

# Powerlink's Customer Panel Meeting

12 May 2021



1. AEMO's 2022 Integrated System Plan (ISP)
2. 2023-27 Revenue Proposal:
  - Key topics in response to Customer Panel feedback
  - Customer Panel views on our Revenue Proposal

# AEMO's 2022 ISP

Stewart Bell  
EGM Network and Business Development  
&  
Enrique Montiel  
Team Leader Regional Grid Planning and Data Support



# 2022 Inputs, Assumptions and Scenarios Report (IASR) – policies



Policy	Export Superpower	Sustainable Growth	Central	Diversified Technology	Slow Growth
26% reduction in emissions by 2030 (NEM)	✓	✓	✓	✓	✓
VRET – 40% by 2025, 50% by 2030	✓	✓	✓	✓	✓
TRET – 100% by 2022	✓	✓	✓	✓	✓
TRET – 150% by 2030, 200% by 2040	✓	✓	✓	✓	✓
GRET – 50% by 2030	✓	✓	✓	✓	✓
NSW Electricity Infrastructure Roadmap	✓	✓	✓	✓	✓
National Electricity (Victoria) Act (NEVA) – Amendment for expedited approval of transmission upgrades	✓	✓	✓	✓	✓
Victoria net zero emissions target	✓	✓	✓	✓	✓
Australian Capital Territory Emission Reduction Targets	✓	✓	✓	✓	✓
Current DER and EE policies	✓	✓	✓	✓	✓
NEM carbon budget to achieve 2050 emission levels*	✓	✓	x	x	x

Note:

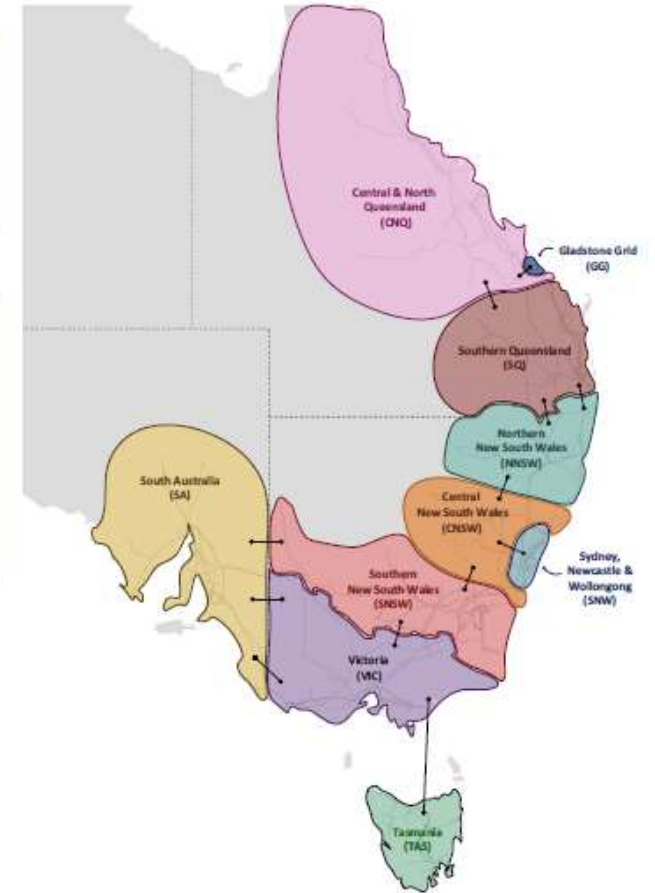
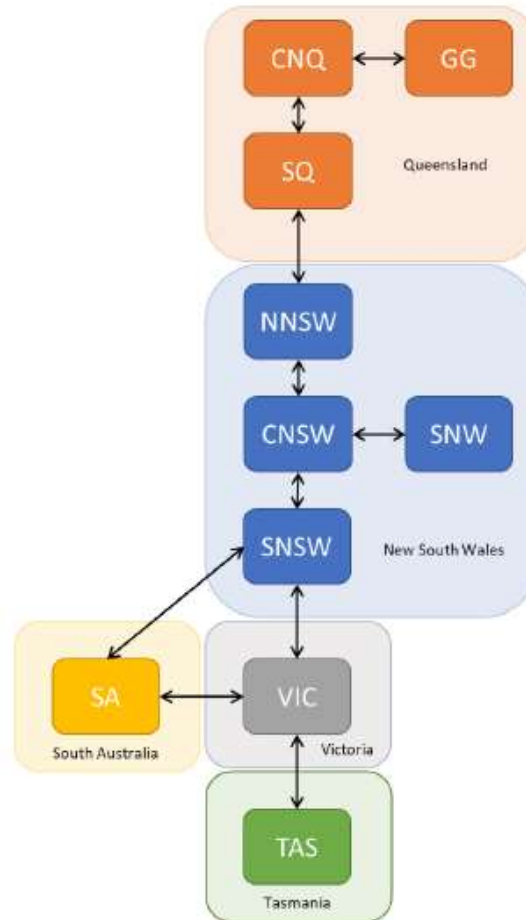
✓ - indicates that this setting will be included in the scenario

x - indicates that this setting will be excluded from the scenario

\* See the Carbon Budget worksheet for more information on these budgets



- Sub-regional model
- Renewable Energy Zone (REZ) transmission limit
- Seasonal limits
- Anticipated projects
- Preparatory activities
- Transmission cost database
- Hydrogen modelling



- Modelling of rooftop PV
- Modelling of losses
- Non-network options
- Asset re-investment


# 2023-27 Revenue Proposal



- This presentation covers four topics raised by the Customer Panel for discussion prior to submissions closing on our Revenue Proposal on 24 May 2021:
  - Powerlink's Cost Allocation Methodology (CAM);
  - Proposed productivity initiatives;
  - Demand Management Innovation Allowance Mechanism (DMIAM); and
  - a 1% Weighted Average Cost of Capital (WACC) increase scenario.
- Following these topics, we will discuss the Customer Panel's views on our Revenue Proposal.



# Cost Allocation Methodology (CAM)

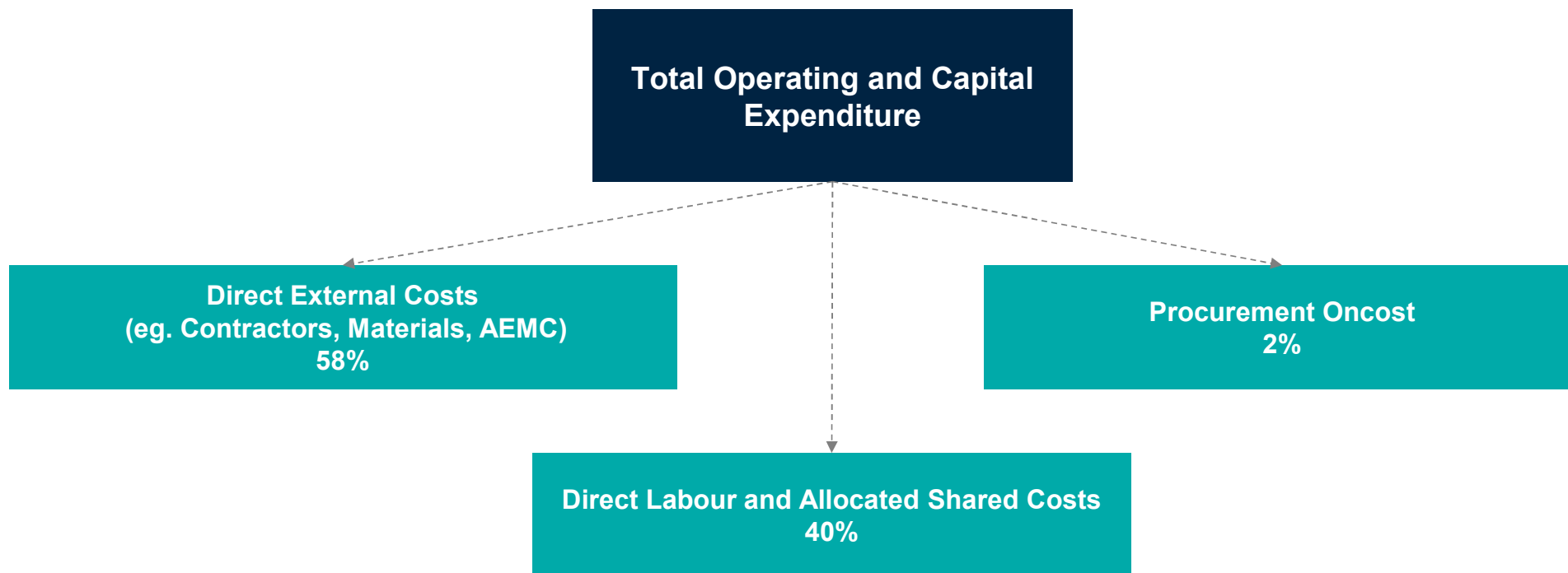
A large, light gray circular graphic in the background. Inside the circle is a map of Queensland, Australia, with a network of white lines representing power lines or transmission routes overlaid on it.

- Powerlink's Cost Allocation Methodology (CAM) establishes the methodology for attributing costs to, allocating between or within prescribed, negotiated and non-regulated transmission services.
- The CAM applies to all Powerlink costs and is prepared in accordance with the requirements of the National Electricity Rules (NER), the AER's 2007 Cost Allocation Guidelines and the AER's 2002 Transmission Ring-Fencing Guidelines.
- Powerlink's CAM was approved by the AER in 2008.
- Costs are captured and tracked using Powerlink's Enterprise Resource Planning system, SAP.

Powerlink's CAM is based on the following principles:

- costs are allocated at the source to the appropriate transmission service category;
- activities are allocated to opex or capex in accordance with Australian Accounting Standards;
- costs are charged on a full cost recovery basis and do not incorporate internal profits;
- a cost will only be allocated once;
- where a cost is directly associated with an activity, it is allocated to that activity; and
- where direct attribution is not possible, a causal basis of allocation is undertaken.

- The majority of costs are directly attributed or allocated to the relevant activity.
- A causal allocation is undertaken for other costs with direct labour as the main allocator.



- The allocation of costs and revenues to prescribed in our regulatory accounts are not comparable, mainly due to fluctuation in prescribed revenues reported in the regulatory accounts year on year.
- A better comparison is asset split. Assets are a key driver of the costs of maintaining and operating the network.
- Our Regulatory Asset Base (RAB) is approximately 86% of our total asset base. It was approximately 94% at the time of our previous Revenue Proposal in 2015.
- Some significant costs (eg. Network Operations and AEMC levy) are almost entirely a regulated obligation. These costs therefore will be mainly or fully allocated to the regulated business, thereby increasing the portion of regulated costs.
- We consider substance over form when determining any change in allocation.



- Currently we allocate 100% of insurance costs to prescribed services.
- We recognise the proportion of non-regulated assets has grown in recent years. Given this, we have considered and intend to allocate a portion of our insurance costs to non-regulated from 1 July 2022.
- The timing of this adjustment at the start of the 2023-27 regulatory period is consistent with our CAM, and our allocation will be on the basis of the value of our assets.
- The CAM itself does not have to be reviewed to facilitate this change. Our view is the CAM is still appropriate and our allocations remain consistent with the CAM.

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

# Productivity update

- We have set a target of no real growth in opex for the 2023-27 regulatory period.
- To help achieve this, we have targeted a real productivity growth of 0.5%, which is above the industry average productivity of 0.3%.
- Our Revenue Proposal identified a number of initiatives that can be categorised into four themes.



Productivity theme	Initiative	Phase	Delivery timeframe
Procurement	Materials supply chain and direct purchasing	Early investigation	Staged – 2022 to 2024
	Vegetation management	Implementation	2022
Work practices	Field Delivery Optimisation	Implementation	2024
	Office refit	Proposed	2025
Technology	In-Vehicle Asset Management System (IVAMS)	Early investigation	Not yet determined
	Business IT upgrades and replacements	Proposed	Staged – 2023 to 2027
Value Driven Maintenance	Transmission Tower earth testing	Implementation	2021 onwards
	Battery Maintenance	Early investigation	Not yet determined

- Each initiative has been broadly grouped into three phases: early investigation, proposed, implementation.

A large, faint, light-gray watermark is centered in the background. It consists of a circle containing a map of Queensland, Australia, with a stylized power line or cable running through it.

# Demand Management Innovation Allowance Mechanism (DMIAM) Update



# What is the DMIAM?



- The Demand Management Innovation Allowance Mechanism (DMIAM) will provide funding for R&D on demand management projects with potential to reduce long-term network costs.
- It applies to expenditure that is not otherwise efficient – efficient expenditure is included in the ex-ante capital and operating expenditure allowances.
- DMIAM is a separate ex-ante allowance included in the Revenue Determination, but with ex-post approval of actual expenditure.
- The AER does not review or endorse potential DMIAM projects as part of the Revenue Determination process.
- The AER is developing a guideline to implement the DMIAM. A Draft DMIAM was published in December 2020. The Final DMIAM is expected in June 2021 and will apply to Powerlink in the 2023-27 regulatory period.

## **Allowance:**

- 0.1% of MAR + \$200,000 (to fund an Independent Advisory Panel). For Powerlink 0.1% of MAR is approximately \$3.3 million;
- limited to operating expenditure only; and
- any underspend is recovered as a negative pass-through in the next regulatory period. Any overspend is borne by the TNSP.

## **Project eligibility requirements:**

- based on new or original concepts; or
- involves technology or techniques not previously implemented in the relevant market; or
- focussed on customers in a market segment that has not been exposed to the technology.

1. Use demand management resources to extend transmission network limits.
  - Many of our key network limits are transient or voltage stability – extending these limits requires very fast detection of power system conditions and response by participating resources (often < 300 msec).
  - We want to consider how we might extend existing facilities that rapidly trip transmission connected generation and/or load.
  - This would improve wholesale market outcomes as well as meet supply reliability needs.
2. Explore initiatives to address minimum demand issues e.g. research potential incentive structures to encourage EV charging to fill demand troughs, potentially at a fleet level.

We are unlikely to be in a position to outline any individual project in detail in our Revised Revenue Proposal.

# Weighted Average Cost of Capital (WACC) Scenario

A faint, light gray background image of the state of Queensland, Australia. Overlaid on the map is a network of white lines and circles, representing a power transmission system or grid.

# WACC scenario – 1% increase



- The table below sets out the impacts of the an increase in WACC of 1% in each year of the 2023-27 regulatory period.

	Revenue Proposal (RP)	WACC Scenario	Variance against RP
<b>WACC – Post-tax nominal<sup>1</sup></b>	4.44%	5.44%	1%
<b>2023-27 MAR (\$m real, 2021/22)<sup>2</sup></b>	3,333.9 (↓15%)	3,707.0 (↓5%)	373.1 (↑11%)
<b>Indicative price impact (\$ nominal):<sup>3</sup></b>			
- Residential annual bill	↓ \$13 (11%)	↓ \$1 (1%)	↑ \$12 (11%)
- Small business annual bill	↓ \$23 (11%)	↓ \$3 (1%)	↑ \$20 (11%)

<sup>1</sup> WACC is updated in each year of the regulatory period based on the AER's trailing average approach.

<sup>2</sup> MAR is compared to the AER allowance for the 2018-22 regulatory period.

<sup>3</sup> Based on indicative price change in the first year of the next regulatory period (2022/23)

- To maintain the same price forecast from our Revenue Proposal, either:
  - opex would need to decrease by 36% or \$370m; or
  - our RAB would need to decrease by 36% or \$2.5b.
- Capex contributes <5% to MAR within the regulatory period and therefore any change to capex would have a negligible impact to the MAR within period.



# Discussion – Customer Panel views on our Revenue Proposal

A large, faint, light-grey circular graphic in the background. Inside the circle is a map of the state of Queensland, Australia. Overlaid on the map is a network of white lines and circles, representing a power transmission or distribution network.

