Revenue Proposal Reference Group Meeting No.3

Details of Meeting	
Date and time of meeting	13:00 – 16:00, Tuesday 15 April 2025
Location	Powerlink Offices, Virginia

Attendees	Organisation
RPRG members – customer representatives	
Alicia Kennedy	Queensland Farmers' Federation (QFF)
Chris Hazzard	St Vincent de Paul Society
Mark Grenning	Energy Users Association of Australia (EUAA)
Michael Bray (online)	Aurizon
Robyn Robinson	Council on the Ageing (COTA)
RPRG members – Powerlink representatives	
Roger Smith (RPRG Chair)	Director Revenue Reset
Gerard Reilly	General Manager Communications, Customer and Engagement
Jenny Harris	General Manager Network Regulation
Guests and speakers	
Jacqui Bridge	Executive General Manager Energy Futures
Paul Ascione	General Manager Asset Strategies and Planning
Subbu Brahmanayagam	General Manager Infrastructure Delivery
Damien Scott (online)	Manager Asset Strategies
Aidan Lawlor	Capex Lead, Revenue Reset Team
Jessica Purdy	Customer Engagement Specialist, Revenue Reset Team
Wendy Miller (online)	Customer Strategist
Invited stakeholders	
Michael Brothers (online)	Australian Energy Regulator (AER)
Mike Swanston	AER Consumer Challenge Panel No.34
Apologies	
David Prins	AER Consumer Challenge Panel No.34
Katie-Ann Mulder	Queensland Renewable Energy Council (QREC)

Meeting Agenda

1. Business as usual process
    1.1 Project initiation
    1.2 Project estimation
2. Forecasting approach
3. AER Framework and Approach paper

Overview / Notes of Meeting

Roger Smith, Director Revenue Reset, and Aidan Lawlor, Capex Lead Revenue Reset, opened the meeting and outlined the agenda and purpose.

1. Business as usual process

Aidan introduced guest speakers Damien Scott and Subbu Brahmanayagam to cover project initiation and estimation business as usual (BAU) processes, which Powerlink will leverage to develop a robust Capex forecasting methodology for the Revenue Proposal.

1.2 Project initiation

Damien Scott, Manager Asset Strategies, outlined Powerlink's approach to asset life cycle management and specifically the project initiation process for reinvestment needs. Powerlink gathers asset condition information to calculate health indices – numerical scores representing the remaining life of assets. These indices are used to systematically assess the current health of assets and project their deterioration over time, helping to inform the timing of reinvestment needs.

Powerlink also develops a quantified risk cost, which represents the monetised value of the consequences of asset failure, to inform cost-benefit analysis and determine the most efficient option for addressing asset reinvestment needs. Several factors, including safety, environmental impact, and network reliability are considered to ensure long-term value for customers.

Discussion, questions and responses

Discussion focused on the challenges associated with secondary systems and the need for ongoing investment in these systems driven by obsolescence, supportability and supplier pressure to keep pace with technology advancements. RPRG members requested clarification as to how health indices are applied and validated to maintain asset risk at a reasonable level.

1. How early would Powerlink start contemplating replacement of assets? Does Powerlink run assets to failure?
    a. Age is one of several inputs we use to decide when reinvestment is required.
    b. Transmission networks do not run assets to failure. We note that distribution networks can do this in some cases, where failure impacts are lower, spares are readily available and customers can be reconnected rapidly following an outage. Transmission asset failures tend to be more significant in terms of impact and complexity to address.
2. How does Powerlink define an asset?
    a. Powerlink typically defines an asset as a set of components that provides a function, e.g. a substation switchgear 'bay' – consisting of components such as a circuit breaker and disconnectors – or a transmission line 'built section' – consisting of a number of towers, insulators, etc.

   b. Powerlink's asset management systems allow us to assign health indices at the level of individual components and generate aggregate health indices for groups of assets and components.
   c. Asset health indices, risk cost assessments and bundling approaches are used for all asset types including transmission lines, substations primary and secondary plant.
3. How are health indices validated?
   a. Historical data is available for some asset types, which Powerlink supplements with industry resources.
   b. Heath indices provide a trigger for further action and are not the sole driver of investment decisions.
   c. Assets are inspected prior to making investment decisions and condition monitoring increases with asset age.
4. Can assets stay in service longer than their projected life if they remain in good condition?
   a. Yes, enhanced maintenance and inspection regimes can enable extension of asset life.
5. Given climate variability in Queensland, does asset life vary with location?
   a. Yes, for example Powerlink applies a corrosion region model to transmission line assets to determine the likely rate of asset degradation.
   b. As technical life may not be equivalent to economic life, Powerlink will confirm what depreciation periods are applied in the PTRM (post tax revenue model).

Post meeting note: the PTRM includes a single age profile for transmission line assets of 50 years, while the useful life (for accounting purposes and investment decisions) reflects three separate lives of 40, 50 and 60 years depending on corrosion region.

6. How has Powerlink's overall risk index been tracking over the last 10 years?
   a. Overall asset health has been tracking smoothly in line with Powerlink's expectations. However, increased supportability risk associated with secondary systems will drive reinvestment in the 2027-32 regulatory period.
7. How are advancements in asset health modelling and data driven asset management impacting asset service life?
   a. These factors are typically captured in health indices as our understanding of failure rates increases.
   b. Improvements in service life are likely to be offset by pace of technology advancement (obsolescence).
8. Is the market for secondary systems competitive locally or is Powerlink constrained to specific suppliers?
   a. There are multiple suppliers in the market for most types of systems.
   b. Telecoms supplier availability can be limited, given transmission applications represent a small proportion of sales.

1.2 Project estimation

Subbu Brahmanayagam, General Manager Infrastructure Delivery, detailed the project estimation process for regulated network projects. Powerlink has a rigorous process for project estimation. We align with the Association for the Advancement of Cost Engineering (AACE) International recommended practice for the classification of cost estimates, with Powerlink's maturity level for a given class of estimate equivalent to or better than that of the AACE International recommended practice.

The level of maturity of inputs and assumptions informs both the class and the accuracy of an estimate. Estimates are progressively improved throughout the project lifecycle based on availability of specific project information and market-tested prices, which can add considerable additional resource, time and cost to achieve. Hence, better classes of estimate are developed as the certainty of the project need and definition increases.

Discussion, questions and responses

The RPRG queried Powerlink's estimating methodology to ensure cost borne by consumers will not include unreasonable allowances for risk and uncertainty. Discussion distinguished between estimate maturity and accuracy, highlighting increasing estimate maturity as projects move through their lifecycle, which enables cost estimates to progress from Class 5 to Class 2.

1. What is the typical range of project value? Is there a large proportion of smaller projects?
    a. Regulated projects can range from below $1 million to more than $100 million and typically there are several projects with varying dollar values ongoing at a time.
    b. We will provide further information on the distribution of project value over both the current and forecast regulatory periods.
2. What equipment or plant that Powerlink uses has the longest lead time currently?
    a. At present, power transformers such as 275/132kV have the longest lead time at four years.
3. Can a Class 2 estimate be made available in advance of project approval, given major equipment is secured several years prior?
    a. While major equipment is a significant cost component, brownfield reinvestment will typically require other significant inputs depending on location and access requirements.
    b. Inputs such as property, environment and contracting costs contribute to estimate maturity and are not available at sufficiently high confidence early in the project lifecycle.
4. How does Powerlink manage contractor exclusions on unforeseen scope variations and cost and exchange rate volatility?
    a. We aim to eliminate as much risk as possible based on available information (e.g. targeted geotech studies). However, there is always a residual risk of exceptional circumstances leading to variation such as latent conditions or inclement weather.
    b. We aim to complete project approval soon after tender prices are received, to minimise any changes resulting from exceeding quote validity period (90 days).
    c. With regard to exchange rate volatility, Powerlink procures equipment using period contracts with major suppliers where possible, while the Finance department also hedges the cost at the time of placing order to avoid any variation.
5. Are projects approved based on a specific cost or a cost range?
    a. Approved costs include project specific delivery risks and contingency allowances. However, the project team is released a budget without the risks and contingency allowances. If the identified risks eventuate, the project team will issue a change request with justification and detailed assessment of costs and time.
6. Did this process apply to Powerlink's current regulatory period and does it apply to all project types? If so, how have actual costs compared to estimates?
    a. Yes, this estimating process applies to all projects requiring external contractors to deliver and has been in place throughout the current regulatory cycle.
    b. Although the process has not changed, the past several years have been subject to unforeseen supply and demand dynamics impacting estimate inputs (post-COVID and other geopolitical events).
    c. Powerlink leverages broad and deep commitment of resources to produce accurate estimates for project approval, without incurring unreasonable cost to meet our obligations under the regulatory framework.

2. Forecasting approach

Aidan provided an overview of the capex forecasting methodology, explaining the differences between the proposed approach and the BAU process, which aim to balance cost and resource requirements while ensuring reasonable outcomes for customers.

Discussion, questions and responses

Discussion highlighted estimation confidence and deliverability as fundamental to the expenditure forecast. These considerations have also been raised at other networks' engagement forums and by Powerlink's Board and Executive team.

1. Can Powerlink provide a view on the likely value of approved projects anticipated at the time of submitting the Revised Revenue Proposal?
    a. Yes, an updated chart will be provided.
2. For project costs estimated via the BAU method based on a single option, what is the risk that the selected option could change prior to project approval?
    a. Material impact of changes on the capex forecast is expected to be low, given options will be selected based on asset data and engineering judgement.
    b. We are considering guiding principles in the treatment of option selection, such as how to reflect the outcomes of the Asset Reinvestment Review, and will provide supporting commentary on these guiding principles and the risk of change to forecasts to the RPRG, and in our Revenue Proposal.
    c. We anticipate that a significant proportion of expenditure will be subject to the RIT-T and the Customer Panel will be engaged on these as they arise.
    d. We will 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.
3. Does the forecasting methodology require AER approval and has there been any indication from the AER regarding continued use of the Repex Model?
    a. The methodology does not require AER approval and is published for the purpose of transparency to enable the AER to understand the basis for our forecast when assessing our Revenue Proposal.
    b. We understand the AER's position is consistent with our intent to move away from using the Repex Model.

Informal consensus following the discussion indicated that Powerlink's forecasting approach appears reasonable, and the RPRG is sufficiently well prepared to review the methodology documentation once available.

3. AER Framework and Approach paper

Roger summarised the AER's consultation paper on Powerlink's proposed Framework and Approach for the Revenue Proposal, focusing on incentive schemes, assessment guidelines, and depreciation methodology.

Discussion, questions and responses

The RPRG discussed application of the Capital Expenditure Sharing Scheme (CESS) and potential for the AER to apply discretion in assessment of prudency and efficiency. It was noted Powerlink has no prior experience of implementing ex-post review findings and there is limited precedence for network service providers.

In response to interest from the RPRG to understand the operation of the CESS mechanism, Powerlink agreed to provide the RPRG with the relevant AER contact for our revenue determination process.

1. What is the value of opex subject to the Efficiency Benefit Sharing Scheme (EBSS)?

a. We will verify the value and report back to the RPRG.
b. We are not proposing to derogate from the EBSS.

Actions Arising

	Action	Responsible person	Due
1.6	Include the potential impacts on the maximum allowed revenue arising from large capital projects that are outside of the revenue determination process	Roger Smith	22/05/25 with Cut 2 forecasts
2.2	Update Engagement Plan to reflect change of participation level for social performance from consult to inform	Jessica Purdy	30/06/25
2.3	Provide updated charts to illustrate the split of regulated capex between categories for actual/forecast capex within the current 2022-27 period	Aidan Lawlor	15/04/25 - defer to 22/05/25
2.4	Provide updated charts to illustrate the split of regulated capex between categories for forecast for the 2027-32 regulatory control period	Aidan Lawlor	22/05/25 with Cut 2 forecasts
2.6	Review forecasting approach used for insurance costs in the prior regulatory period and report back to RPRG	Michelle Beavis	01/05/25 - defer to 22/05/25
3.1	Provide information on the distribution of projects (grouped by value) over both the current and forecast regulatory periods	Aidan Lawlor	22/05/25
3.2	Provide a view of the likely value of approved projects anticipated at the time of submitting the Revised Revenue Proposal	Aidan Lawlor	22/05/25
3.3	Provide commentary on the guiding principles for option selection and the risk of change to forecasts	Aidan Lawlor	11/06/25
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	Aidan Lawlor	11/06/25
3.5	Provide the RPRG with the relevant AER contact for our revenue determination process	Roger Smith	Complete
3.6	Present information on the value of opex subject to the EBSS, and forecast revenue adjustments arising	Michelle Beavis	22/05/25