Powerlink 2027-32 Revenue Proposal

Revenue Proposal Reference Group Meeting





Powerlink acknowledges the Traditional Owners and their custodianship of the lands and waters of Queensland and in particular the lands on which we operate.

We pay our respect to their Ancestors, Elders and knowledge holders and recognise their deep history and ongoing connection to Country.



Meeting Purpose

- Explain our approach to updating our Pricing Methodology
- Step through the components of operating expenditure including base year, trend and step changes
- Present potential options in relation to price path smoothing
- Give preliminary information from customer surveys

Reminder: this meeting will be recorded and transcribed to aid record keeping

Agenda

Item	Duration		
Pricing Methodology	30 minutes		
Optional break			
Opex base year, step changes and trend	60 minutes	<u> </u>	
Optional break			
Price path smoothing	15 minutes	(4)	
Review of actions outstanding	15 minutes		









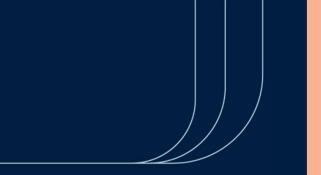


Pricing Methodology









Overview

- Pricing Methodology background
- Approach to updating Pricing Methodology
- Proposed changes to our Pricing Methodology

Pricing Methodology background

Our Pricing Methodology:

- describes how we allocate our annual prescribed revenue to the various categories of prescribed transmission service and transmission network connection points
- sets out the structure of our annual prescribed transmission service prices for directly connected customers, including Energy Queensland

The National Electricity Rules (Rules):

- · specify the requirements of a Pricing Methodology and
- require that we submit a proposed Pricing Methodology with our Revenue Proposal

The Pricing Methodology must be approved by the Australian Energy Regulator and will apply from 1 July 2027 to 30 June 2032.

Approach to updating the Pricing Methodology

Review of the environment impacting pricing, resulted in:

Implementing Rule Changes

Recovery of non-network system security contracts

Improving Security Frameworks for the Energy Transition Rule change.

New Rules terminology

Providing Flexibility in the Allocation of the Interconnector Costs Rule change.

Other minor administrative amendment

Continue transition

Continue the transition to locational charges based on peak demand only for the remaining 5 years of the 10-year transition.

We will also engage with the AER on a potential addition, to clarify that the optimised replacement cost of non-prescribed transmission system assets that are designated network assets or identified user shared assets is zero.

Recovery of non-network system security contracts

Powerlink <u>must</u> comply with the Improving Security Frameworks for the Energy Transition (ISF) rule change

Introduces an annual process for forecasting and recovery of non-network system security contracts incurred by TNSPs. Rule came into effect 1 December 2024.

What is the impact on customers?



Implemented in 2025/26 prescribed transmission service prices

How does it impact the Pricing Methodology?



Annual forecast of expected nonnetwork system security contracts for the upcoming regulatory year and <u>recover the</u> <u>expected contracts through</u> <u>prescribed transmission prices</u> for that year



Recovery of or return to transmission customers any differences between the actual and forecast contracts through prescribed transmission service prices, subject to approval by the AER through a network support passthrough application.

New Rules terminology implementation

Powerlink <u>must</u> comply with the Providing flexibility in the allocation of interconnector costs rule change

Final rule does not alter the existing pathway for allocating interconnector costs between jurisdictions but does provide an alternative mechanism that enables implementation of an interconnector cost allocation agreement made between Ministers in respect of a <u>new</u> regulated interconnector. Rule came into effect 3 July 2025

What is the impact on customers?



No impact on prescribed transmission service prices as no interconnector cost allocation agreement is in place.

How does it impact the Pricing Methodology?



As the Co-ordinating Network Service
Provider for Queensland, Powerlink is
subject to the new Rules terminology
'regional Aggregate Annual Revenue
Requirement' (AARR). The regional AARR
includes an interconnector transfer
amount.

Continue transition

Continue the transition to locational charges based on peak demand only for the remaining 5 years of the 10-year transition consistent with Powerlink's 2023-27 Revenue Proposal and the AER's Final Decision (April 2022)

Effects shift from average demand-based locational charges to prices based on nominated or contract agreed maximum demand

• No material impact on customers, supported by customers and AER in our previous Revenue Proposal.

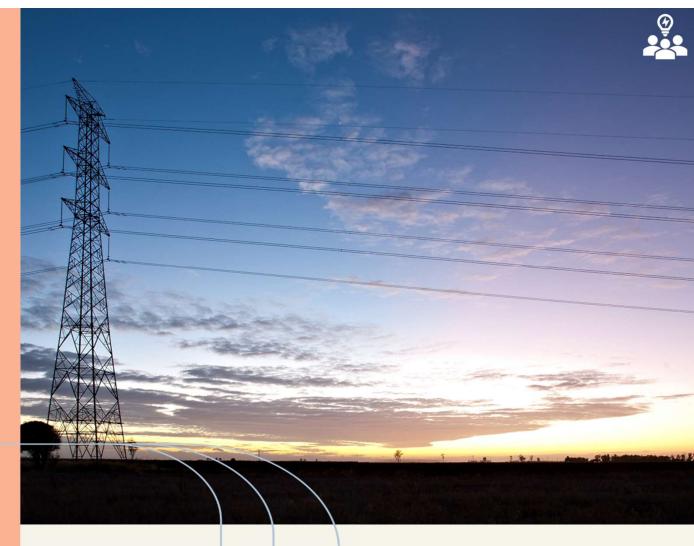
Potential minor addition

In response to changes made to TasNetwork's and ElectraNet's Pricing Methodologies we propose to engage with the AER on this potential addition to the Pricing Methodology

Clarify that the optimised replacement cost of non-prescribed transmission system assets that are designated network assets or identified user shared assets is zero

• No impact to customers, as this was already a requirement within the Rules.

Opex base year, step changes and trend



Michelle Beavis, Opex Lead



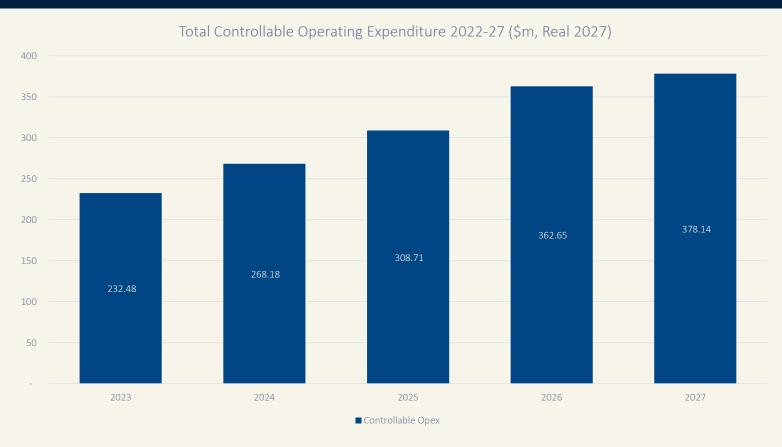
Base

Overview

- We propose to use the AER's preferred BASE-TREND-STEP methodology for forecasting opex.
- The base year selected should represent efficient audited actual opex that reflects recurrent expenditure.
- We considered year 3 (FY2025) and year 4 (FY2026) for our base year

FY2026 is our proposed base year as it is most reflective of our recurrent costs.

Powerlink analysis – base year controllable opex



2025/26 controllable is ~\$54m higher than 2024/25.

Powerlink analysis – controllable opex

2025/26 is more reflective of ongoing operations:

- ✓ maintenance and decommissioning works are representative of future requirements
- ✓ incorporates current costs related to new Electrical Safety Act changes, SOCI compliance and maintenance of SP-2 cyber security maturity level
- ✓ change in effort required to operate a reliable network and plan for future operations
- ✓ reflects current operating expenditure

Other considerations:

- We will adjust our base year for non-recurrent costs
- Both Transgrid and AusNet applied year 4 as their base year, which was accepted by the AER
- The AER and Powerlink will undertake an assessments of our efficient base year.

Trend

Overview

- The AER provides guidance relating to the trend methodology and inputs.
- The price and productivity trend measures are reasonable indicators of growth for Powerlink.

We are seeking input on potential alternative measures for output growth that reasonably reflect the drivers of cost for a TNSP, and the potential trade-off with step changes.

AER guidance on growth measures



Output change Measures & weightings		
Energy throughput	14.9%	
Ratcheted maximum demand (RMD)	24.7%	
# Customers	7.6%	
Circuit length	52.8%	

Price change Measures & weightings		
Labour	70.4%	
Non-labour	29.6%	

Productivity change Measures & weightings		
Average industry productivity	0.3%	



The AER provides guidance on inputs and weightings for the rate of change calculation in the Annual Benchmarking Report and it's supporting documentation.

Powerlink analysis – output growth

Measure	Weighting	Description
Energy throughput	14.9%	A measure of the amount of electricity that TNSPs deliver to their customers.
Ratcheted maximum demand	24.7%	Recognises the higher maximum demand of their customers that the TNSP has had to meet in the time period examined.
# Customers	7.6%	The number of end users is a proxy for the complexity of the TNSPs network.
Circuit length	52.8%	Reflects the distances over which TNSPs transport electricity and is a significant driver of the services a TNSP must provide.

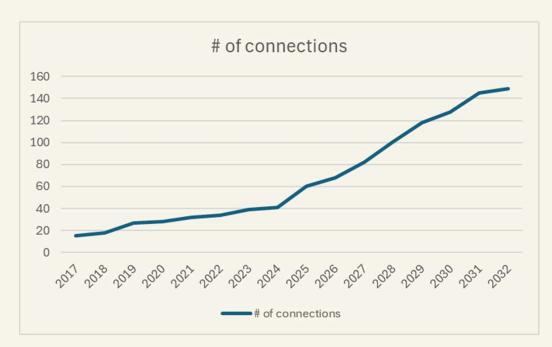
The number of customers reflects complexity of distribution networks, but less reliable as a driver of cost within the transmission network.

Alternative output growth measures

Generator Connections

Increasing integration of renewable energy sources, with a mix of technologies and infrastructure, with significant uplift forecast over the next 7 years in the type and number of renewable energy connections

- Variable and unpredictable generation causes rapid changes in power flows, which complicates real-time balancing and control
- Increase in outage planning and co-ordination and relationship management with significantly more generators

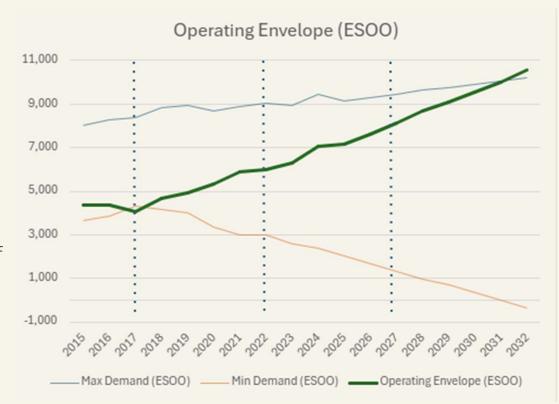


Alternative output growth measures

Operating Envelope

Recognises the increased complexity of operating the network as a consequence of the extremes of maximum and minimum demand

- Challenges with security of supply during minimum load scenarios
- More frequent operator intervention to ensure reliability of the network, and increased complexity of switching and operation
- Increases in number of equipment operations and network support activations to manage system strength
- Requires the development of specific operating and contingency plans and schemes



Feedback?

Does the RPRG consider that Powerlink should investigate and engage on alternative output measures for the 2027-32 Revenue Proposal?

Powerlink analysis – price growth

Measure	Weighting	Description
Labour	70.4%	Costs, including in-house labour, field services contracts and non-field services contracts.
Non-labour	29.6%	All costs that are not considered 'labour'.

The actual Powerlink labour / non-labour split aligns with the AERs price growth weightings.

Powerlink analysis – non-labour zero real price growth

38% (\$205m) of non-labour costs historically increase at rate close to CPI

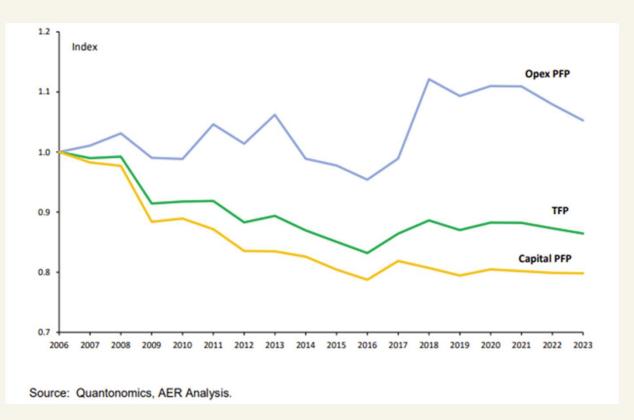
10% (\$54m) of non-labour costs based on category specific forecasts, hence independent of price growth assumption

52% (\$280m) of non-labour costs is 'industry specific', e.g. AEMC levy, IT costs and equipment hire – historically, costs increased higher than CPI in some (not all) cases

- no relevant specific price index for such categories
- requires additional category specific forecasts using a bottom-up approach
- not considered a material impact overall

We propose no change to zero real price growth for non-labour costs

Productivity growth



We have adopted the AER's preferred productivity growth forecast of the industry average opex productivity growth for electricity transmission in our current forecasts (0.3%)

Refer Quantonomics TNSP Economic Benchmarking Results Table B.1 Industry individual output, input and PFP growth rates 2006-2023

Step

Overview

• Update on evaluation of potential step changes.

Step changes criteria and AER expectations

Step change criteria

• Step changes represent costs that are not captured in the base opex or rate of change and are required to meet the opex objectives

AER expectations

- New regulatory obligation step change
- Capex/opex substitution step change
- Step change driven by major external factors(s) outside the control of a business.

Proposed step changes

Step change	Description	Driver	Forecast
Security uplift	Costs associated with complying with our obligations for physical security under the <i>Security of Critical Infrastructure Act 2018</i> (SOCI) and subsequent amendments.	Regulatory obligation	\$9.4m
Transition to cloud-based services	Costs associated with the implementation new cloud- based information and operational technology.	External factor	\$58.5m
Strengthening network monitoring	Costs incurred in strengthening overnight network monitoring, as preferred by AEMO.	External factor	\$13.5m
Synchronous condenser maintenance	Costs incurred in maintaining synchronous condensers commissioned within the regulatory period.	Regulatory obligation	\$30.3m

Note: We are investigating potential site modification works to address arc flash risks under the Electrical Safety Act. If material, this could be added as a step change.

Opex forecast – July 2025





Powerlink Queensland | 31

Price path smoothing



Nina Zhuang, Finance and Modelling Lead



Price path smoothing – regulatory framework

Revenue is smoothed over the regulatory period by annual x-factors. The indicative price is calculated by dividing the smoothed revenue by the forecast energy supplied.

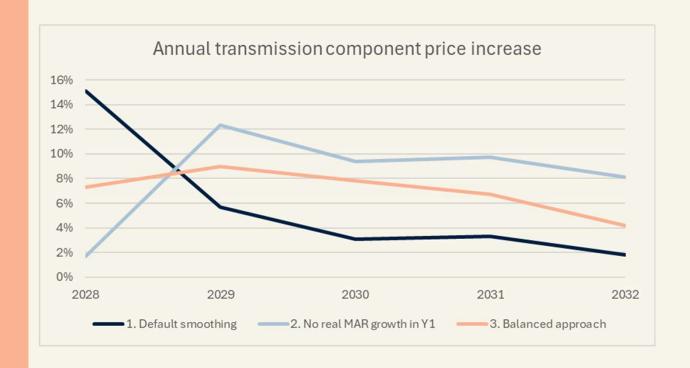
Revenue smoothing requirements:

- Total smoothed and unsmoothed revenue in a regulatory period must be equal in net present value terms.
- Divergence in the final year between smoothed and unsmoothed revenue may be up to 3%.

Two methods for smoothing:

- Default smoothing
- Custom smoothing

Price path options



Three options presented

Option Y5 divergence

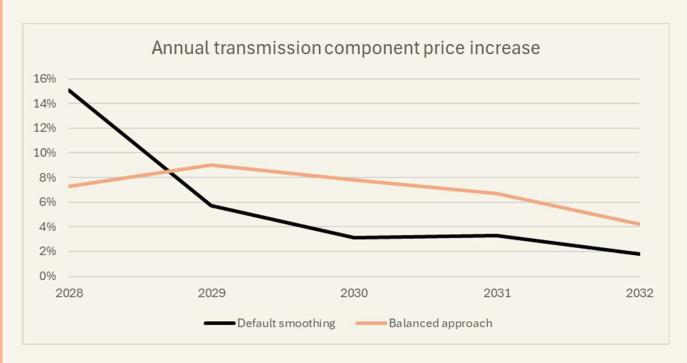
- Default smoothing -3.1%

- No real growth in Y1 +8.8%

- Balanced approach +3.0%

Note: based on forecasts presented in May 2025

Compliant price path options



Balanced Approach Objective:

Minimise price volatility by applying a smoothing method that provides a smoother price path while ensuring regulatory compliance.

Review of actions outstanding







Actions outstanding

	Action	Due	Deferred
3.2	Provide a view of the likely value of approved projects anticipated at the time of submitting the Revised Revenue Proposal	22/05/25	21/08/25
3.3	Provide commentary on the guiding principles for option selection and the risk of change to forecasts	11/06/25	21/08/25
3.4	Provide information to the RPRG to illustrate how changes to the preferred option may have led to material cost increases in the current regulatory period	11/06/25	21/08/25
4.4	Present a timeline of the ex-post review process for capex overspend in the current period	16/07/2025	21/08/25
4.5	Provide an overview sheet to explain application of the EBSS	30/06/2025	16/07/2025
4.6	Provide information on changing costs of typical project components	21/08/2025	
4.8	Propose alternative smoothing profiles for price path	16/07/2025	
5.1	Schedule overview of Operational Technology strategy and forecast for a future RPRG meeting	16/07/2025	
5.2	Include actions list in future meeting slides	16/07/2025	
5.3	Provide examples of post-implementation reviews (PIRs) for IT investments to demonstrate efficiency gains and benefits realised in the current period	17/10/2025	

Other business



Roger Smith, Director Revenue Reset



Queensland Household Energy Survey 2025

Results went live on Monday, with headline insights including:

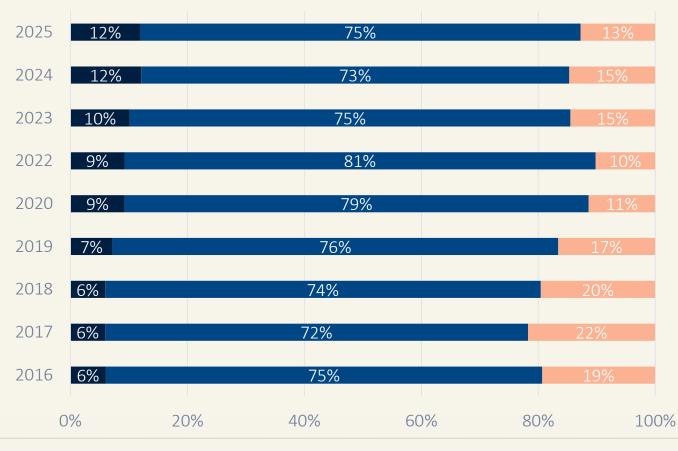
76% (up from 71%) of participants trust energy suppliers to provide their households with a reliable energy supply, the highest ever positive result.

50%
of participants expect electricity price increases of 15% or more.

of participants with solar are taking action to shift their use of appliances and load to during the day

QHES: Cost and reliability trade off – trend by year

2025 result consistent with 2023 and 2024, with reliability becoming more important over time



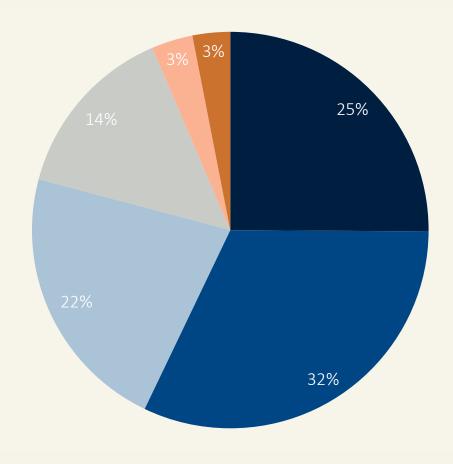
- I would be prepared to pay more to have higher reliability
- The existing balance between cost and reliability is about right
- I would be prepared to accept poorer reliability to reduce my bill

QHES: To what extent do you support or oppose upfront investment in the energy system now for long-term benefits in the future?

Majority support network investment

Many are neutral or want more information

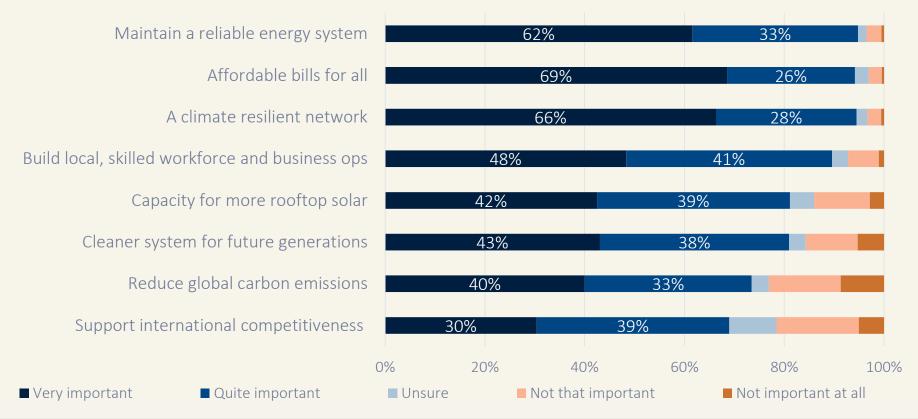
- Strongly support
- Somewhat support
- Neither support, nor oppose
- I need more information before I can have an opinion
- Somewhat oppose
- Strongly oppose



QHES: To what extent do you support or oppose upfront investment in the energy system now for long-term benefits in the future?

Top benefits are reliability, affordability and resilience

Majority of benefits rated as important by >80% of responses



Direct-connect and C&I customer survey

We received responses from nine customers, including four directly connected customers

- Customers indicated continued prioritisation of electrification and renewable energy, with renewable energy or decarbonisation ambitions being key drivers for seven out of nine survey respondents
- Customers identified reliability of supply, resilience to network interruptions and predictability of pricing and network upgrades as being critical to support their long-term planning
- Customers advocated for targeted and timely investment to ensure costs will not disproportionately impact existing customers

electricity forecasts access
Support demand COST network Enable planning
Facilitate needs delivery integration

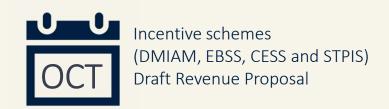
Other business

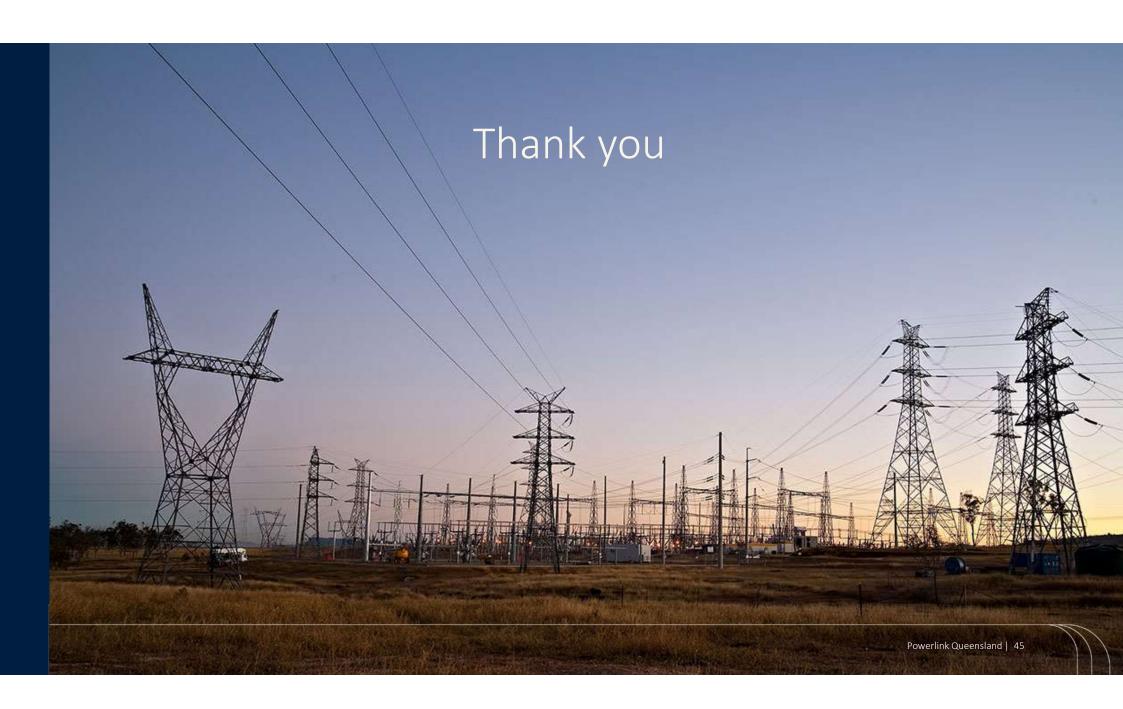
- CQ Transmission Network Forum
- RPRG response to draft Revenue Proposal
- September Customer Panel meeting

Upcoming meetings:









Security uplift

Regulatory driver

- Powerlink is a critical energy provider under the *Security of Critical Infrastructure (SOCI) Act 2018*.
- The Security Legislation Amendment (Critical Infrastructure) Bill 2022 provides Rules for the protection of 'Critical' infrastructure assets.
- Requires Powerlink to mitigate material risks associated with cyber and information hazards, personnel hazards, supply chain hazards, and physical and natural hazards - this proposed step change relates to the uplift in security capability for management of physical risks.

What's changing?

- Establishing a 24-hour security control room
 - o Real-time monitoring of physical security risks
 - o Improve situational awareness and incident management
 - Safeguard personnel
- Uplift of site security and monitoring
 - o Increase specialist security capability
 - o Security upgrades for key corporate sites
 - o Implement single video monitoring software

CRITERIA

- Aligned to step change criteria regulatory obligation under SOCI Act
- Related to prescribed services mix of prescribed and non-prescribed services
- Not in base year some costs within base year although full recurrent cost cannot be accommodated within trend provisions
- Materiality >\$1m/year forecast average cost of \$1.9m/year
- Likelihood of realisation additional cost of compliance will be incurred within the 27-32 regulatory period
- Other provisions within rules no reasonable alternative treatment methods¹

Cloud-based services

External market driver

- Information technology vendors are increasingly phasing out 'onprem' solutions, forcing a move to cloud services.
- It has been clarified in an IFRS Interpretations Committee decision that where customised cloud-based 'as a Service' (aaS) solutions do not result in a resource which is controlled by the customer, costs are expensed.

What's changing?

 Implementation of likely cloud-based SaaS and IaaS solutions which are not controlled by Powerlink are no longer capitalised.

CRITERIA

Aligned to step change criteria – external market shift to cloud-based solutions

Related to prescribed services – mix of prescribed and non-prescribed services

Not in base year — some costs within base year although full recurrent cost cannot be accommodated within trend provisions

Materiality >\$1m/year — forecast average cost of \$11.9m/year

Likelihood of realisation – additional cost of compliance will be incurred within the 27-32 regulatory period

Other provisions within rules – no reasonable alternative treatment methods

Strengthening network monitoring

External market driver

- AEMO has a preference that Powerlink remove the single-person risk for network control.
- This practice is considered best practice and is adopted by other TNSPs.
- This will provide redundancy, allow for cross-checking, assist with AEMO's real-time market operations, support coordination with an increasing number of generators.

What's changing?

• Establishing a two-person overnight network monitoring capability.

CRITERIA

Aligned to step change criteria – external market preference

Related to prescribed services – mix of prescribed and non-prescribed services

Not in base year — some costs within base year although full recurrent cost cannot be accommodated within trend provisions

Materiality >\$1m/year — forecast average cost of \$2.7m/year

Likelihood of realisation – additional cost of compliance will be incurred within the 27-32 regulatory period

Other provisions within rules – no reasonable alternative treatment methods

Synchronous condenser maintenance

Regulatory Obligation

- *Under the AEMCs* Efficient Management of System Strength on the Power System Rule (System Strength Rule), Powerlink is the System Strength Service Provider for Queensland.
- We are required to take action to plan, procure and make available system strength services as set out in the Australian Energy Market Operator's (AEMO's) annual <u>System Strength Report</u>.

What's changing?

- Powerlink plans to commission 4 synchronous condensers in 2029.
- Costs to operate and maintain these new assets are the basis for this step change.

CRITERIA

Aligned to step change criteria – new regulatory obligation

Related to prescribed services – relates only to prescribed services

Not in base year — some costs within base year although full recurrent cost cannot be accommodated within trend provisions

Materiality >\$1m/year – forecast cost of \$10.09m/year in the final 3 years

Likelihood of realisation — additional cost of compliance will be incurred within the 27-32 regulatory period

Other provisions within rules – no reasonable alternative treatment methods