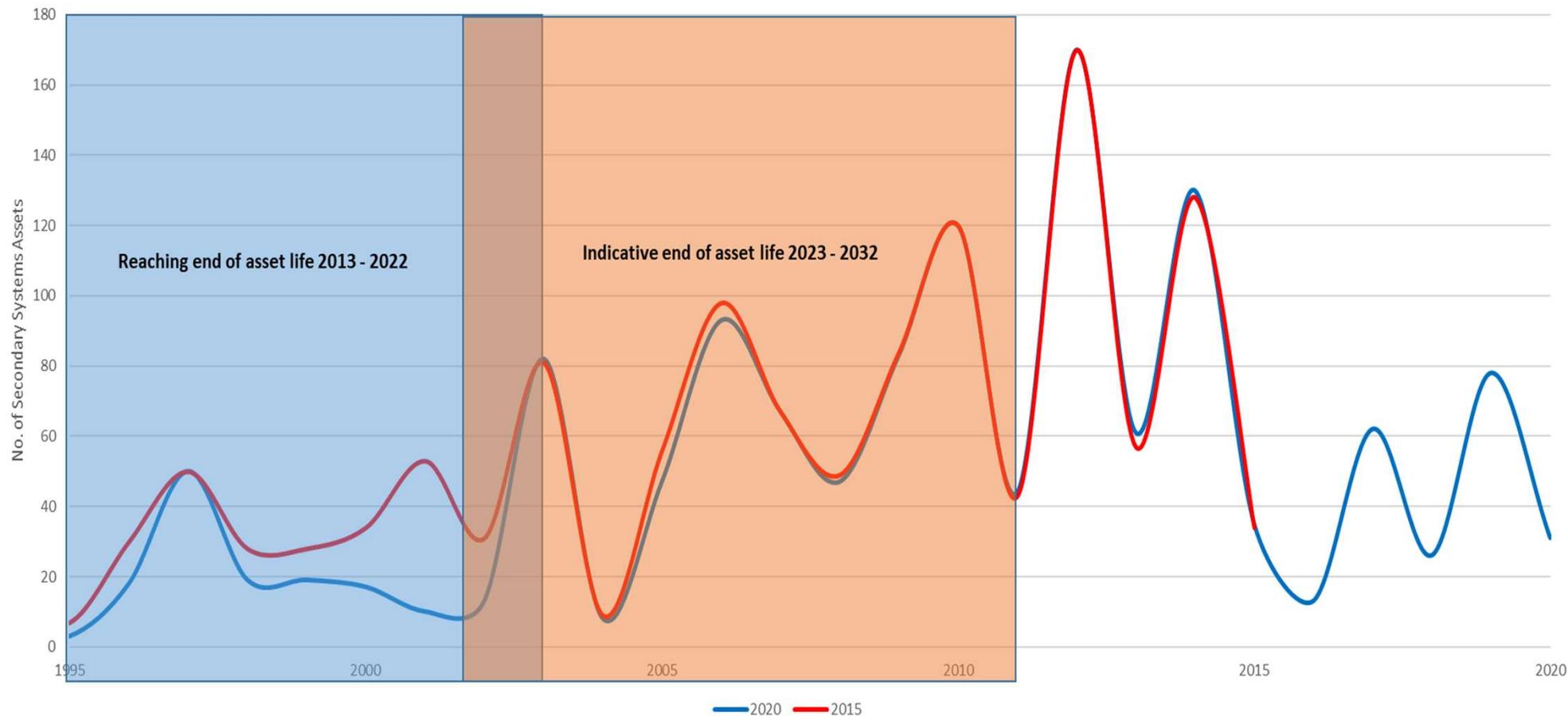
- Powerlink's investment decisions are guided by our asset management policy, strategies and methodologies.
- We assess a range of options and associated risk/cost prior to making an investment decision. Options could include:
  - **Repex** – asset retirement, non-network alternatives, life extension, network reconfiguration or asset reinvestment.
  - **Augex** – non-network alternatives, uprating, reconfiguration or investment.
- Network augmentations and replacements >\$6m are subject to the RIT-T and all network investment decisions >\$10m require Powerlink Board approval.
- We consider our network investment drivers holistically and not as separate, discrete requirements.
  - An example of this holistic assessment is our RIT-T consultation [Maintaining reliability of supply – Clare South to Townsville South](#). Also summarised in our presentation to the [RPRG 26 March 2020 meeting](#).

# Reinvestment – transmission tower age profile

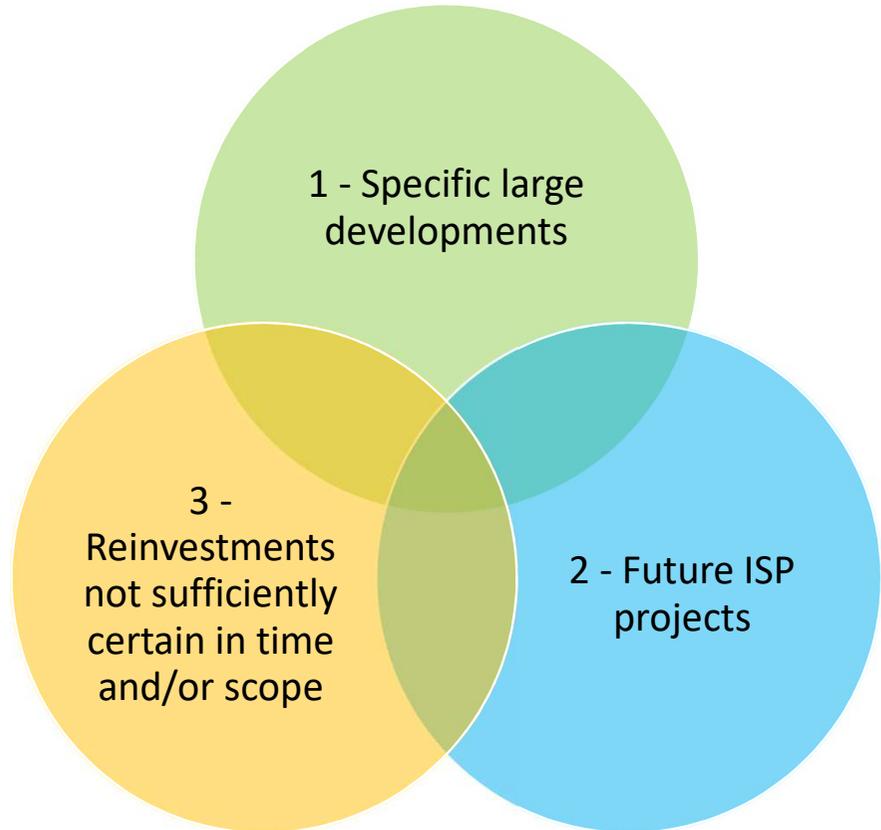


Of our total population of ~23,000 towers, over 40% of these will pass 50 years of age before the end of the 2028-32 regulatory period.

# Reinvestment – secondary systems age profile



Of our total population of ~ 1400 secondary systems assets, approximately 60% will reach an age where reinvestment may be required before the end of 2028-32 regulatory period.



We have identified six contingent projects for the 2023-27 regulatory period. We relate these to three (potentially overlapping) streams:

1. Specific large load or generation shifts i.e. “traditional” contingent projects;
2. Future ISP projects, which could be related to 1 above; and
3. Reinvestments where the timing to invest is still uncertain at this time, or the likely solution will be influenced by 1 or 2 above. Contingent reinvestments are being proposed by Powerlink and the concept has support from our customers.

# Questions



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

# Operating expenditure (opex)

## 2018-22 Regulatory Period

Actual/forecast operating expenditure is **\$1038.9m**, which is **\$5.3m (0.5%)** higher than the AER's allowance<sup>1</sup>.



## 2023-27 Regulatory Period

We have targeted **no real growth** (i.e. **\$1038.9m**) in total operating expenditure<sup>1</sup>, proposed a productivity factor of 0.8% (above the industry benchmark average), and no step changes.

Customer feedback on productivity, affordability and the current economic climate has been central to this decision.



## Key risks/drivers

There is potentially up to **\$35.2m** of cost increases over the 2023-27 regulatory period that we may need to absorb.

We may need to review our no real growth target after our insurance renewal in November 2020.



## Forecasting Approach

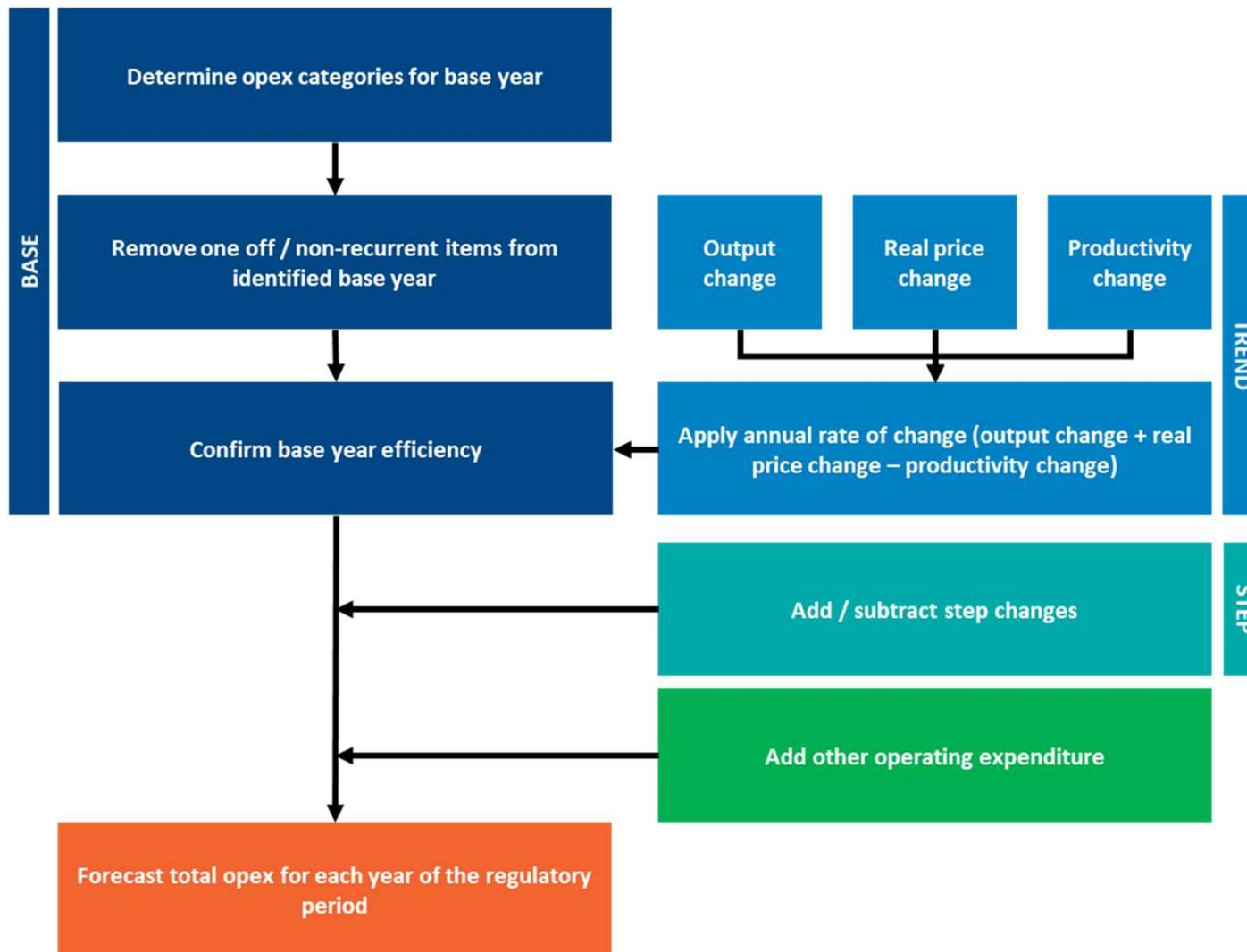
Our forecasts are based on the AER's base-step-trend methodology.

We developed a category-specific forecast for the Australian Energy Market Commission (AEMC) Levy.

### Notes:

<sup>1</sup> These figures exclude debt raising costs. Debt raising costs are set using a benchmark methodology and should not be considered when targeting no real growth based on underlying operating expenditure performance.

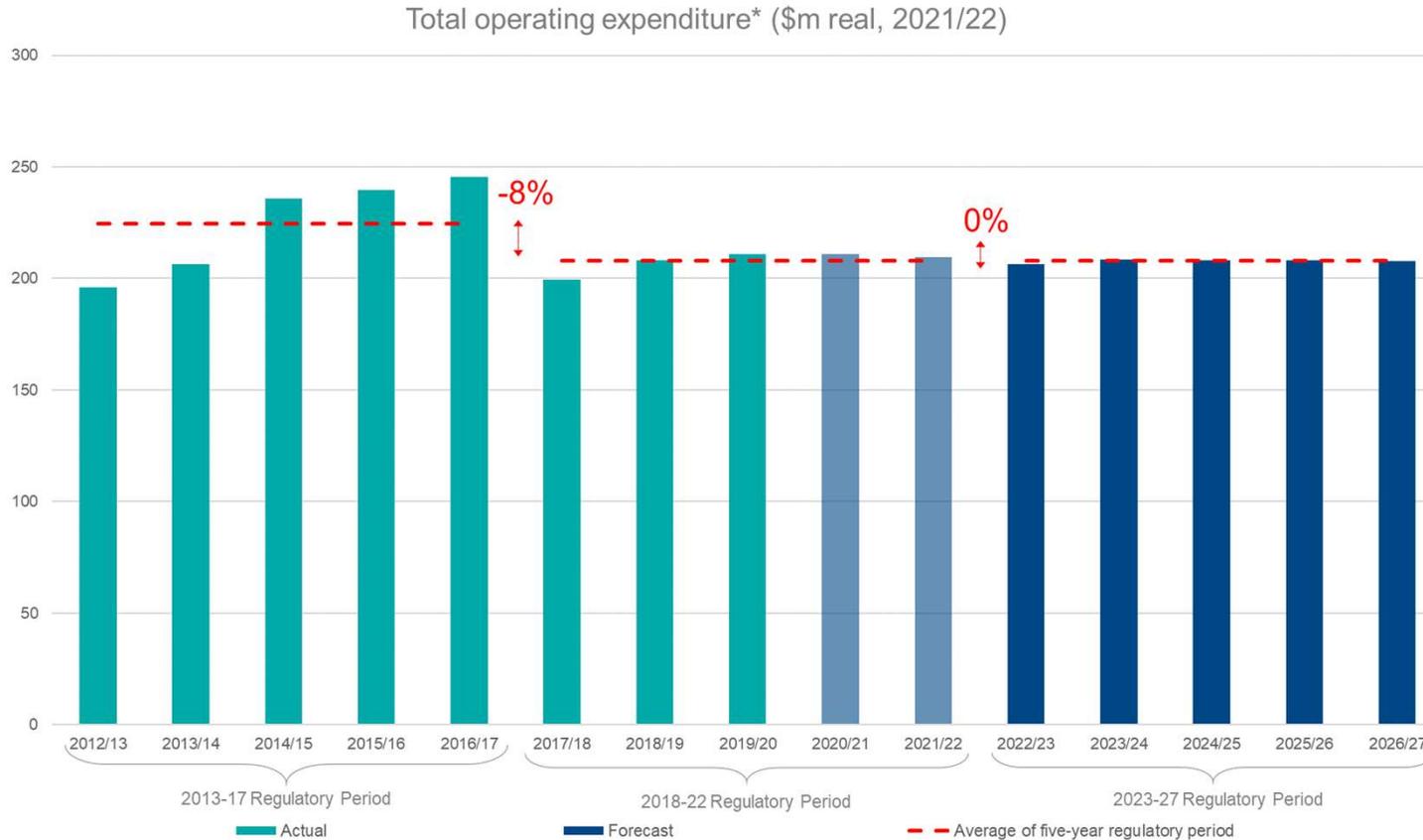
# Opex forecasting approach



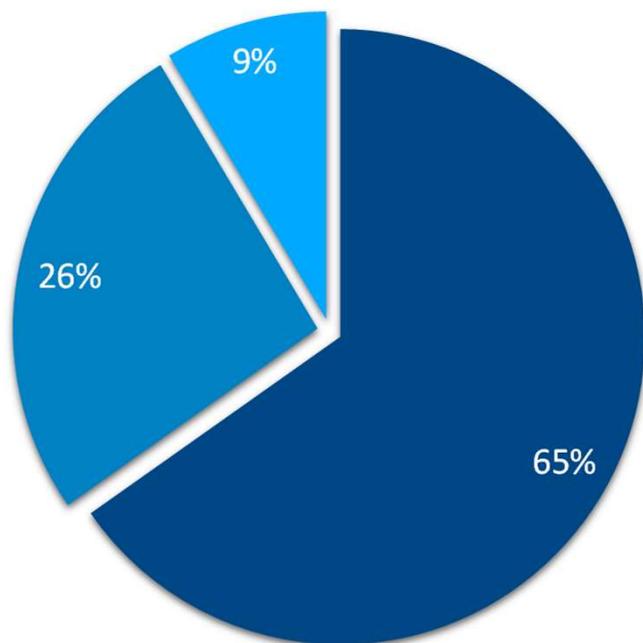
# Total opex (excl. debt raising)



- 2018-22 actuals/forecast - **\$1038.9m** (\$5.3m or 0.5%) higher than the AER's allowance.
- 2023-27 forecast - **\$1038.9m** (no real growth) compared to actuals/forecast for 2018-22.



\* Excludes debt raising costs.



- Operating and Maintenance Expenditure
- Other Controllable Expenditure
- Non-controllable Operating Expenditure

- ~65% of our opex relates to operations, maintenance and refurbishment of the network.
- Key drivers of opex in the 2023-27 regulatory period include:
  - outage management complexities associated with the growth in Inverter-Based Resources (IBR)
  - increased focus on cyber security
  - growth in insurance premium costs; and
  - increased decommissioning activities.
- We seek to manage increased costs within our current regulatory allowance and opex forecast.
- It will be a challenge for us to meet this target. However, we are committed to driving our business harder and improving efficiency.

## Cyber Security

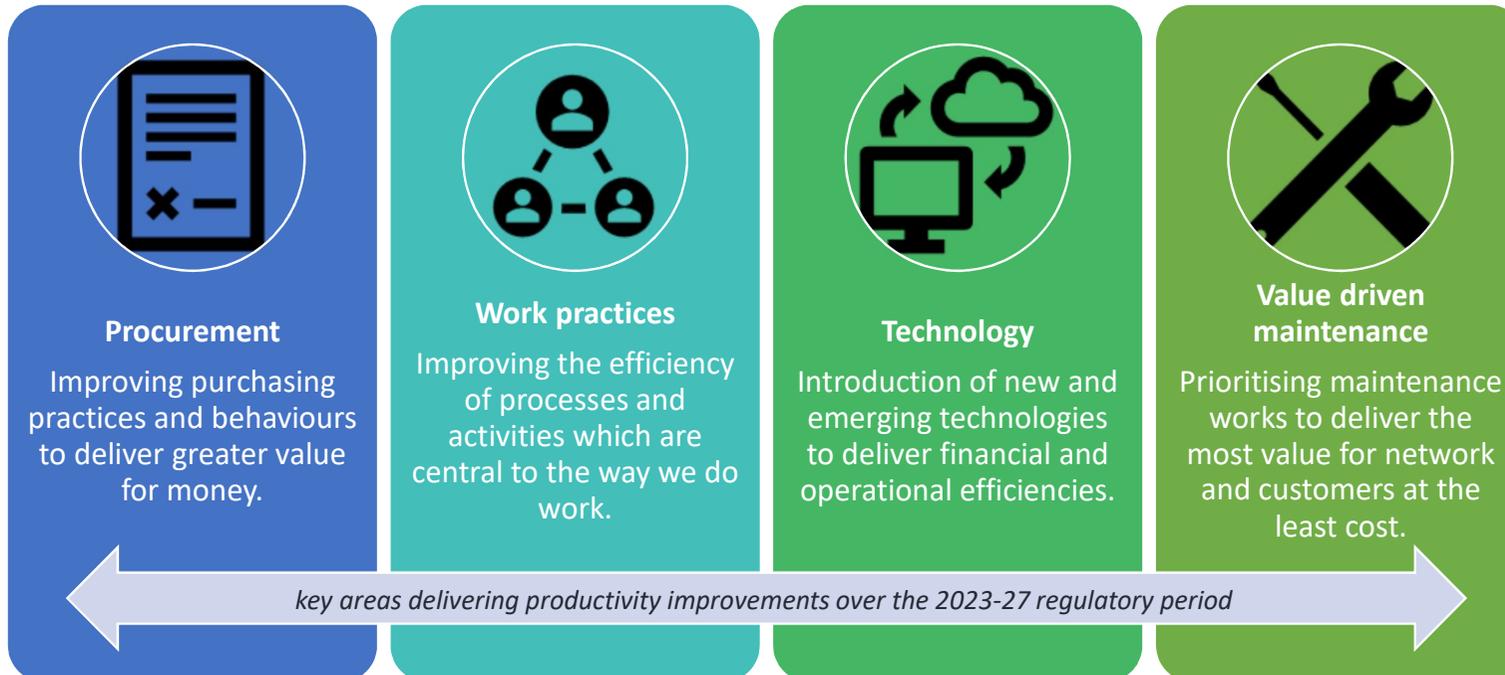
- As a prudent operator, we continue to manage and build our cyber security capability where necessary.
- We expect to spend opex of between \$1.5-2.4m p.a. and will propose capex of \$5.8m in the 2023-27 Revenue Proposal, to ensure our cyber security capability and maturity can continue to respond to emerging threats.
- We may need to implement a further uplift in our security (this may include items other than cyber security) if mandated by the Federal Government.

## Insurance

- There is significant uncertainty and volatility in the insurance market at present.
- Our insurance brokers, Marsh, have forecast a potential increase in premiums of \$20m (48%) in the next regulatory period, compared to our actuals/forecast for this regulatory period.
- The difference between Marsh's forecast, and the base-step-trend forecast we have applied, is \$26m.
- We will hold a deep dive workshop in November 2020 on insurance to explore this issue further.

To meet our no real growth opex target for the 2023-27 regulatory period, we propose a productivity factor of **0.8%**. This is significantly above that the TNSP benchmark industry average.

We will focus on four key potential areas to drive productivity. We recognise that we will need to identify ways to deliver further efficiency and productivity improvements during the 2023-27 regulatory period and commit to doing this as part of BAU operations.



# Questions



# Rate of Return (RoR), Maximum Allowed Revenue (MAR), Inflation and Regulated Asset Base (RAB)

# Rate of Return (RoR)



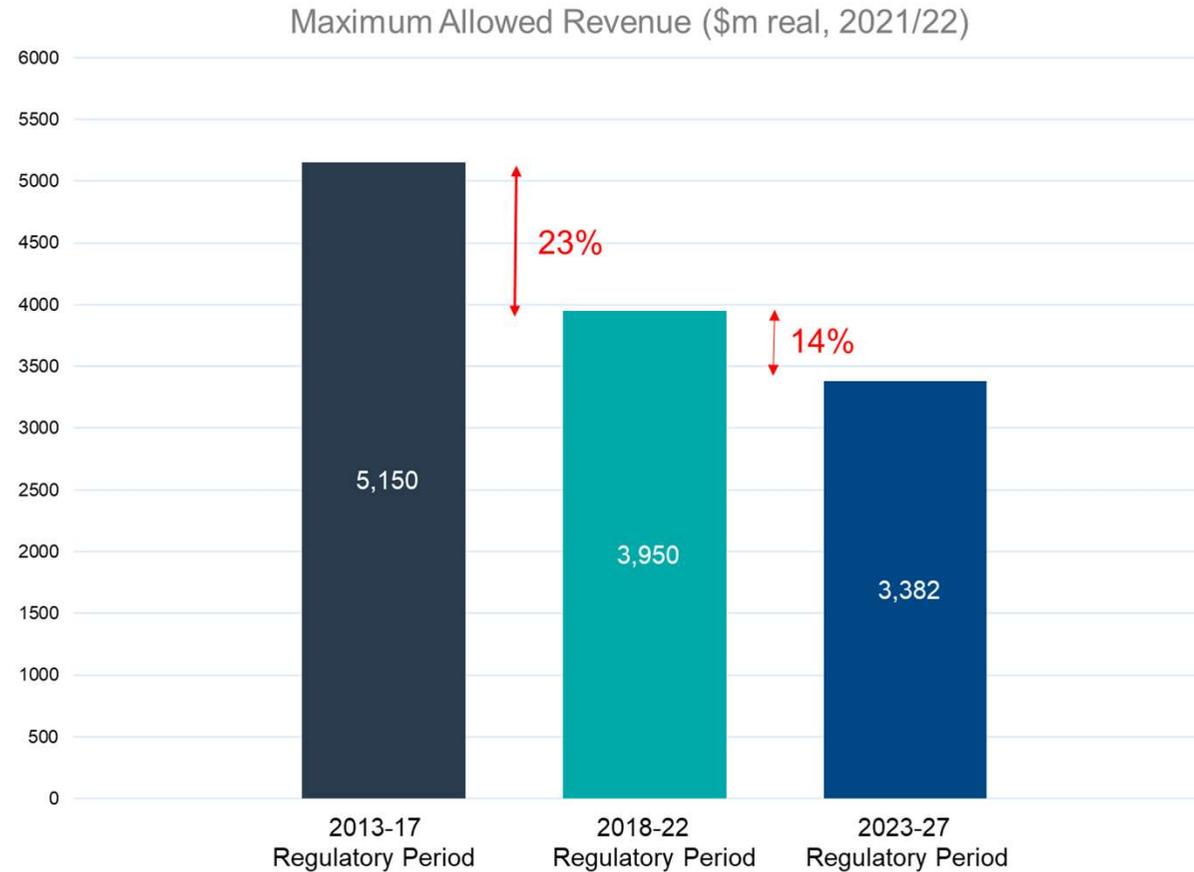
- The rate of return for the 2023-27 regulatory period is ~1.5% lower than the current regulatory period, primarily driven by the current historic low interest rate environment.

Parameter	Base	Assumptions
Risk Free Rate (Rf)	0.89%	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.
<b>Return on Equity</b>	<b>4.55%</b>	
Return on Debt	4.42%	Cost of debt assumes Powerlink's prevailing rate for 2020/21 remains unchanged for the 2023-27 regulatory period.
<b>WACC</b>	<b>4.47%</b>	
Gamma	0.585	As per AER's 2018 binding Rate of Return Instrument.

# Maximum Allowed Revenue (MAR)



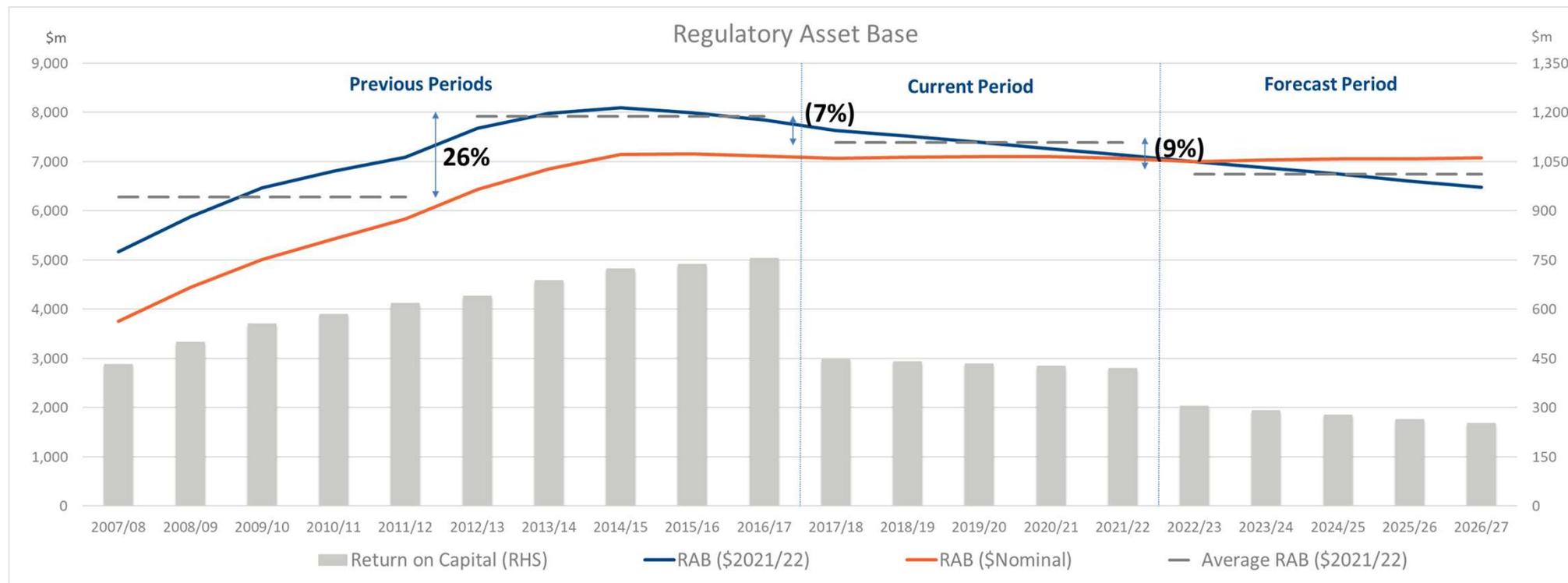
The reduction in MAR is primarily related to a reduction in the return on capital building-block (RAB\*Rate of Return).



# Regulated Asset Base (RAB)



The RAB is forecast to continue to decline in real terms in the current regulatory period and through the 2023-27 regulatory period.



- We have adopted an inflation forecast of 2.25% in our draft Revenue Proposal. This forecast uses the AER's current preferred approach to forecasting inflation.
- On 1 October 2020, the AER released a draft position paper on the review of the regulatory treatment of inflation and proposed to change the approach to estimating expected inflation. The revised approach results in a lower inflation forecast of 1.95%.
- With 1.95% applied, our MAR would increase by approximately \$110m over the next regulatory period.
- The AER aim to release a final position in December 2020. We plan to adopt the final outcome of the AER's review for our Revenue Proposal in January 2021.

# Questions



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Wrap up and close

- Feedback on our draft Revenue Proposal closes **30 October 2020**.
- Feedback will be considered as part of the development of our Revenue Proposal, to be lodged with the AER in January 2021.
- Customers and stakeholders will also have the opportunity to provide a submission to the AER on our Revenue Proposal after it is lodged in January 2021.

## How to provide feedback on the draft Revenue Proposal

**Feedback form:** [www.powerlink.com.au/2023-27-regulatory-period](http://www.powerlink.com.au/2023-27-regulatory-period)

**Email:** [resetteam@powerlink.com.au](mailto:resetteam@powerlink.com.au)

**Phone:** (07) 3860 2111