

Draft Decision

Powerlink electricity transmission determination 2027 to 2032

(1 July 2027 to 30 June 2032)

Attachment 3 – Operating expenditure

September 2026

© Commonwealth of Australia 2026

This work is copyright. In addition to any use permitted under the *Copyright Act 1968* all material contained within this work is provided under a [Creative Commons Attributions 4.0 International licence](#) with the exception of:

- the Commonwealth Coat of Arms
- the AER logo
- any illustration diagram, photograph or graphic over which the AER does not hold copyright but which may be part of or contained within this publication.

The details of the relevant licence conditions are available on the Creative Commons website as is the full legal code for the CC BY 4.0 licence.

Important notice

The information in this publication is for general guidance only. It does not constitute legal or other professional advice. You should seek legal advice or other professional advice in relation to your particular circumstances.

The AER has made every reasonable effort to provide current and accurate information, but it does not warrant or make any guarantees about the accuracy, currency or completeness of information in this publication.

Parties who wish to re-publish or otherwise use the information in this publication should check the information for currency and accuracy prior to publication.

At the AER, we use artificial intelligence (AI) to enhance our internal productivity and data analysis. Our AI tools do not make decisions or take action on our behalf. We maintain high standards of security measures to safeguard personal information. The AER remains fully responsible for all work and oversight, including checking the quality of any AI outputs. We ensure our AI use complies with all legal and regulatory requirements. To learn more, see the [ACCC/AER AI transparency statement](#). If you have any questions about this statement or would like further information on our use of AI, please contact us.

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601
Email: aer inquiry@aer.gov.au
Tel: 1300 585 165

AER reference: AER24009263

Amendment record

Version	Date	Pages
1	30 September 2026	44

Contents

3	Operating expenditure	1
3.1	Draft decision	3
3.2	Powerlink’s proposal	6
3.3	Reasons for draft decision.....	9
	Glossary.....	40

3 Operating expenditure

Operating expenditure (opex) refers to the operating, maintenance and other non-capital expenses incurred in the provision of network services. Forecast opex is one of the building blocks we use to determine a service provider's annual total revenue requirement.

This attachment outlines our assessment of Powerlink's proposed opex forecast for the 2027–32 regulatory control period.

Assessment approach

Our role is to decide whether to accept Powerlink's total opex forecast. We must form a view about whether a transmission network service provider's (TNSP's) forecast of total opex 'reasonably reflects the opex criteria'.¹ In doing so, we must have regard to the opex factors specified in the National Electricity Rules (NER).²

The Expenditure Forecast Assessment Guideline (the Guideline), together with an explanatory statement, sets out our assessment approach in detail.³ While the Guideline provides for greater regulatory predictability, transparency and consistency, it is not mandatory. However, if we make a decision that is not in accordance with the Guideline, we must state the reasons for departing from the Guideline.⁴

Our approach is to assess Powerlink's forecast opex over the regulatory control period at a total level, rather than to assess individual opex projects. To do so, we develop an alternative estimate of total opex using a 'top-down' forecasting method, known as the 'base-step-trend' approach.⁵ We compare our alternative estimate with Powerlink's total opex forecast to form a view on the reasonableness of the proposal. If we are satisfied Powerlink's forecast reasonably reflects the opex criteria, we must accept the forecast.⁶ If we are not satisfied, we must not accept the forecast, and substitute it with our alternative estimate that we are satisfied reasonably reflects the opex criteria.⁷ Figure 3.1 provides an outline of this assessment process.

In making this decision, we consider the reasons for the difference between our alternative estimate and the business' proposal, and the materiality of the difference. Further, we take into consideration interrelationships between opex and the other building block components of our decision.⁸

¹ NER, cl. 6A.6.6(c).

² NER, cl. 6A.6.6(e).

³ AER, *Expenditure forecast assessment guideline for electricity transmission*, October 2024; AER, *Expenditure forecast assessment guideline, Explanatory statement*, October 2024.

⁴ NER, cl. 6A.2.3(c).

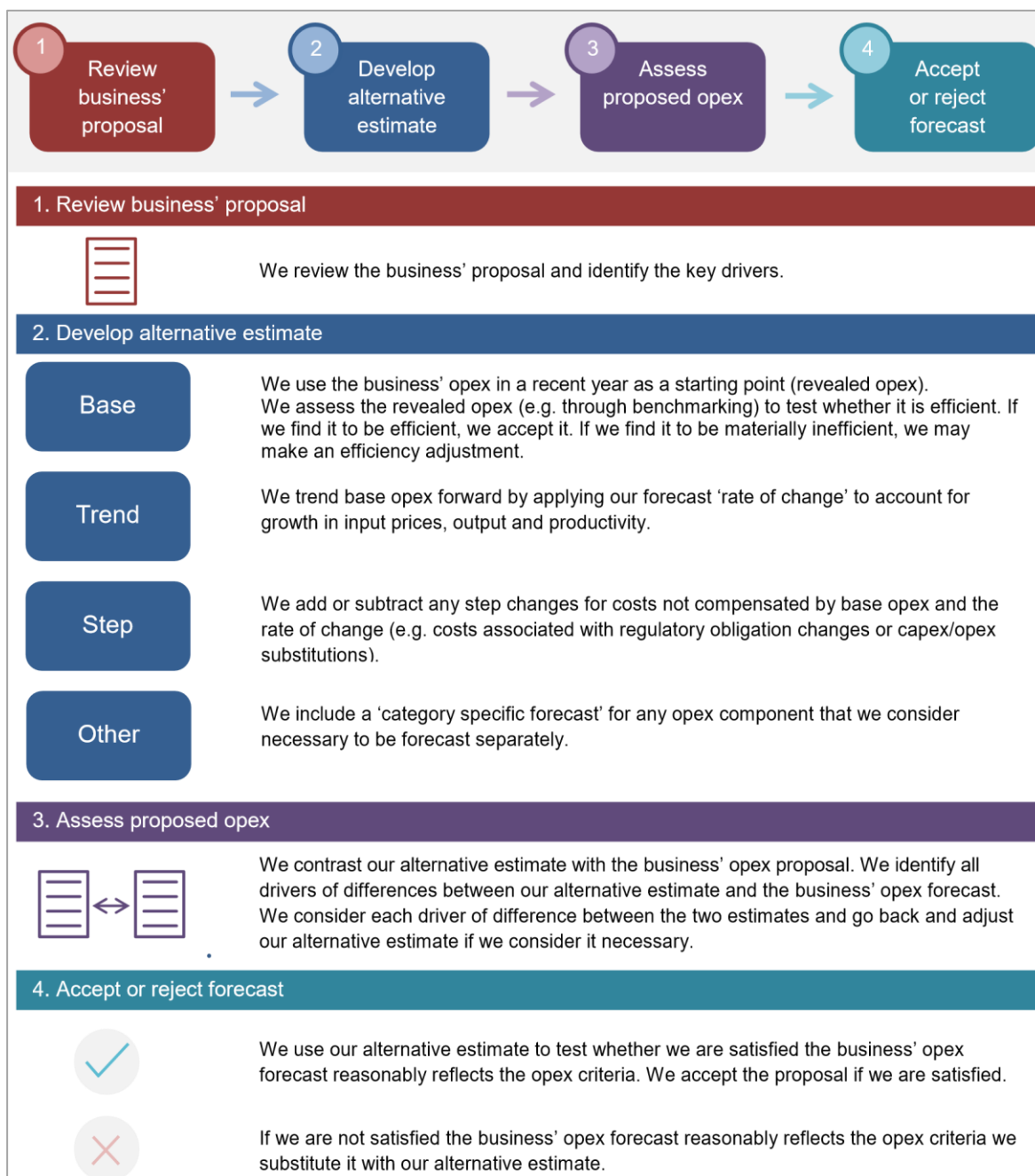
⁵ A 'top-down' approach forecasts total opex at an aggregate level, rather than forecasting individual projects or categories to build a total opex forecast from the 'bottom up.'

⁶ NER, cl. 6A.6.6(c) and 6A.14.1(3)(i).

⁷ NER, cl. 6A.6.6(d) and 6A.14.1(3)(ii).

⁸ NEL, s. 16(1)(c).

Figure 3.1 Base-step-trend forecasting approach



Interrelationships

In assessing Powerlink's total forecast opex we considered other components of its proposal and our draft determination, including:

- the efficiency benefit sharing scheme (EBSS) carryover—the level of opex used as the starting point to forecast opex (the final year of the current regulatory control period, 2026–27) should be the same as the level of opex used to forecast the EBSS carryover. This consistency ensures that the business is rewarded (or penalised) for any efficiency gains (or losses) it makes in the final year the same as it would for gains or losses made in other years.

- the operation of the EBSS in the 2027–32 regulatory control period, which provides Powerlink an incentive to reduce opex in the base year.
- the impact of cost drivers that affect both forecast opex and forecast capital expenditure (capex). For instance, forecast labour price growth affects forecast capex and our forecast price growth used to estimate the rate of change in opex.
- the approach to assessing the rate of return, to ensure there is consistency between our determination of debt raising costs and the rate of return building block.
- concerns of electricity consumers identified during Powerlink’s engagement with consumers.

3.1 Draft decision

Our draft decision is to not accept Powerlink’s total opex forecast of \$1,832.2 million⁹ for the 2027–32 regulatory control period as we are not satisfied it reasonably reflects the opex criteria.¹⁰ Our alternative estimate of opex, which we consider does reasonably reflect the opex criteria, is \$1,563.5 million. This is \$268.7 million, or 14.7% lower than Powerlink’s forecast. We consider this difference to be material, and consequently, our draft decision includes total forecast opex of \$1,563.5 million.¹¹

The difference is primarily driven by our alternative estimate using Powerlink’s actual, audited opex for 2023–24 as the base year rather than the estimate of 2025–26 opex proposed by Powerlink. We have also not included, or included lower amounts for Powerlink’s 3 proposed step changes. We discuss our reasons in section 3.3.

Our draft decision is:

- \$270.6 million (20.9%) higher than the opex forecast we approved in our final decision for the 2022–27 regulatory control period.
- \$39.0 million (2.6%) higher than Powerlink’s actual (and estimated) opex in the 2022–27 regulatory control period.

We note that while adopting the earlier 2023–24 base year is the main driver of our lower opex forecast, the impact of the change on Powerlink’s net operating revenues over 2027–32 (i.e. its 2027–32 opex allowance plus the EBSS carryovers from the 2022–27 period) is largely neutral. This is because while the earlier, lower base year reduces Powerlink’s 2027–32 opex allowance, it also significantly decreases its EBSS penalty. The key impact of changing the base year, therefore, is to provide Powerlink with a lower opex allowance, which we consider is consistent with a prudent and efficient level of operating costs. This is discussed further in Attachment 5, which details our draft decision on the EBSS.

In our final decision we will review Powerlink’s revised proposal on its base year, including additional information it may provide to justify how its proposed base year can be considered prudent and efficient in the context of its rapidly increasing opex over this period

⁹ All dollar values are in June \$2026–27 terms unless stated.

¹⁰ NER cl.6A.6.6(c)-(d).

¹¹ Includes debt raising costs.

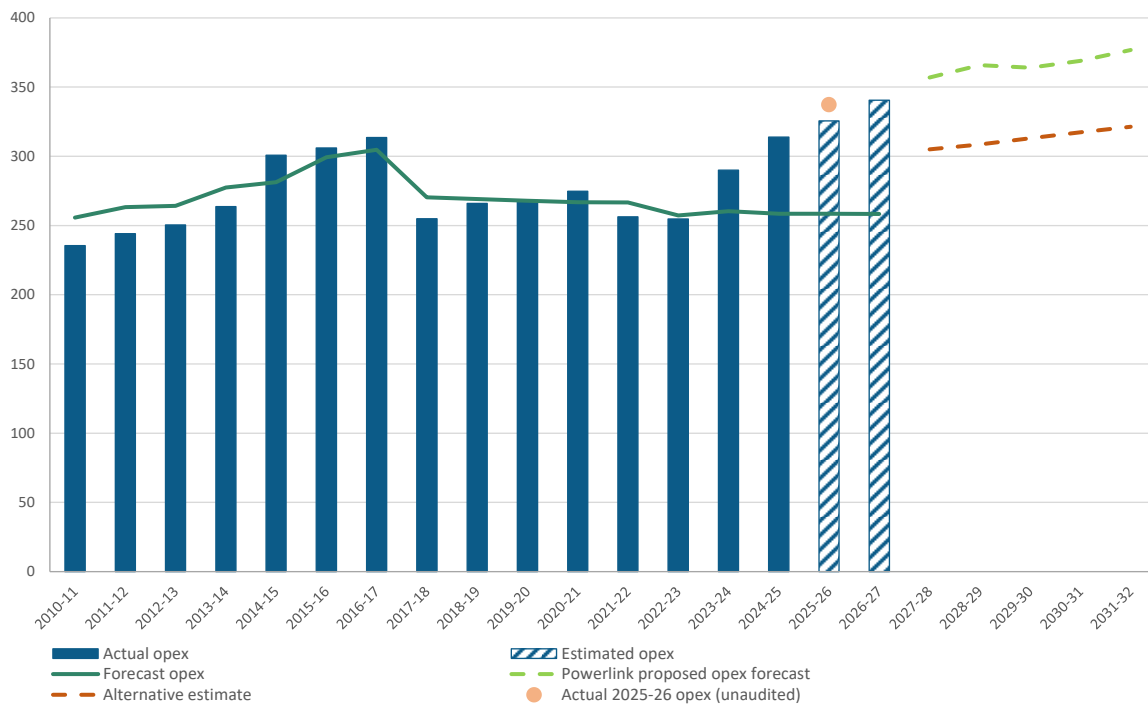
(section 3.3.1). We will consider any further information Powerlink can provide on its ICT expenditures, including on those areas of its Transition to cloud step change where we note Powerlink has identified areas of potential need but has not yet provided sufficient information to establish prudence and efficiency (section 3.3.4.1). We will also update for any required mechanical adjustments to our opex forecasting methodology (e.g. latest inflation and labour price growth forecasts).

If Powerlink re-proposes 2025–26 as the base year in its revised proposal, we would seek additional information that more clearly explains the drivers of its increasing opex in the current period, including the year-to-year impact on its labour costs of the Enterprise Bargaining Agreement (EBA) that commenced in early 2024, and the growth in the workforce of its regulated business. We would also seek additional information that can justify how the magnitude of the increases from these two drivers can be considered prudent and efficient, given these costs represent a rapid and material step up in Powerlink’s operating costs compared to its historical revealed costs, as well as what progress Powerlink is making in offsetting the EBA-related cost increases with savings from actual and planned efficiency initiatives.

Alternatively, it is also open to Powerlink to put forward opex from 2024–25 as the base year in its revised proposal. Our conceptual concerns about material inefficiency in 2025–26 opex also apply to 2024–25, so Powerlink would still need to provide additional information to address the key questions raised in the preceding paragraph. However, as total opex in 2024–25 was lower than in 2025–26, the magnitude of the increase that Powerlink would need to explain would be lower. Regardless of whether 2023–24 (accepting the draft decision), 2024–25, or 2025–26 is the base year in Powerlink’s revised proposal, the AER assessment will be focused on establishing an opex forecast that reflects the prudent and efficient costs Powerlink requires over the next regulatory period.

In Figure 3.2, we compare our alternative estimate of opex to Powerlink’s proposal for the next regulatory control period. We also show the forecasts we approved for the last two regulatory control periods and Powerlink’s actual and estimated opex over these periods.

Figure 3.2 Historical and forecast opex (\$ million, 2026–27)



Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026; AER PTRM and opex allowance data for previous Powerlink transmission determinations; AER analysis.

Notes: Values are in \$2026–27 unless otherwise stated.

Table 3.1 sets out Powerlink’s opex proposal, our alternative estimate for the draft decision and the differences between these forecasts.

Table 3.1 Comparison of Powerlink’s opex proposal and our alternative opex estimate (\$ million, 2026–27)

	Powerlink’s initial proposal	Our alternative estimate	Difference (\$)
Base opex	1,627.8	1,389.1	-238.7
Total Base year adjustment	-31.5	–	31.5
Final year increment	-0.1	4.0	4.1
Remove category specific forecasts	-2.1	-0.6	1.5
Trend: Output growth	34.4	34.3	-0.1
Trend: Price growth	36.9	32.7	-4.2
Trend: Productivity growth	-20.3	-17.8	2.5
Total trend	51.0	49.2	-1.8
Step change: Transition to cloud	60.0	21.4	-38.6
Step change: Physical security uplift	16.4	–	-16.4

Step change: Overnight network monitoring	8.7	–	-8.7
Step change: AEMO participant fee	–	80.1	80.1
Total step changes	85.1	101.5	16.4
Category-specific forecasts – AEMO participant fees	80.1	–	-80.1
Total opex excluding debt raising costs	1,810.2	1,543.2	-267.1
Debt raising costs	22.0	20.3	-1.6
Total opex, including debt raising costs	1,832.2	1,563.5	-268.7

Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026; AER analysis.

Notes: Numbers may not add up to totals due to rounding. Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

3.2 Powerlink's proposal

Powerlink applied a base–step–trend approach to forecast opex for the 2027–32 regulatory control period, which is consistent with our standard approach.¹²

Powerlink's proposed total opex of \$1,832.2 million for the 2027–32 period is:

- \$307.8 million (20.2%) more than Powerlink's actual and estimated opex for 2022–27 period.
- \$539.3 million (41.7%) more than the opex forecast we approved for that period (Figure 3.2).

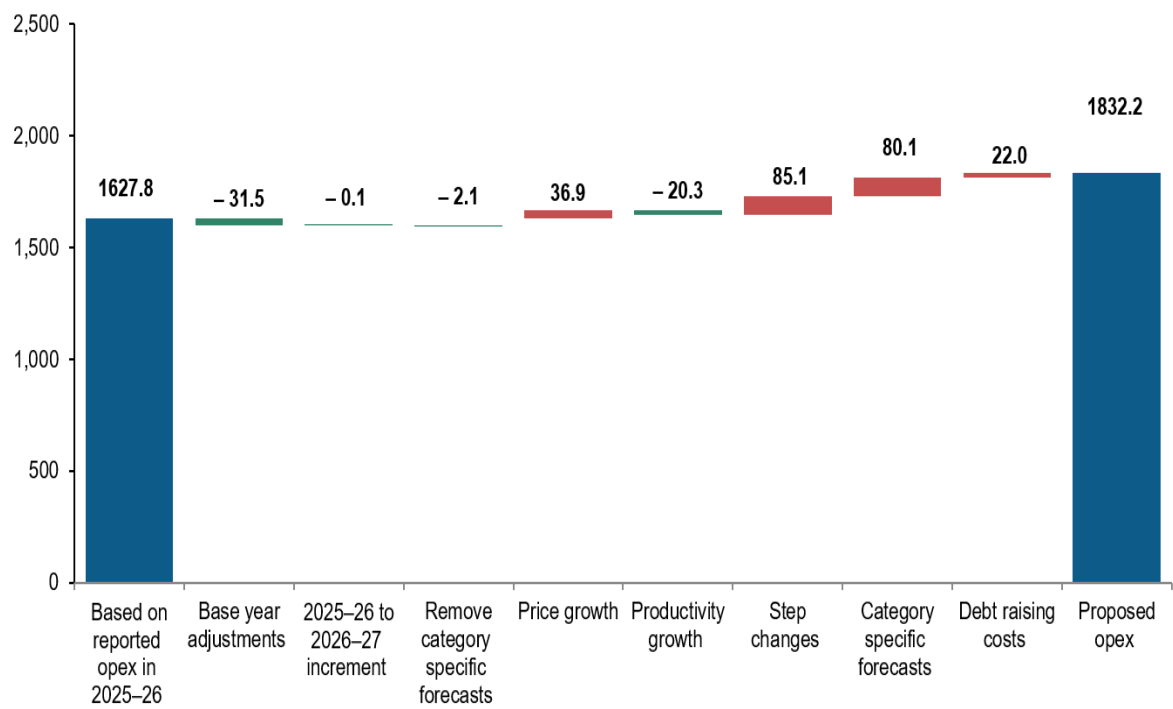
The key driver of Powerlink's opex proposal is its choice of a 2025–26 base year, currently estimated to be \$67.1m or 26.0% above the AER allowance that year, with the audited actual amount to be provided in the revised proposal. The high base year reflects Powerlink's rapid opex growth over the current period (Figure 3.2).

Other drivers of increasing opex include step changes totalling \$85.1 million (4.6% of forecast opex) for IT and cyber security, an uplift to physical site security, and one additional system controller in Powerlink's overnight control room. In response to a recent AEMC rule change, Powerlink has also included an \$80.1 million category specific forecast for AEMO participant fees that were previously recovered outside the reset process.

Figure 3.3 below shows the different components that make up Powerlink's opex forecast.

¹² Powerlink, *2027-32 Operating Expenditure Model*, January 2026.

Figure 3.3 Powerlink’s opex forecast (\$ million, 2026–27)



Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026.
Notes: Numbers may not add up to totals due to rounding. Values are in \$2026–27 unless otherwise stated.

3.2.1 Stakeholder views

We received four submissions with opex-related comments, including from Powerlink’s Revenue Proposal Reference Group (RPRG), the AER’s Consumer Challenge Panel sub panel 34 (CCP34), the Queensland Resources Council, and Origin Energy (as agent to Australia Pacific LNG).

The RPRG noted the significant bill impact of the large increase in proposed opex.¹³ The RPRG highlighted increasing labour costs over the current period from Powerlink’s EBA provisions as a key issue, questioning whether Powerlink’s underdeveloped productivity initiatives are sufficient to offset the EBA costs.¹⁴ The RPRG submitted that Powerlink had indicated to it that the EBAs, which commenced in February and March 2024, would increase Powerlink’s average labour costs by 30% over their four-year terms, with most of that cost increase occurring in the first year of their implementation (i.e. from February 2024 to February 2025) due to the impact of a nominal wage rise of 4.5% combined with significant new non-wage benefits.¹⁵

The RPRG submitted that if productivity initiatives are not successful there is a large risk to delivery of approved opex (and capex) programs ‘on time’ and ‘on budget’, and that

¹³ Revenue Proposal Reference Group, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 7.
¹⁴ Revenue Proposal Reference Group, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 13.
¹⁵ Revenue Proposal Reference Group, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 13.

Powerlink may, as in the current period, exceed its opex (and capex) allowance with consumers paying for the overrun under the EBSS (and capital expenditure sharing scheme). The RPRG highlighted Powerlink's decreasing productivity, which it expects to continue falling in 2024–25 and 2025–26, and questioned if Powerlink's proposed 2025–26 base year would be judged 'materially inefficient', requiring an adjustment as Ergon Energy experienced in its 2025–30 revenue determination.¹⁶

CCP34 submitted that Powerlink's choice of 2025–26 as its base year appears to be reasonably representative given operating conditions; while highlighting it exceeds the AER allowance, and noting there is limited evidence that it is not 'materially inefficient'. CCP34 further noted that current benchmarking evidence is inconclusive, and declining measured productivity across the transmission sector raises uncertainty as to whether the base year reflects efficient operating practices or reflects a higher cost structure.¹⁷ CCP34 submitted that while the step changes appear broadly credible and driven by external events, the AER must determine that the step-up in costs is truly incremental to the base year, and include potential savings from the large, proposed ICT investments.¹⁸ CCP34 stated that in examining the higher costs in Powerlink's proposed base year, the AER should consider the extent to which Powerlink has actively sought to mitigate its rising costs through productivity improvements, and other management tools such as reprioritisation of discretionary activities, program rationalisation, workforce optimisation or other offsetting efficiency measures.¹⁹

The Queensland Resources Council Rail Working Group also called on the AER to scrutinise the drivers of Powerlink's recent cost escalation and consider whether efficiency adjustments are warranted, highlighting that a robust assessment of opex efficiency and the proposed base year is required.²⁰ It submitted that the AER should supplement its standard benchmarking assessment with an assessment of the drivers of Powerlink's increasing opex, including the extent to which the drivers are enduring, efficient, and the proposed base year reflects efficient costs, or adjustments are warranted.²¹ The Queensland Resources Council Rail Working Group further questioned whether the 'overnight network monitoring' and 'physical security uplift' step changes should be considered as part of the normal year-to-year variation in opex, and should be accounted for by trend growth.²² It also noted Powerlink's trend forecast included real cost increase of 0.8% per annum offset by

¹⁶ Revenue Proposal Reference Group (RPRG), *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, pp 35, 45; AER, *Final Decision Attachment 6, Operating expenditure, Ergon Energy, 2025–30 Distribution determination revenue proposal*, April 2025, section 6.4.1.1. b

¹⁷ CCP34, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 32.

¹⁸ CCP34, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, pp 33–34.

¹⁹ CCP34, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 34.

²⁰ Queensland Resource Council Rail Working Group, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p i.

²¹ Queensland Resource Council Rail Working Group, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, pp 5–6.

²² Queensland Resource Council Rail Working Group, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 6.

productivity growth of 0.4% per annum, and submitted that Powerlink should be required to offset forecast real cost increases through ongoing efficiency initiatives.²³

Origin Energy, on behalf of Australia Pacific LNG, questioned the efficiency of Powerlink's new EBA, and the substantial increase in Powerlink's workforce given a general business environment where many companies are seeking savings through finding operational efficiencies and redundancies.²⁴

3.3 Reasons for draft decision

Our draft decision is to not accept Powerlink's total opex forecast of \$1,832.2 million for the 2027–32 regulatory control period as we are not satisfied it reasonably reflects the opex criteria.²⁵ Our alternative estimate of opex, which we consider does reasonably reflect the opex criteria, is \$1,563.5 million, which is \$268.7 million or 14.7% lower than Powerlink's forecast. We consider this difference to be material, and consequently, our draft decision includes total forecast opex of \$1,563.5 million.²⁶

Table 3.1 (above) sets out Powerlink's proposal, our alternative estimate that has informed this draft decision, and the difference between our alternative estimate and the proposal.

The difference is primarily driven by our alternative estimate using 2023–24 as the base year, rather than 2025–26 as proposed by Powerlink, and not including or including lower amounts for Powerlink's proposed step changes. We discuss each of the components of our alternative estimate, and our assessment of Powerlink's proposal, below.

Full details of our alternative estimate are set out in our opex model, which is available on our website.²⁷

3.3.1 Base opex

This section provides our view on the prudent and efficient level of base opex that we consider Powerlink would need for the safe and reliable provision of electricity services over the 2027–32 regulatory control period.

The choice of base year is assessed against the opex criteria, being that the base year should produce a forecast that reasonably reflects prudent and efficient costs, and a realistic expectation of demand and cost inputs a business needs for the required services.²⁸ Factors we typically have regard to in making this assessment include that a base year is a recent year for which audited actual opex is available, does not include significant one-off costs, is consistent with the business's revealed costs (assuming opex is largely recurrent in nature), and is not materially inefficient. Where there is a rapid and material increase in a business's

²³ Queensland Resource Council Rail Working Group, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, pp 6–7.

²⁴ Australia Pacific LNG, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 1.

²⁵ NER cl.6A.6.6(c)–(d).

²⁶ Includes debt raising costs.

²⁷ <https://www.aer.gov.au/industry/registers/determinations/powerlink-transmission-determination-2027-2032>

²⁸ NER, cl. 6A.6.6(c)

opex compared to its historical opex, as is the case with Powerlink, we seek to understand the drivers of the increase and consider the more recent benchmarking results, to determine if the recent cost increases are prudent and efficient.

The discussion in this section includes consideration of the efficiency of EBAs entered into by Powerlink in February and March 2024. As an underlying principle, we note that accepting an EBA outcome without testing efficiency would provide no incentive to the TNSP to negotiate an efficient EBA. We must consider whether the proposed base year, incorporating the EBA and other factors, will generate a forecast that reflects the opex factors. An EBA does not constitute a ‘regulatory obligation or requirement’ under the NEL.²⁹

Submissions on Powerlink’s initial proposal highlighted the rapid growth in its opex over the current period, questioning whether its proposed 2025–26 base year was efficient and supporting AER scrutiny of base-year efficiency. Stakeholders noted significant increases in average labour costs related to EBA provisions that commenced in February and March 2024, and asked whether Powerlink’s productivity initiatives would be sufficient to offset the EBA costs (section 3.2.1).

We agree with these stakeholder concerns, and based on the information currently available on the drivers of Powerlink’s rapidly rising operating costs, we have relied on Powerlink’s actual, audited opex in 2023–24 as the base year for this draft decision. This is because we consider, based on the information Powerlink has been able to provide to date, that using 2024–25, the most recent year for which audited actuals are available, or 2025–26, Powerlink’s proposed base year, would result in an opex forecast that is not consistent with the opex criteria as it would not reasonably reflect the prudent and efficient costs Powerlink needs to deliver the required services over the next regulatory period. We considered the following factors in coming to this position:

- Our revealed cost analysis, supported by benchmarking analysis, indicates that Powerlink’s actual 2024–25 opex, and its estimated 2025–26 opex, include a level of materially inefficient costs (section 3.3.1.2).
- 2025–26 opex is an estimate and Powerlink has indicated that the audited actual amount coming in its revised proposal will be materially higher (Figure 3.2).³⁰ This indicates that the current estimate may not accurately represent Powerlink’s actual base year costs in 2025–26.
- Powerlink has proposed 2 adjustments to its estimated 2025–26 base year opex to remove various ‘non-recurrent costs’,³¹ and advised that a third base adjustment will be included in its revised proposal.³² This indicates that 2025–26 may not be a good reflection of Powerlink’s recurrent expenditure requirements.

²⁹ *Application by SA Power Networks [2016] ACompT 11*, [521]–[529]; and *SA Power Networks v Australian Competition Tribunal (No 2) [2018] FCAFC 3*, [375], [380], and [385].

³⁰ Powerlink, *Response to information request IR#004*, Question 6, April 2026.

³¹ Powerlink, *2027–32 Revenue Proposal*, January 2026, p 89.

³² Powerlink, *Response to information request IR#035*, July 2026.

- Submissions that expressed concern regarding the rapid growth in Powerlink’s opex over the current period, the role of the February and March 2024 EBAs, and the efficiency of the magnitude of the related increases (section 3.2.1).

If Powerlink proposes 2024–25 or 2025–26 as its base year in its revised proposal, we would seek additional information in its revised proposal that better explains the drivers of its increasing opex in the current period, including the year-to-year impact on its labour costs of the EBAs that commenced in early 2024, and the growth in the workforce of its regulated business. We would also seek further information that can justify how the magnitude of the increases from these two drivers can be considered prudent and efficient, given these costs represent a rapid and material step up in Powerlink’s operating costs compared to its historical revealed costs, as well as what progress Powerlink is making in offsetting the EBA-related cost increases with savings from actual and planned efficiency initiatives. We outline the basis of Powerlink’s base year proposal in section 3.3.1.1, and our assessment of the base year in section 3.3.1.2.

3.3.1.1 Proposed base year

Powerlink proposed a base year of 2025–26 and provided an estimate of base year opex of \$325.6 million. This equates to \$1,627.8 million over the 5 years of the next regulatory control period. Powerlink noted that it would update the estimate with audited actual amount in its revised proposal.³³

Powerlink’s estimated base year opex is \$67.1 million, or 26.0% higher than the forecast opex approved for that year, and \$39.4 million, or 13.8% higher than its average annual opex over 2022–23 to 2024–25, the first 3 years of the current period (Figure 3.2).³⁴

Powerlink stated that it selected 2025–26 as its base year as it is reflective of an efficient level of the expenditure required to meet the operating expenditure objectives and criteria, and it will be the most recent year of revealed costs when the AER makes its final decision in April 2027.³⁵ Powerlink noted that it considered 2024–25 for the base year, but concluded that the opex that year was less than it needs in the next regulatory period, noting it incurred lower maintenance costs that year, and new Security of Critical Infrastructure (SoCI) Act costs that began in 2025–26.³⁶

In support of using 2025–26 as the base year, Powerlink used our benchmarking tools to assess the efficiency of its estimated opex that year. Powerlink engaged economic consultants, HoustonKemp, to provide advice on the efficiency of its 2025–26 opex, and assess its historical opex against other TNSPs.³⁷

³³ Powerlink, *2027–32 Revenue Proposal*, January 2026, pp 88–89.

³⁴ Powerlink, *TRR 2027–32 Operating Expenditure Model*, January 2026; AER, *AER decision, Powerlink PTRM, 2025-26 RoD update*, March 2025; AER analysis.

³⁵ Powerlink, *2027–32 Revenue Proposal*, January 2026, p vi.

³⁶ Powerlink, *2027–32 Revenue Proposal*, January 2026, p 89.

³⁷ HoustonKemp, *Efficiency of Powerlink’s proposed base year operating expenditure (2027–32)*, January 2026, p 5.

HoustonKemp used the most recent economic benchmarking models from the AER's 2025 Annual Benchmarking Report.³⁸ Powerlink submitted that while the HoustonKemp analysis showed its opex efficiency was forecast to decline further in 2024–25 and 2025–26 due to increasing opex, comparative data was not yet available to determine whether this decline reflected factors specific to Powerlink, or a broader transmission industry trend.³⁹ Powerlink added that HoustonKemp concluded there was insufficient information currently available to support a conclusion that its (forecast) 2025–26 opex was efficient (i.e. not materially inefficient), and that it would undertake further benchmarking analysis for its revised proposal using more recent transmission data.⁴⁰

Powerlink also highlighted limitations of the AER's transmission benchmarking tools, submitting that the AER's benchmarking approach does not reflect the rapid change in the operating environment experienced by transmission networks in recent years.⁴¹

Powerlink proposed 2 base year adjustments to its estimated opex for 2025–26. These included an adjustment of –\$6.0 million to remove costs associated with revenue reset preparation, and a further adjustment of –\$0.3m to remove costs for discontinued operational technology licenses.⁴²

During our engagement with Powerlink on its initial proposal, it notified us that its level of actual opex for 2025–26, its proposed base year, will be higher than the estimate used in its initial proposal. Powerlink provided us with an estimate of its unaudited actual opex for 2025–26 of \$337.2 million, which is 3.6% higher than the estimate included in its initial proposal, and \$78.7 million or 30.4% higher than the AER allowance in that year (Figure 3.2). Powerlink further advised that it would include in its revised proposal a third adjustment to its base year of –\$8.8 million (nominal) to remove costs associated with obsolete stock inventory. This would make the impact of the 3 proposed base year adjustments a total reduction of \$15.8 million (nominal) from Powerlink's 2025–26 base year opex, or \$79.0 million (nominal) over the 2027–32 regulatory period.

Under the NER, forecast opex must reasonably reflect the opex criteria. Overall, we aim to select a base year that reasonably reflects the prudent and efficient costs a business needs to deliver the required services over the next regulatory period. Standard factors we have regard to in doing this include that the base year:

- be a recent year for which audited actual opex is available⁴³
- does not include significant one-off costs⁴⁴

³⁸ HoustonKemp, *Efficiency of Powerlink's proposed base year operating expenditure (2027–32)*, January 2026, p 5.

³⁹ Powerlink, *2027–32 Revenue Proposal*, January 2026, p 69.

⁴⁰ Powerlink, *2027–32 Revenue Proposal*, January 2026, p 94.

⁴¹ Powerlink, *2027–32 Revenue Proposal*, January 2026, p 94.

⁴² Powerlink, *2027–32 Revenue Proposal*, January 2026, p 89.

⁴³ AER, *Better Resets Handbook*, July 2024, p 24.

⁴⁴ Or if no such year exists, we may use the non-recurrent efficiency gain mechanism to remove the non-recurrent costs from an available year.

- be consistent with the revealed costs of the network, assuming opex is largely recurrent⁴⁵
- is not materially inefficient.⁴⁶

To select the base year for the draft decision, we considered Powerlink's estimated 2025–26 base year, and the most recent years for which audited actuals were available, 2023–24 and 2024–25. We reviewed the information Powerlink provided in its initial proposal and through subsequent information requests explaining the drivers of its rapidly increasing opex over the current period, including the report from its consultant HoustonKemp. We also considered the incidence of one-off or non-recurring costs, and the extent to which a given year's total opex was consistent with Powerlink's historic revealed costs, and could be considered efficient.

Having regard to all the available information, we consider that using Powerlink's estimated 2025–26 opex as the base year for our alternative estimate of total opex would not be consistent with the opex criteria. Our reasons for this, which are outlined in section 3.3.1.2 in more detail, include that, while 2025–26 will be the most recent year for which audited actuals are available by the time of the final decision, Powerlink's current estimate of 2025–26 does not appear to accurately represent its actual total opex in 2025–26. It also includes significant one-off costs, which would require material adjustments to reflect recurrent expenditures. Further, Powerlink's estimated opex in 2025–26 does not appear to be reflective of its revealed costs over previous regulatory periods, and Powerlink has not provided sufficient information to explain the drivers of the rapid cost increases reported over this period. In particular, those increased costs related to the EBAs that commenced in February and March 2024 and the significant growth in the workforce of its regulated business, or how the magnitude of these cost increases can be considered prudent and efficient (see section 3.3.1.2). Finally, our benchmarking analysis, used in support of the revealed costs analysis, indicates Powerlink's estimated base year opex likely contains some level of material inefficiency.

Given this, we considered the appropriateness of 2023–24 and 2024–25 as alternative base years for our alternative estimate of total opex. We have actual, audited opex for both 2023–24 and 2024–25, and we are unaware of significant one-off costs requiring base year adjustments in either year. Based on currently available information, we consider 2023–24 is the better choice of base year because:

- 2023–24 is more reflective of Powerlink's actual (revealed) costs over the current and previous regulatory periods. Powerlink's average, annual opex over the longer 2010–11 to 2024–25 period has been \$272.8 million, and \$272.3 million over the most recent 8 years covering the current and previous regulatory periods. Powerlink's actual 2023–24 opex of \$289.9 million is more consistent with these average revealed opex requirements than its 2024–25 opex of \$313.8 million.
- 2023–24 is significantly less impacted by the drivers of Powerlink's rapid and material cost increases over the current period, including the EBAs that commenced in February

⁴⁵ AER, *Final decision, Expenditure Forecast Assessment Guideline – Electricity Distribution*, October 2024, p 6.

⁴⁶ AER, *Better Resets Handbook*, July 2024, p 23.

and March 2024, and the growth in its prescribed workforce, which our assessment in section 3.3.1.2 indicates are likely sources of material inefficiency.

- Specifically, 2023–24 is only partially impacted by the EBAs, particularly the non-wage conditions, which available information indicates are a material driver of increases in Powerlink’s average labour costs in the first 12 months the EBAs took effect (from February and March 2024 to January and February 2025). In contrast, 2024–25, like Powerlink’s proposed base year 2025–26, reflects the full impact of the EBAs. As outlined in section 3.3.1.2, we seek more detailed information on the year-to-year impact on Powerlink’s average labour costs of the EBAs’ various components, including the relative magnitudes of the impacts of the wage and superannuation increases, which appear consistent the wage price index (WPI) forecasts used in our and Powerlink’s opex forecasting methodology, compared to the magnitude of the impact of the changes to non-wage conditions, which appear to increase average labour costs by significantly more than WPI forecasts.
- In addition, while 2023–24 appears to include the majority of the forecast increase in Powerlink’s work force over this period (approximately 70% of the increase occurs over 2022–23 and 2023–24)⁴⁷, it does not include the higher actual staffing levels of 2024–25, or the higher forecast levels for 2025–26. Powerlink has not provided sufficient information to explain the full magnitude of the uplift in its regulated (prescribed) transmission services opex workforce over the current period, and as outlined in section 3.3.1.2, we seek further information in Powerlink’s revised proposal to understand the magnitude of the actual increase in its workforce, and why this uplift is required.

Having regard to the above, and based on the available information, we consider that Powerlink’s 2023–24 opex best reflects the prudent and efficient costs it will need to deliver the required services over the next regulatory period. As a result, we have used 2023–24 as the base year to forecast our alternative estimate of total opex, which is the basis of this draft decision.

3.3.1.2 Efficiency of base year opex

As summarised in section 3.3.1, and in our Expenditure Forecast Assessment Guideline, our preferred approach for forecasting opex is to use a revealed cost approach. This is because opex is largely recurrent and stable at a total level. Where a network business is responsive to the financial incentives under the regulatory framework, the actual level of opex it incurs should provide a good estimate of the efficient costs required for it to operate a safe and reliable network and meet its relevant regulatory obligations. However, we do not assume that the business’s revealed opex is efficient. We examine the historical trend and revealed costs in opex, and use our top-down benchmarking tools, and other assessment techniques, to test whether the business is operating materially inefficiently over the benchmarking period.

⁴⁷ Powerlink, *Response to information request IR#004a Part 2, Question 3, Table 3*, April 2026. FTE numbers reflect staffing levels at the end of each financial year. We seek data on average FTE levels in each year as we consider these better reflect the workforce size for a given level of total opex in a financial year.

Analysis of revealed costs

Analysis of actual and estimated opex, illustrated in Figure 3.2, shows that Powerlink's opex was broadly aligned with its allowance until 2023–24, when it began rapid, material growth exceeding the AER's allowance in the current period. Powerlink forecasts the rapid growth in its opex will continue over the remainder of the current regulatory control period. It estimates its opex will exceed its allowance by \$78.7 million⁴⁸ (30.4%) in 2025–26, its proposed base year, and by \$82.0 million (31.7%) in 2026–27, the last year of the current period. The rapid growth in opex means Powerlink's total opex over the current period is estimated to be \$231.6 million or 17.9% more than the AER's allowance.

Powerlink submitted in its initial proposal that its rapidly increasing opex in the current period is being driven by significant changes to its operating environment, and that the AER's economic benchmarking approach, while providing historical context, does not reflect the rapid, recent changes it faces. Powerlink stated that the majority of the cost increases over this period can be attributed to substantial increases in its workforce, required to respond to changes in government policy, emissions reduction targets and major planned investments, and to increases in labour costs resulting from new enterprise agreements it entered into in the context of growing demand for skilled labour. Powerlink noted it was also required to expand its regional workforce in response to increases in workload across central and northern Queensland, and to operate an increasingly complex network as it transitions to more renewable energy. It further submitted that some of the costs increases were required to address increasing regulatory and compliance obligations.⁴⁹

In response to AER information requests, Powerlink identified its enterprise agreements and workforce growth as significant drivers of its recent opex increases,⁵⁰ stating that its current EBAs increased base salaries, allowances, superannuation and a range of other employment conditions from February and March 2024.⁵¹ It added that its enterprise agreement conditions were typically passed on to its external contractors, also increasing external contractor rates.⁵²

Submissions from the RPRG and CCP34 both noted that Powerlink had informed them that these EBAs would increase Powerlink's average labour costs by 30% over their four year terms, with most of that cost increase occurring in the first year of implementation (i.e. from February 2024 to January 2025) due to the impact of a nominal wage rises combined with significant changes to a range of non-wage conditions.⁵³ The RPRG submission observed that 'the average employee cost increase of 30% over the life of these EBAs is well above the [EBA's] headline wage movements (16.4% in total over 4 years)', which indicates that just under half the 30% increase in average labour costs is attributable to changes to the non-wage conditions. RPRG further noted this 'shows the importance of productivity benefits

⁴⁸ Based on the updated unaudited actual opex Powerlink has provided through information requests.

⁴⁹ Powerlink, *2027–32 Revenue Proposal*, January 2026, pp 72–74.

⁵⁰ Powerlink, *Response to information request IR#004*, April 2026.

⁵¹ Powerlink, *Response to AER information request IR#004 – Question 2*, April 2026, p 2.

⁵² Powerlink, *Response to AER information request IR#004 – Question 3*, April 2026, pp 2–3.

⁵³ Revenue Proposal Reference Group, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 19. CCP34, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 32.

offsetting the full [EBA] cost, not just the headline wage increases that are required under Government of Queensland wages policy.⁵⁴

We sought additional information from Powerlink on the magnitude of the year-on-year impacts of its EBAs and growth in its regulated opex workforce on its operating costs, and to understand why Powerlink was required to incur these cost increases over the current period.

Table 3.2 summarises some of the key information provided by Powerlink, comparing changes in its prescribed (regulated) transmission services opex, its total labour costs, and its workforce, as well as key EBA conditions, including wage increases, superannuation rates, and the changes to non-wage conditions.

Table 3.2 indicates that over the first 4 years of the current period (from 2022–23, the first year of the current period, to Powerlink’s proposed base year 2025–26, the fourth year):

- Powerlink’s total labour costs are estimated to increase by 70.6% (from \$99.5 million to \$169.7 million).
- Wages increased by between 3.0% and 4.5% per year, while superannuation rose 2% (from 12.8% to 14.8%).
- Powerlink’s opex workforce (measured in full time equivalent roles or FTEs) is estimated to increase by 158 FTEs, or 38.9%, with approximately 75.0% of this increase occurring in the first two years of the current period, over 2022–23 and 2023–24.
- A range of non-wage EA conditions took effect in February and March 2024.
- The largest increase in Powerlink’s total labour costs occurred in 2024–25 — the first full financial year with the new EBAs in place.

⁵⁴ Revenue Proposal Reference Group, *Submission – Powerlink 2027–32 electricity transmission revenue proposal*, May 2026, p 15.

Table 3.2 Powerlink labour cost drivers (\$ million, 2026–27)

Financial year	2020	2021	2022	2023	2024	2025	2026	2027
Total opex	268.1	274.7	256.3	254.7	289.9	313.8	325.6	340.0
Total internal labour costs (\$m)	102.9	99.6	94.2	99.5	122.1	155.5	169.7	186.5
Workforce (FTEs)*	441.5	417.0	405.9	471.8	523.2	544.5	563.7	567.3
					Feb / March 2024 EBAs			
Wage increases (%)				3.0%	4.5%	4.5%	3.5%	3.0%
Superannuation rate (%)				12.8%	14.8%	14.8%	14.8%	14.8%
EBA non-wage conditions commencing in Feb / March 2024					• Reduced work week 38 to 36 hours • More overtime at increased rate from 1.5x 2x to 2x flat • New retention rates for specialised roles + \$2–\$4 per hour • New licence allowance for engineers +\$5000 per year • On-call allowance doubled from \$65 per day to \$130 on weekdays, and \$160 on weekends			

Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026; *Working at Powerlink Agreement 2020*, October 2020; *Working at Powerlink Agreement 2024*, July 2024; Powerlink, *Response to information request IR#004A, Part 1*, May 2026; Powerlink, *Response to information request IR#004A, Part 2*, June 2026; AER analysis.

Notes: *FTE numbers reflect staffing levels at the end of each financial year. We seek additional data on average FTE levels by financial year as we consider these better reflect the workforce size for a given level of total opex in a financial year.

Based on the available information, we agree with Powerlink’s submission that the primary drivers of its rapid growth in opex this period include the implementation of the EBAs, and the growth in its workforce. While the data in Table 3.2 is high-level in nature and incomplete, it indicates that the growth of Powerlink’s workforce was the primary driver of its increasing labour costs in the first two years of the current period 2022–23 and 2023–24, while the EBAs are the primary driver of its rising costs from 2024–25 onwards, with the greatest increase in 2024–25.

Considering all the above, including stakeholder submissions, the available information indicates that the combined impact of Powerlink’s EBA wage, super and non-wage conditions has significantly increased Powerlink’s average labour costs (by approximately 30% over the four years from February/March 2024 to January/February 2028). Most of the increase in average labour costs occurred in the first 12 months of the agreements (from

February/March 2024 to January/February 2025), partially impacting Powerlink's opex in financial year 2023–24, with the full impact of the combined wage, super and non-wage cost increases being seen from 2024–25 onwards. Further, over the four-year term of the EBA, around 60% of the increase in average labour costs is likely attributable to the wage and superannuation increases, while around 40% of the increase is attributable to changes to Powerlink's non-wage conditions.

We consider growth in Powerlink's labour costs from the wage and super to be largely consistent with the WPI forecasts used in the trend component of our opex forecast methodology. Based on the information we currently have available, the non-wage conditions appear to further, materially increase Powerlink's labour costs in the first 12 months of the agreements at a rate that is likely significantly above the WPI forecasts Powerlink and we rely on. While WPI forecasts do not directly take changes in non-wage related labour costs into account, our trend assumes this component of labour costs moves in line with the WPI (and wages) over time. We consider this is a sound assumption, and that the WPI forecasts represent the efficient rate of escalation of wage and non-non-wage related labour costs. Powerlink has not provided sufficient evidence to justify how the apparent 'above WPI rate of growth' in labour costs, which fully impacts its opex from 2024–25 onwards, can be considered prudent and efficient.

We also sought to understand the drivers of the significant increases in Powerlink's workforce this period – the other material driver of its increasing opex, particularly in the first two years of the current period. In response to an AER information request, Powerlink initially attributed the increase in its workforce to changes in government policy, including the *Queensland Energy and Jobs Plan* launched in 2022, evolving emissions reductions targets, major planned transmission investments, increasing integration of renewable energy and new or changing regulatory and compliance obligations. Powerlink noted that the *Queensland Energy and Jobs Plan*, and its supporting legislation, had direct, material impacts on Powerlink in the current regulatory period, including requiring Powerlink to:

- progress the development and expansion of REZs;
- commence design and planning for the SuperGrid transmission backbone;
- deliver the Central Queensland Gladstone Grid reinforcement;
- meet obligations to connect large-scale renewable generation and firming resources; and
- establish two new regional transmission and training hubs.⁵⁵

Powerlink submitted that it commenced expansion of its workforce in the current period specifically to:

- progress early works and engagement on significant investment projects such as CopperString, Borumba Pumped Hydro, Pioneer Pumped Hydro and the Central Queensland Gladstone Grid reinforcement;

⁵⁵ Powerlink, *Response to information request IR#004a*, May 2026, p 3.

- perform the role of the REZ Delivery Body and undertake detailed analysis and planning into REZs;
- deliver work in central and northern Queensland with a local, regional workforce; and
- respond to connection enquiries.⁵⁶

Powerlink further submitted that in October 2025 the current Queensland Government released the 5-year *Queensland Energy Roadmap 2025* (Roadmap) and *Energy System Outlook* that rebalanced earlier commitments under the *Queensland Energy and Jobs Plan*. Powerlink noted that while the Roadmap repealed aspects of the *Queensland Energy and Jobs Plan*, and shifted the timing and responsibility for some projects Powerlink was to undertake, it submitted that it retained a significant role in delivering the new plan, and that it was redirecting its workforce to deliver its requirements under the updated Roadmap, with required resourcing levels expected to remain ‘at current levels’.⁵⁷

Noting that Powerlink’s initial explanation and the data it provided on the uplift in its workforce appeared to encompass the regulated (prescribed) and unregulated (non-prescribed) arms of its operations, we sought clarification on the data and drivers of the growth in Powerlink’s regulated transmission services opex workforce, which is the scope of this component of the revenue determination decision.⁵⁸ Powerlink provided updated estimates of its regulated transmission services opex workforce, showing an increase of approximately 145 FTE roles over the current period, with 105 of these new roles required to address growing ‘complexity in its network operations,’ 27 new roles to increase staffing at regional depots, and approximately 10 new roles to address increasing regulatory compliance obligations.⁵⁹

Powerlink further submitted that the 105 new ‘network complexity’ roles were required to meet the ‘demands of operating an increasingly complex transmission network, driven by fundamental changes in how the power system is used and controlled’. Powerlink noted that to continue delivering reliable and secure transmission services, it required an ‘uplift in operational capability, workforce capacity, and supporting processes.’ Examples of the work these additional roles were undertaking included:

- engineering analysis, scenario modelling, and operational decision-making to ensure system security under an expanded set of conditions; and
- management of voltage, thermal constraints, frequency control, system stability, and asset utilisation.⁶⁰

We recognise that Powerlink faces growing complexity in planning, operating and maintaining its transmission network, particularly in the face of the energy transition, and that this will require increasing resources and costs, including for the recruitment and training of additional workers. We consider that some level of the increase in Powerlink’s workforce

⁵⁶ Powerlink, *Response to information request IR#004a*, May 2026, p 3.

⁵⁷ Powerlink, *Response to information request IR#004a*, May 2026, pp 3–4.

⁵⁸ Powerlink, *Response to information request IR#004a part 2*, June 2026.

⁵⁹ Powerlink, *Response to information request IR#004a part 2*, June 2026, p 3.

⁶⁰ Powerlink, *Response to AER information request IR#004 – Question 4*, April 2026, p 2.

over the current period can be justified by changes in Queensland Government policy, and the increasing complexity of network operations.

However, based on the available information, we do not consider the increasing network complexity described by Powerlink can explain such a rapid and material increase in its regulated workforce numbers. It is also unclear, based on the information provided by Powerlink, how the revised, reduced scope of work for Powerlink under the current Queensland Government's *Roadmap* requires the same level of growth in Powerlink's regulated transmission services opex workforce as initially anticipated under the 2022 *Energy and Jobs Plan*. In the absence of better information explaining the growth in its regulated transmission services opex this period, we consider the actual and forecast growth in its regulated opex workforce, particularly in second half of the current period, to be unexplained, and indicative of another source of material inefficiency in Powerlink's opex.

Powerlink noted in its current revenue proposal that in its 2022–27 revenue proposal, it proposed an annual productivity target higher than the industry average and identified several productivity initiatives to support this target. It submitted that it had achieved productivity savings of approximately \$5.6 million annually over the current period, partially offsetting the impacts of its increasing costs.⁶¹ Powerlink stated that it recognised the need to identify ways to deliver further efficiency and productivity improvements during the 2027–32 regulatory period, submitting that it is targeting further productivity improvement through:

- new or alternative construction methods, products and technologies in project delivery;
- use of advanced asset monitoring and analytics to optimise network performance and minimise downtime in asset management; and
- leveraging data and technology advancements to plan asset maintenance, prioritise investments, and balance risk and cost.⁶²

Given the significant increases in opex this period, we sought additional information on Powerlink's ongoing efficiency program, including descriptions of specific initiatives, the timing of estimated savings, and the extent to which these may offset higher costs from its EBAs and growing workforce. Powerlink provided a high level summary of some initiatives it had identified to achieve efficiencies in the next regulatory period, including ones related to online condition monitoring of underground cables, targeted insulator replacement, and a transmission line health index reinvestment trigger. However, Powerlink noted that it had not yet quantified the extent of potential productivity savings. Powerlink submitted that it was exploring other opportunities for operating expenditure savings but noted that these initiatives were at the early stages of maturity, with any potential cost savings not yet understood.⁶³

Considering all of the above, our revealed costs analysis indicates that Powerlink's increasing opex over the current period likely includes some level of material inefficiency. The wage and superannuation increases in Powerlink's enterprise agreements, which commenced in February and March 2024, appear to be generally consistent with efficient

⁶¹ Powerlink, *2027-32 Revenue Proposal*, January 2026, pp 75–76.

⁶² Powerlink, *Appendix 5.04, Operating Expenditure Productivity Approach and Potential Initiatives*, January 2021.

⁶³ Powerlink, *Response to AER information request IR#004, Question 8*, April 2026, pp 1–3.

costs. However, based on the information Powerlink has been able to provide to date and from submissions, Powerlink has not provided sufficient evidence to explain how the apparent 'above WPI rate of growth' in labour costs, particularly from the non-wage conditions that fully impact its opex from 2024–25 onwards, can be considered prudent and efficient.

Similarly, we consider the significant increase in its regulated transmission services opex workforce over the current period, which is only partially explained by the available information, is a further source of material inefficiency in Powerlink's opex, particularly from 2024–25 onwards.

Finally, we agree with Powerlink that additional efficiency initiatives are required to offset its rising costs, including from components of the EBAs, but we consider there is insufficient detail on the planned initiatives or level of savings being targeted to enable us to conclude that material efficiency savings are likely to be achieved at this time.

As set out in section 3.3.1.1, this revealed costs analysis shows that opex in both 2024–25, and Powerlink's proposed base year of 2025–26, include a level of material inefficiency as these years fully capture the labour costs increases from the 2024 enterprise agreements, particularly the non-wage conditions, as well as the additional but unexplained growth in Powerlink's regulated opex workforce.

Further, we consider this analysis indicates that 2023–24 better represents a level of efficient cost, as it does not include the full impact of the EBAs, and better reflects a level of growth in Powerlink's workforce that can be justified as required to address Powerlink's growing network complexity, and its updated work program under the Queensland Government's current Energy Roadmap.

If Powerlink proposes 2024–25 or 2025–26 as its base year in its revised proposal, we would seek additional information to better understand the relative magnitude of the impacts of the EBAs and workforce growth on its year-on-year costs over the current period, and how the magnitude of the related cost increases can be considered prudent and efficient. Specifically, we would seek additional information that more clearly shows for each financial year of the current period:

- the decomposed impacts of the EBAs' wage, superannuation, and non-wage components on Powerlink's average labour costs.
- how the magnitude of these year on year increases in average labour costs compares to the WPI used in the trend component of our opex forecasting methodology, and where the rate of growth in average labour costs exceeds the WPI, why this higher rate of growth can be considered prudent and efficient.
- noting that currently available FTE numbers reflect the workforce as at 30 June each financial year, we seek average regulated transmission services opex workforce numbers (FTEs), by total and disaggregated by work roles, with updated actuals for 2025–26 and updated forecasts for 2026–27.
- the reasons for recruiting these workforce numbers over the current period, and a more detailed explanation on how Powerlink's actual workforce levels in 2024–25 and 2025–26 remain prudent under the Queensland Government's current policy settings.

We also seek further details on Powerlink's productivity initiatives underway, and planned that aim to achieve efficiency savings to offset cost increases from the EBAs, including descriptions of any individual initiatives, implementation timeframes, and achieved and estimated savings.

Benchmarking the efficiency of Powerlink's opex over time

We have used a variety of economic benchmarking tools to test the efficiency of Powerlink's opex. Benchmarking broadly refers to the practice of comparing the economic performance of a group of service providers that all provide the same service as a means of assessing their relative performance over time.

Our preferred approach is to benchmark a transmission business's efficiency over a period and compare trends over time using our multilateral total and partial factor productivity (MTFP and MPFP) techniques. This works with the EBSS and mitigates incentives to shift costs between years. We consider this is a better approach than looking at the efficiency of a single year (such as the base year) in isolation as this recognises that opex is generally recurrent, but with some degree of year-to-year fluctuation. Our annual benchmarking reports include information about the use and purpose of economic benchmarking, and details about the techniques we use to benchmark the efficiency of transmission businesses in the National Electricity Market (NEM).

Our analysis shows that Powerlink's benchmarking performance over the 2006–2024 period generally ranked poorly among the five transmission networks. Our 2025 Annual Benchmarking Report for transmission shows that, in summary, relative to other regulated transmission businesses in the NEM, Powerlink:

- ranked fourth in opex MPFP from 2015 onwards, after alternating between third and fourth in earlier years, as shown in Figure 3.4 below.⁶⁴
- performed broadly in line with most networks on MTFP, which measures both capital and opex inputs, as shown in Figure 3.5 below.⁶⁵
- performed relatively average for various total cost and cost category partial performance indicators (PPIs) over the 2006–24 period.⁶⁶

We are currently finalising the benchmarking results for the 2026 Annual Benchmarking Report, which will include analysis for the financial year 2024–25. Our preliminary results indicate that Powerlink's opex MPFP continued to decline, while its MTFP remained stable. The benchmarking analysis over the 2006–24 benchmarking period shows that Powerlink's relative opex efficiency, in terms of opex MPFP, generally ranked fourth or fifth among the transmission networks and did not exhibit the pronounced improvements observed for some peers. While its relative efficiency improved modestly during 2018–23, it declined in 2024.

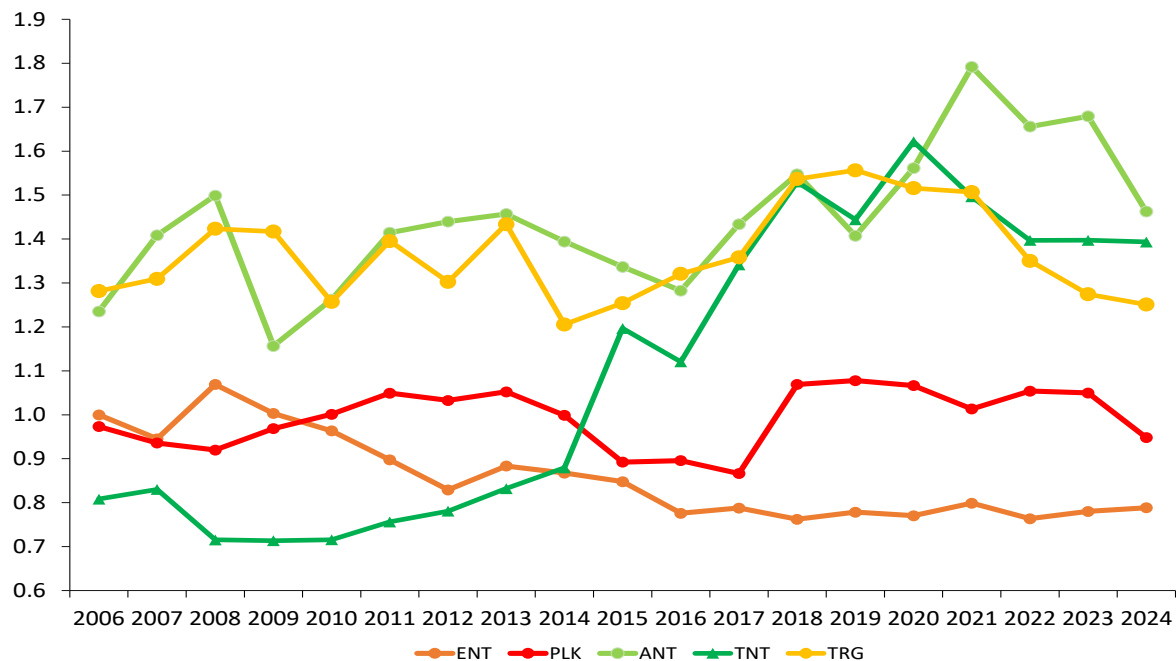
⁶⁴ AER, *2025 Annual Benchmarking report, Electricity transmission network service providers*, November 2025.

⁶⁵ AER, *2025 Annual Benchmarking report, Electricity transmission network service providers*, November 2025.

⁶⁶ AER, *2025 Annual Benchmarking report, Electricity transmission network service providers*, November 2025.

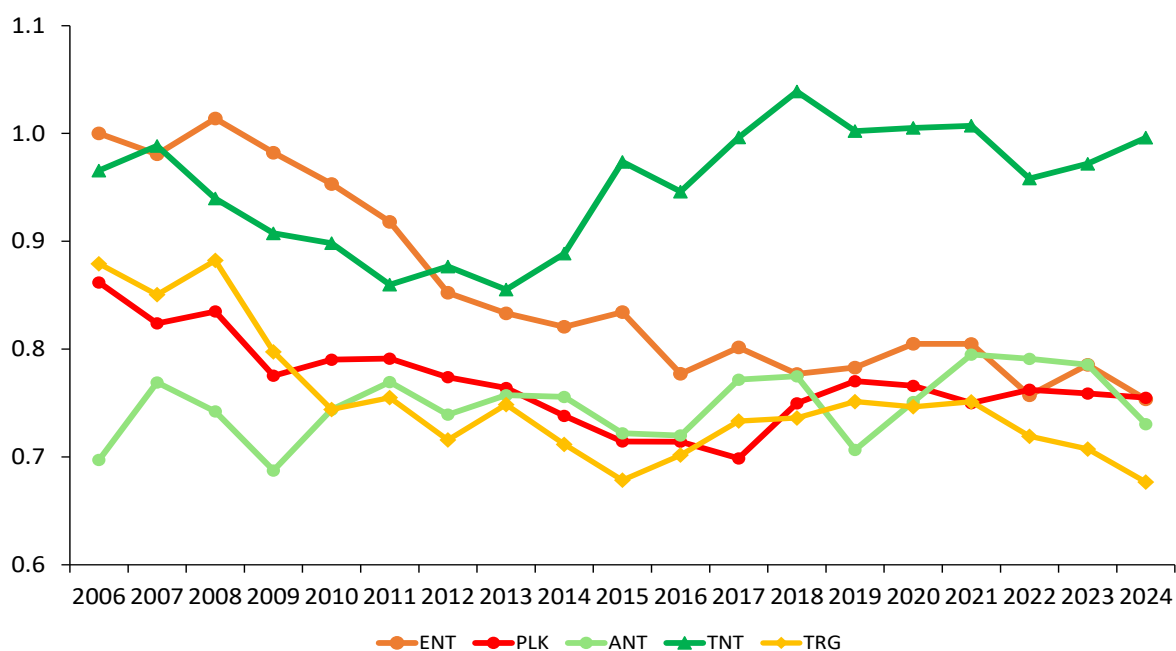
Overall, Powerlink's opex MPFP performance remained consistently below that of other networks but above ElectraNet for much of the period.

Figure 3.4 Multilateral Opex Partial Productivity (MPFP)



Combining opex and capital inputs, Powerlink's MTFP has generally ranked in the lower half of the benchmarked transmission businesses over the 2006–24 period. Its MTFP remained relatively stable for much of the period, with some improvement in recent years before declining in 2024. This reflects Powerlink's consistently lower opex MPFP performance relative to its peers, partially offset by a modest recovery in capital MPFP since 2018.

Figure 3.5 Multilateral Total Factor Productivity (MTFP)



In terms of our Partial Performance Indicators (PPI), Powerlink's results indicate mixed performance. Powerlink's relative performance has improved on some measures over time, with costs declining and becoming more comparable with the better-performing networks in recent years. However, the results do not consistently place Powerlink among the leading transmission networks, suggesting scope for further efficiency improvements relative to the networks with lower costs per category. However, these results may not fully reflect Powerlink's network characteristics and as a result, these PPI measures may not fully capture factors affecting relative cost performance.

Powerlink engaged its consultant, HoustonKemp, on the efficiency of its proposed 2025–26 base year and its benchmarking results. HoustonKemp found that Powerlink's opex productivity was expected to decline further to 2025–26 as opex increased without corresponding growth in measured outputs. However, it considered the available benchmarking evidence insufficient to conclude that Powerlink's proposed base year opex was not materially inefficient.⁶⁷

Given Powerlink's benchmarking performance and our revealed cost analysis, we are not satisfied that using 2025–26 as the base year would reflect the efficient costs of achieving its opex objectives. Powerlink has not yet provided sufficient information to demonstrate that its increased costs are prudent and efficient. Powerlink's relative benchmarking performance is also low, and its opex productivity is expected to decline further as opex rises. We consider that changing the base year, together with the incentives provided by the EBSS, results in an opex allowance that encourages Powerlink to pursue further efficiencies. We also note this change is broadly revenue neutral, providing Powerlink with a similar total revenue amount to safely operate its network, without embedding potentially inefficient opex into future opex forecasts.

3.3.2 Adjustments to base year opex

Powerlink proposed two downward adjustments to its estimated 2025–26 base year opex, including \$0.3 million per year for Operational Technology (OT) licensing fees and \$6.0 million per year for revenue reset costs.⁶⁸

For our draft decision, we have used 2023–24 rather than Powerlink's proposed 2025–26 base year to forecast opex. As these adjustments relate specifically to costs included in Powerlink's proposed base year, they are not applicable to our alternative estimate and have not been applied.

3.3.2.1 Final year increment

Our standard practice to calculate final year opex is to add the estimated change in opex between the base year and the final year of the current regulatory control period to the base year opex amount.

⁶⁷ HoustonKemp, *Efficiency of Powerlink's proposed base year operating expenditure (2027–32)*, January 2026, pp 5–6.

⁶⁸ Powerlink, *2027–32 Revenue Proposal*, January 2026, p 89.

We have added \$0.8 million per annum for the final year increment in our alternative estimate, increasing our alternative estimate by \$4.0 million over the 2027–32 regulatory control period.

3.3.3 Rate of change

Having determined an efficient base year opex and estimated final year opex by adding a final year increment, we trend it forward to account for the forecast growth in prices, output and productivity over the regulatory control period. We refer to this as the rate of change. Powerlink largely applied our standard approach to forecast the rate of change, including by:⁶⁹

- **Price growth:** adopting our standard input price weightings of 70.4% labour and 29.6% non-labour. Powerlink forecast labour price growth using an average of wage price index growth forecasts from Oxford Economics Australia (its consultant) and Deloitte Access Economics (our consultant, as a placeholder). As price growth rates for the final year (2032) were not available when we prepared our alternative estimate, we used the average growth rate over the preceding four years as a placeholder. We will update the estimate using the 2032 price growth rate when it becomes available for our final decision.
- **Output growth:** applying the output weights from our benchmarking results, consistent with standard approach.
- **Productivity growth:** using the long-term annual transmission industry average opex partial factor productivity growth rate of 0.42% per year reported in the AER's 2025 Annual Benchmarking Report, which was the most recent report available at the time of publication.

Table 3.3 Forecast annual rate of change in opex (%)

	2026–27	2027–28	2028–29	2029–30	2030–31
Powerlink's proposal					
Price growth	0.4%	0.6%	0.7%	1.1%	1.6%
Output growth	0.7%	0.7%	0.9%	0.8%	0.7%
Productivity growth	0.4%	0.4%	0.4%	0.4%	0.4%
Rate of change	0.7%	0.9%	1.2%	1.6%	1.9%
AER alternative estimate					
Price growth	0.8%	0.7%	0.9%	0.8%	0.9%
Output growth	0.7%	0.8%	0.9%	0.9%	0.7%
Productivity growth	0.4%	0.4%	0.4%	0.4%	0.4%
Rate of change	1.1%	1.1%	1.4%	1.3%	1.2%
Difference	0.3%	0.2%	0.2%	–0.3%	–0.7%

⁶⁹ Powerlink, 2027–32 Operating Expenditure Model, January 2026.

Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026; AER analysis.

Notes: Numbers may not add up to totals due to rounding. Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

3.3.3.1 Forecast price growth

Powerlink proposed average annual price growth of 1.1%, which increased its total opex forecast by \$36.9 million.⁷⁰ We have used real average annual price growth of 1.1% in our alternative estimate of total opex. This increases our total opex alternative estimate by \$32.7 million.⁷¹

Both Powerlink and the AER forecast price growth as a weighted average of forecast labour price growth and non-labour price growth (real price growth rate of zero), of 70.4% and 29.6% respectively.

Table 3.4 compares our forecast labour price growth with Powerlink's proposal.

Table 3.4 Forecast labour price growth (%)

	2027–28	2028–29	2029–30	2030–31	2031–32
Powerlink's proposal					
Oxford Economics Australia	1.3	1.4	1.6	1.6	1.3
Deloitte Access Economics	0.7	0.6	0.9	0.8	0.8
Average	1.0	1.0	1.3	1.2	1.1
AER alternative estimate					
Oxford Economics Australia	1.3	1.4	1.6	1.6	1.3
Deloitte Access Economics	0.6	0.7	0.9	0.9	0.8
Average	1.0	1.1	1.3	1.3	1.0
Overall difference	–	0.1	–	0.1	–0.1

Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026; AER analysis.

Notes: Numbers may not add up to totals due to rounding. Values of '0.0' and '-0.0' represent small non-zero amounts and '-' represents zero.

3.3.3.2 Forecast output growth

Powerlink proposed average annual output growth of 0.9%, which increased its proposed total opex forecast by \$34.4 million (\$2026–27). We have used a forecast average annual output growth of 0.8%. This increases our alternative estimate of total opex by \$34.3 million (\$2026–27).

Both Powerlink and the AER have forecast output growth by:

⁷⁰ Powerlink, *2027–32 Operating Expenditure Model*, January 2026.

⁷¹ The average annual rates are rounded to one decimal place. Differences in the underlying unrounded annual rates and the opex bases to which they are applied result in different increases to total opex.

- forecasting the growth rates for four outputs (customer numbers, circuit length, ratcheted maximum demand, and energy throughput)
- calculating the weighted average of output growth rates using the output weights from the opex MPFP benchmarking model in our 2025 Annual Benchmarking Report for transmission. We discuss these below.

Forecast growth of the individual output measures

We are satisfied that Powerlink’s forecast of the growth in energy throughput, customer numbers and circuit length, as set out in Table 3.5, reflect a realistic expectation. They are largely consistent with forecast trends from historical growth rates, in line with our standard approach.

However, we are not satisfied with Powerlink’s forecast growth rates for ratcheted maximum demand as it does not align with our standard approach. We discuss our position on ratcheted maximum demand below.

Table 3.5 Forecast growth in individual output measures (%)

	2027–28	2028–29	2029–30	2030–31	2031–32
Powerlink’s proposal					
Energy throughput	0.3	0.8	2.0	3.6	4.9
Ratcheted maximum demand	1.0	1.5	1.6	2.4	3.6
Customer numbers	1.1	1.0	1.0	1.0	1.0
Circuit length	–	–	–	0.0	0.1
AER alternative estimate					
Energy throughput	0.3	0.8	2.0	3.6	4.9
Ratcheted maximum demand	2.3	1.9	2.2	1.4	1.0
Customer numbers	1.1	1.0	1.0	1.0	1.0
Circuit length	–	–	–	0.0	0.0
Difference					
Energy throughput	–	–	–	–	–
Ratcheted maximum demand	1.3	0.4	0.5	–1.0	–2.6
Customer numbers	–	–	–	–	–
Circuit length	–	–	–	–	–

Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026; AER analysis.

Notes: Numbers may not add up to totals due to rounding. Values of '0.0' and '–0.0' represent small non-zero amounts and '–' represents zero.

Output weights

The output weights that both we and Powerlink have used are set out in Table 3.6. These are the weights from our 2025 Annual Benchmarking Report for transmission.

Table 3.6 Output weights (%) applied

Customer numbers	Circuit length	Ratcheted maximum demand	Energy throughput
9.3%	52.5%	28.7%	9.4%

Source: AER, *Annual Benchmarking Report*, November 2025.

We will publish our 2026 Annual Benchmarking Report for transmission in late November 2026. In our final decision, we will update our output growth rate forecasts if output weights are updated in the 2026 Annual Benchmarking Report. Full details of our approach to forecasting output growth are set out in our opex model, which is available on our website.⁷²

Ratcheted maximum demand growth

We have not used Powerlink’s initial forecast for ratcheted maximum demand as it was based on a maximum demand measure that is not consistent with our standard approach. We asked Powerlink to provide updated ratcheted maximum demand forecasts using ‘Transmission system non-coincident weather-adjusted summated maximum demand, 50% POE’ (TOPSD0206), consistent with the measure used in previous revenue determinations. We used Powerlink’s updated forecasts in our alternative estimate.⁷³

Table 3.7 compares these forecasts with those in Powerlink’s initial proposal.

Table 3.7 Forecast growth in ratcheted maximum demand (%)

	2027–28	2028–29	2029–30	2030–31	2031–32
Powerlink’s updated proposal	1.0	1.5	1.6	2.4	3.6
AER alternative estimate	2.3	1.9	2.2	1.4	1.0
Difference	1.3	0.4	0.6	–1.0	–2.6

Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026; *Response to Information request #012b*, June 2026; AER analysis.

3.3.3.3 Forecast productivity growth

We have forecast productivity growth of 0.4% per year in developing our alternative opex forecast. Consistent with our standard approach for transmission, Powerlink also included forecast productivity growth of 0.4% per year in its opex forecast.⁷⁴ This reduces our alternative estimate over the 2027–32 regulatory control period of total opex by \$17.8 million (\$2026–27), compared with Powerlink’s proposed \$20.3 million reductions.

⁷² <https://www.aer.gov.au/industry/registers/determinations/powerlink-transmission-determination-2027-2032>

⁷³ Powerlink, *Response to Information request #012b*, June 2026.

⁷⁴ Powerlink, *2027–32 Operating Expenditure Model*, January 2026.

Our productivity growth forecast reflects our expectation of the opex productivity growth an efficient service provider in the transmission industry can achieve. It reflects historic industry opex productivity growth to the extent we consider past performance to be a good indicator of future performance under a business-as-usual situation. We forecast 0.4% productivity growth based on opex partial factor productivity index analysis over the 2006–24 period. We consider this reflects a reasonable expectation of the benchmark productivity that an efficient and prudent transmission network can achieve for the forecast period. We will update our productivity growth forecast in the final decision to incorporate the latest data from our 2026 Annual Benchmarking Report.

3.3.4 Step changes

In developing our alternative estimate for the draft decision, we include prudent and efficient step changes for cost drivers such as new regulatory obligations or efficient capex/opex trade-offs. As we explain in the Guideline, we will generally include a step change if the efficient base opex and the rate of change in opex of an efficient service provider does not already include the proposed cost for such items and they are required to meet the opex criteria.⁷⁵

Powerlink’s proposal includes three step changes totalling \$85.1 million. Our draft decision has also included Powerlink’s proposed category specific forecast for AEMO participant fees as a step change for the reasons outlined in section 3.3.4.4. The step changes are shown in Table 3.8 along with our alternative estimate for the draft decision. We discuss our assessment of each step change below.

Table 3.8 Step changes included in Powerlink’s proposal and the AER’s alternative estimate (\$million, 2026–27)

Step change	Powerlink’s proposal	AER’s alternative estimate	Difference
Transition to cloud	60.0	21.4	-38.6
Physical security uplift	16.4	–	-16.4
Network monitoring	8.7	–	-8.7
AEMO participant fees	–	80.1	80.1
Total step changes	85.1	101.5	16.4

Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026; AER analysis.

Notes: Numbers may not add up to totals due to rounding. Values of ‘–’ represent zero.

⁷⁵ AER, *Expenditure forecast assessment guideline for electricity distribution*, August 2022, p 26.

3.3.4.1 ICT expenditure – ICT capex and Transition to cloud step change

Powerlink proposed \$121.4 million for six ICT projects over the 2027–32 regulatory period, including \$61.2 million in capex and a \$60.0 million Transition to cloud step change.⁷⁶ These projects consist of various initiatives to maintain and uplift Powerlink’s cyber security, operational, asset and business management systems. Powerlink noted that a significant proportion of the costs were opex due to the industry shift to Software as a service (SaaS) only provision, and because it was adopting updated accounting standards redefining SaaS as opex for the 2027–32 period.⁷⁷

We engaged Oakley Greenwood to undertake a technical review of the proposed ICT expenditures. Considering their advice, we have jointly assessed Powerlink’s capex and opex proposal, including through the information provided in the respective ICT business cases and models, the responses to our information requests, and information obtained through an onsite workshop with Powerlink staff.

Table 3.9 summaries the 6 ICT projects with capex and opex amounts proposed by Powerlink, our alternative estimates, and the reasons for our decision.

Table 3.9 shows that across the 6 ICT projects, we have included \$57.1 million in total expenditure (totex) for the draft decision, which is \$64.3 million below Powerlink’s proposal. This position includes:

- \$35.7 million in ICT capex, \$25.5 million (–41.7%) lower than proposed (see Attachment 2)⁷⁸
- \$21.4 million for the Cloud-based services step change, \$38.6 million (–64.3%) lower than proposed (see Table 3.10 below).

This lower amount is because, while Powerlink identified a potential need for additional IT expenditure across the 6 project areas, it has not provided key aspects of the supporting analysis required to demonstrate the prudence and efficiency of 4 of its 6 proposed IT projects, including for initiatives 2 and 3 of the Cyber security project, and the Enterprise Asset Management (EAM), Health, Safety and Environment (HSE), and Support and Sustain (S&S) projects.

⁷⁶ Powerlink, *Appendix 4.06, IT Plan 27–32*, January 2026; Powerlink, *Appendix 5.05, Operating Expenditure Step Changes Approach*, January 2026; AER analysis. Total ICT expenditure is higher than the \$94.9 million initially proposed due to updated cost data provided by Powerlink in information responses.

⁷⁷ Powerlink, *Appendix 5.05, Operating Expenditure Step Changes Approach*, January 2026, p 7.

⁷⁸ The \$35.7 million includes our draft decision of \$17.6 million for total ICT capex and \$18.0 million for cyber security related Operational Technology (OT) capex (referred to in Attachment 2 Capital Expenditure, section 1.2.5) as we assessed ICT and OT related cyber security capex together. See Attachment 2, Tables 2.4 and A1.6 for more information.

Table 3.9 ICT expenditure (\$ million, 2026–27)

	Powerlink proposal			AER estimate			
Projects	Capex	Opex	Totex	Capex	Opex	Totex	Reasoning
1. Cyber Security total	44.9	31.2	76.1	20.9	11.5	32.4	
initiative 1: sustaining cyber security defence maturity	22.5	12.0	34.5	20.9	11.5	32.4	Included as while no net present value (NPV) benefits were provided, the project is required to maintain Powerlink's current cyber defence level. A small efficiency adjustment is proposed to capex and opex to reflect our consultant's benchmarking of inputs and labour rates.
initiative 2: SoCI Act proactive risk mitigation	18.2	10.1	28.3	–	–	–	Not included as Powerlink has not provided sufficient evidence to demonstrate prudence and efficiency, including sufficiently detailed scope of works, and completed NPV analysis demonstrating net benefits. We have included the additional information we seek on these initiatives in Appendix D of Attachment 2.
initiative 3: managing evolving cyber threat	4.2	9.1	13.3	–	–	–	
2. Enterprise Asset Management	1.1	19.3	20.4	1.0	9.9	10.9	Included with an efficiency adjustment to reflect benchmarking of inputs, labour rates, and implementation savings. While no NPV benefits were provided, estimated benefits based on a sufficiently detailed scope of work demonstrate the proposed option is prudent.
3. Health, Safety & Environment	0.2	4.2	4.6	–	–	–	Not included as Powerlink has not provided sufficient evidence to demonstrate prudence and efficiency, including sufficiently detailed scope of works, and completed NPV analysis demonstrating net benefits. We have included the additional information we seek on these initiatives in Appendix D of Attachment 2.
4. Support & Sustain	1.2	5.3	6.5	–	–	–	
5. Recurrent	9.7	–	9.7	9.7	–	9.7	Included as recurrent capex is consistent with the historical trend.
6. Devices	4.1	–	4.1	4.1	–	4.1	Included as device capex is consistent with the historical trend.
Totals	61.2	60.0*	121.4**	35.7	21.4	57.1	

Source: Powerlink, *Appendix 4.06, IT Plan 27–32*, January 2026; Powerlink, *Appendix 5.05, Operating Expenditure Step Changes Approach*, January 2026; Powerlink, Forecast capex model; Powerlink, *Response to AER information requests IR#012a and IR#013*, 8 May 2026; AER analysis.

Notes: *Total ICT opex in the 2027–32 period is \$68.4 million. Adjusting for recurrent IT opex in the base year reduces the step change to \$60.0 million. **Total ICT expenditure is higher than the \$94.9 million initially proposed due to updated cost data provided by Powerlink. Numbers may not sum due to rounding. Expenditure shown in this table is for prescribed transmission services. Capex does not include capitalised overheads. Cyber security capex includes both ICT and OT projects. Our draft decision for cyber security capex and opex applies a percentage reduction based on Powerlink's mapping of initiatives to projects and Oakley Greenwood's findings on efficient costs. We mapped the cyber security initiatives to individual capex projects based on the information provided by Powerlink, noting it was unclear how each initiative contributed to each project.

We agree with Powerlink’s view that it faces growing complexity in planning, maintaining, operating and securing its transmission network, particularly in the face of the accelerating energy transition and a rapidly evolving cyber security threat environment. To assist it in responding to this draft decision, we have outlined in Appendix D of Attachment 2, the type of additional information we seek in its revised proposal, particularly on initiatives 2 and 3 of the Cyber security project, the HSE, and S&S projects. We consider Powerlink has identified a potential need for additional IT expenditures of some level in each of these areas. However, we do yet have sufficient information on the proposed scope of work, or the quantification of benefits to be able to determine if the proposed activities and level of expenditures are prudent and efficient.

Table 3.10 Transition to cloud step change (\$ million, 2026–27)

	2027–28	2028–29	2029–30	2030–31	2031–32	Total
Powerlink’s proposal	11.5	17.0	10.7	10.0	10.8	60.0
AER alternative estimate	4.3	4.3	4.3	4.3	4.3	21.4
Difference (\$)	-7.2	-12.7	-6.4	-5.7	-6.5	-38.6

Source: Powerlink, *Appendix 4.06, IT Plan 27–32, January 2026*; AER analysis.

Notes: Numbers may not add up to totals due to rounding. Values of ‘–’ represent zero.

The following section summarises the basis of our decision on each of the proposed ICT projects and the information gaps we seek Powerlink to address in its revised proposal.

Cyber security

Powerlink’s cyber security expenditure proposal includes three initiatives that aim to address a growing cyber security threat environment. These are a combination of actions that aim to sustain its existing cyber capabilities, while also undertaking targeted uplifts to address specific security-related requirements.⁷⁹

Oakley Greenwood found that, based on currently available information, Powerlink had provided incomplete options and net present value (NPV) analysis in support of the proposed cyber security expenditures, in particular by not providing calculations of the benefit of the proposed investments in reducing identified risks. Oakley Greenwood advised that in order to conduct a more ‘robust prudency analyses of the provided options, [it] would require NPV analysis for each option, preferably for each initiative within each option, showing adequate risk offset benefit calculations’.⁸⁰ Oakley Greenwood further noted that Powerlink had not provided clear cost build-ups of the three cyber initiatives (instead providing individual IT, OT, security system project costings that span across all three initiatives), and that there were inconsistencies between the cost build-ups provided and the initiative totals.⁸¹ In the absence of this information, Oakley Greenwood concluded that ‘initiative 1 - Sustaining Cyber Security

⁷⁹ Powerlink, *2027–32 - ITOT Cyber Security Program Investment Case - January 2026 – PUBLIC*, pp 19–22.

⁸⁰ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, pp 8–9.

⁸¹ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, p 10.

Defence Maturity' could still be considered prudent. This is because the proposed expenditures to refresh and update Powerlink's existing services and capabilities was required to maintain Powerlink's existing level of cyber security defence in the context of a constantly evolving threat landscape.⁸² Based on the available cost information for initiative 1, Oakley Greenwood recommended a small efficiency adjustment to the proposed expenditure to reflect its benchmarking of inputs and labour rates (Table 3.9).⁸³

In contrast, Oakley Greenwood found that, in the absence of a clearer description of the scope of work for initiatives 2 and 3, and NPV analysis with quantified benefits, or evidence that some regulatory obligations are not being met, it could not establish the prudence of the expenditures.⁸⁴

We agree that Powerlink faces a growing and evolving cyber security threat environment. We also accept Oakley Greenwood's assessment that initiative 1 is needed to maintain Powerlink's existing levels of cyber defence. We have included the adjusted capex and opex amounts for initiative 1 in our capex alternative estimate, and alternative estimate of total opex. We also consider there may be a case for further expenditure for targeted uplifts to address specific security related requirements as generally proposed by Powerlink in initiatives 2 and 3. However, we are unable to make an assessment on of the prudence and efficiency of this without further information on what is being proposed and the benefits that are being targeted. As a result, we cannot include expenditures for initiatives 2 and 3 in the draft decision, and we have listed in Appendix D of Attachment 2 the type of information we seek in Powerlink's revised proposal on these components of its cyber security proposal.

Enterprise Asset Management, Health, Safety and Environment, and Support & Sustain

Powerlink proposed three IT projects covering a range of business operations and management systems, including:

- the EAM project, which aims to improve Powerlink's asset management systems, building on its existing foundational IT platforms, including SAP, Digital Engineering and Strategic Data Management.⁸⁵
- the HSE project, which aims to consolidate and improve its existing health, safety and environmental management systems, leveraging its existing foundational IT platforms.⁸⁶
- the S&S project, which aims to ensure the sustainability of its IT systems and services, consistent with prudent IT asset lifecycle investments.⁸⁷

Oakley Greenwood found that while Powerlink had identified a potential need for some level of new expenditure for each of these projects, it had not provided sufficient information

⁸² Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, p 9.

⁸³ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, p 18.

⁸⁴ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, pp 9–10 and 18.

⁸⁵ Powerlink, *Appendix 4.06, IT Plan 27–32*, January 2026, pp 22–25.

⁸⁶ Powerlink, *Appendix 4.06, IT Plan 27–32*, January 2026, pp 26–27.

⁸⁷ Powerlink, *Appendix 4.06, IT Plan 27–32*, January 2026, pp 28–29.

on the preferred options in each case to establish prudence. Oakley Greenwood noted that Powerlink's options and NPV analysis was incomplete with benefits not quantified; mapping of the proposed initiatives to the risks they are intended to mitigate was unclear; the residual risk ratings underpinning the HSE and S&S projects justifications were unsupported; and a fuller evaluation of options, including implementation savings, and the synergies from implementing the three projects in parallel, had not been accounted for.⁸⁸ In doing so, Oakley Greenwood took into account information provided by Powerlink in its initial proposal, and through subsequent information requests and workshop discussions.

On the proposed EAM, HSE and S&S project costs, Oakley Greenwood noted that Powerlink's costings were internal estimates that had not been market tested, and that efficiency savings from implementing the projects, which Powerlink described qualitatively in business cases, had not been quantified and netted off the proposed project costs. As an example, Oakley Greenwood estimated that claimed benefits (efficiency savings) from implementing the EAM project could offset Powerlink's proposed project cost by up to \$8.8 million over the next period.⁸⁹ Oakley Greenwood further used top-down benchmarks and a bottom-up build of planned headcount, project duration and labour rates to test the efficiency of the proposed costs, and identified efficiency reductions in each of the EAM, HSE and S&S programs.⁹⁰

Noting the above limitations, Oakley Greenwood quantified the benefits Powerlink had listed but not estimated for the EAM project, including estimating the likely efficiency savings, and found Powerlink's proposed EAM project had highest NPV outcome of the three options considered by Powerlink in its business case. Oakley Greenwood concluded the proposed EAM expenditure was likely prudent based on the balance of probabilities and best currently available information.⁹¹ Using the combination of top-down and bottom-up benchmarking, it recommended a reduced, efficient amount for the EAM project (Table 3.9).⁹²

For the HSE and S&S projects, however, Oakley Greenwood found that while Powerlink identified a potential need for some level of additional expenditure based on its qualitative risk assessments, it could not determine the prudence and efficiency of the two projects given the absence of a clearer scoping of the proposed work, and incomplete options and NPV analysis.⁹³

We agree with Oakley Greenwood's assessment of these three projects. While Powerlink has provided incomplete options and NPV analysis of the EAM project, we accept that Oakley Greenwood's estimated benefits demonstrate prudence of Powerlink's proposed

⁸⁸ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, p iv.

⁸⁹ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, p iv.

⁹⁰ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, p v.

⁹¹ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, p 27.

⁹² Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, pp 28–29.

⁹³ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, pp 60, 78–79.

option, and have included the efficiency adjusted EAM amount in our capex forecast and alternative estimate of total opex. We seek supporting information from Powerlink on this position in its revised proposal. Consistent with Oakley Greenwood's findings, we have not included capex or opex amounts for the HSE and S&S projects in our draft decision as Powerlink has not provided sufficiently clear descriptions of the scope of these projects, or complete NPV analysis that demonstrates net benefits from what is being proposed. While we agree that Powerlink has identified a potential need for additional expenditure in these areas, we seek further information, as outlined in Appendix D of Attachment 2, to enable us to determine actual prudence and efficiency in the final decision.

Recurrent and Devices

Powerlink proposed the Recurrent ICT project consisting of capex investments in core IT assets, including server, storage and data networking infrastructure, IT applications and video conferencing devices. Powerlink submitted that these expenditures are required to maintain the resilience of its IT services consistent with prudent asset lifecycle, and to meet evolving business requirements.⁹⁴ It further proposed the Devices ICT project consisting of capex to undertake cyclical renewal of IT devices, including laptops, desktop PCs, tablets and monitors, consistent with prudent asset lifecycle management principles.⁹⁵

Consistent with Oakley Greenwood's assessment of these projects, which found the proposed expenditure prudent and efficient based on historical trend,⁹⁶ we accept the investment need for the Recurrent and Devices ICT capex in full and have included these amounts in the capex forecast and our alternative estimate of total opex.

3.3.4.2 Step change: Physical security uplift

Powerlink proposed a \$16.4 million opex step change, and \$126.1 million in related capex, to raise its physical security capabilities to comply with new regulatory obligations under the *Security of Critical Infrastructure Act 2018* (SoCI Act), and regulatory reforms through the *Security Legislation Amendment (Critical Infrastructure) Bill 2022*. The expenditure is for various capital investments, with opex to increase specialist security capability and implement security upgrades at various sites.⁹⁷

While we consider action to uplift Powerlink's physical security is prudent, we have not included the \$16.4 million Physical security uplift step change in our alternative estimate of total opex. This is because the majority of the proposed amount will be provided for in the next regulatory period through opex approved in Powerlink's related 'physical security Cost Pass Through'.⁹⁸ We consider the remainder of the proposed step change is not required due to reductions in the proposed physical security capex detailed in Attachment 2.

⁹⁴ Powerlink, *Appendix 4.06, IT Plan 27–32* - January 2026, pp 30–32.

⁹⁵ Powerlink, *Appendix 4.06, IT Plan 27–32* - January 2026, pp 33–34.

⁹⁶ Oakley Greenwood, *Powerlink, 2027–32 Revenue Proposal IT and IT/OT Cyber Security Review*, September 2026, pp 79–81.

⁹⁷ Powerlink, *Appendix 5.05, Operating Expenditure Step Changes Approach*, January 2026, pp 5–7.

⁹⁸ AER, *Letter to Powerlink, SoCI Pass Through*, July 2026.

Table 3.11 Physical security uplift (\$ million, 2026–27)

	2027–28	2028–29	2029–30	2030–31	2031–32	Total
Powerlink’s proposal	3.3	3.3	3.3	3.3	3.3	16.4
AER alternative estimate	–	–	–	–	–	–
Difference (\$)	-3.3	-3.3	-3.3	-3.3	-3.3	-16.4

Source: Powerlink, *Appendix 5.05, Operating Expenditure Step Changes Approach*, January 2026; AER analysis.

Notes: Numbers may not add up to totals due to rounding. Values of ‘–’ represent zero.

In September 2025, Powerlink sought to recover capex and opex to increase its physical security in the current period to comply with SoCI Act reforms.⁹⁹ In July 2026, the AER approved a \$3.7 million opex cost pass through for the required uplift in Powerlink’s operational security.¹⁰⁰ Through the final year increment component of our opex forecasting methodology in this revenue determination, our alternative estimate of total opex includes the majority of the additional opex proposed by Powerlink in this step change. We consider this will provide for a prudent and efficient level of ongoing physical security opex consistent with Powerlink’s requirements under the SoCI Act reforms.

The capex component of the September 2025 cost pass-through was not approved by the AER as we considered it formed an integral part Powerlink’s broader 2027–32 physical security uplift proposal, and was better considered as part of this revenue determination.¹⁰¹ The capex attachment includes \$21.4 million of Powerlink’s proposed \$126.1 million physical security capex program on the basis that Powerlink has not justified the full costs against the SoCI reforms. Given the interdependencies between the proposed capex and opex, we have not included the remainder of the proposed physical security opex in the draft decision. Further information on this decision can be found in Attachment 2 Capital Expenditure – Confidential Appendix E.

3.3.4.3 Step change: Overnight network monitoring

Powerlink proposed an \$8.8 million opex step change to enable it to roster one additional system controller to the overnight shift in its network control room from 1 July 2027. Powerlink submitted that while this is not required under any new regulatory obligation, increasing staffing from one to two system controllers would address Australian Energy Market Operator (AEMO) feedback on the need for Powerlink to enhance its overnight operational oversight, particularly during periods of low demand and high renewable generation.¹⁰²

We have not included this step change in our alternative estimate of total opex. This is because while we consider the actions prudent, we consider the proposed \$8.8 million amount to be excessive, and that the lower, efficient incremental cost of having one additional staff member in the overnight control room will be provided for through the growth

⁹⁹ Powerlink, *SoCI Pass Through Application*, 30 September 2025.

¹⁰⁰ AER, *Letter to Powerlink, SoCI Pass Through*, July 2026, p 1.

¹⁰¹ AER, *Letter to Powerlink, SoCI Pass Through*, July 2026, p 3.

¹⁰² Powerlink, *Appendix 5.05, Operating Expenditure Step Changes Approach*, January 202, pp 8–9.

in total opex provided by the base and trend components of our alternative estimate of total open.

Table 3.12 Overnight network monitoring (\$ million, 2026–27)

	2027–28	2028–29	2029–30	2030–31	2031–32	Total
Powerlink’s proposal	1.8	1.8	1.8	1.7	1.7	8.8
AER alternative estimate	–	–	–	–	–	–
Difference (\$)	-1.8	-1.8	-1.8	-1.7	-1.7	-8.8

Source: Powerlink, *Appendix 5.05, Operating Expenditure Step Changes Approach*, January 2026; AER analysis.

Notes: Numbers may not add up to totals due to rounding. Values of ‘–’ represent zero.

Powerlink submitted that rostering one additional overnight network operator in its control room would ensure greater system stability and rapid response to contingencies, as well as timely coordination of increasing customer connections that require operational coordination in real time, often within short timeframes to align with power system security guidelines. Powerlink noted that the step change would enable it to transition to two system controllers on overnight shifts from the beginning of the next regulatory period, 1 July 2027, addressing regulatory ‘direction’ from AEMO, operational best practice, incident learning, and broader workforce and safety considerations.¹⁰³

In support of the step change Powerlink provided a letter from AEMO noting that, while AEMO ‘was not advocating on funding matters’, it supported ‘the intent of [Powerlink’s] proposal in principle and recognised it as a reasonable and forward-looking response to the changing risk profile facing power system operators’.¹⁰⁴

In response to an information request, Powerlink noted that the step change amount was based on an estimate of the current annual cost for one staff member for overnight network monitoring of \$1.8 million per year, or \$8.6 million over five years. These costs, which are included in Powerlink’s proposed base year, reflect the annual cost for a single network controller for a 12-hour overnight shift.¹⁰⁵

While not in response to any new regulatory obligation, we consider the proposed increase to overnight network monitoring staffing levels to be prudent and something that Powerlink may wish to consider implementing before the beginning of the next regulatory period. In general, staffing levels are a discretionary management decision considering the level of staffing required to meet operational and regulatory requirements. We consider the proposed \$8.8 million step change amount is likely to be excessive, and that the lower, efficient incremental cost of having one additional staff member in the overnight control room will be provided for through the base and trend components of our alternative estimate of total opex.

¹⁰³ Powerlink, *Appendix 5.05, Operating Expenditure Step Changes Approach*, January 2026, pp 8–9.

¹⁰⁴ Powerlink, *Response to AER information request, IR#012 Step changes, Qu 7, AEMO letter of support*, 5 June 2026.

¹⁰⁵ Powerlink, *Response to AER information request, IR#012 Step changes*, 24 April 2026, pp 4–5.

3.3.4.4 Step change: AEMO participant and cyber security fees

We have included the AEMO participant fees of \$80.1 million as a step change in our alternative estimate.

Table 3.13 AEMO participant and cyber security fees (\$ million, 2026–27)

	2027–28	2028–29	2029–30	2030–31	2031–32	Total
Powerlink's proposal	–	–	–	–	–	–
AER alternative estimate	15.0	15.5	16.0	16.5	17.0	80.1
Difference (\$)	15.0	15.5	16.0	16.5	17.0	80.1

Source: Powerlink, *2027–32 Operating Expenditure Model*, January 2026; AER analysis.

Notes: Numbers may not add up to totals due to rounding. Values of '–' represent zero.

AEMO participant and cyber security fees (AEMO fees) are charges that registered participants in the Australian energy market pay to AEMO to cover its operating costs. Under AEMO's FY26 Budget and Fees report, the core fees allocation for Powerlink is set at \$9.6 million.¹⁰⁶ In addition, AEMO has finalised the fee structure for its new cyber security coordination responsibilities. Powerlink's allocation under the FY26 budget is \$1.4 million.¹⁰⁷

Powerlink adjusted its forecast based on proposed participant fee structures discussed with AEMO in December 2025, resulting in a higher estimate than the FY26 published fee allocations.¹⁰⁸ Its fee growth reflects the guidance provided by AEMO in their FY26 Budget, which indicates an expected annual increase of approximately 6% for the NEM Core segment and is forecasting no growth for its Cyber Security and Resilience fees. We consider Powerlink's forecast for AEMO participant fees to be reasonable and appropriately reflects the guidance provided by AEMO.

Powerlink's proposal to include these fees as a category specific forecast would exclude these fees from the EBSS. However, we consider these fees should not be excluded, and our draft decision is to include them as a step change. The AEMC, in making a rule change to include the fees in revenue determinations, clearly stated its intention that the fees be subject to incentive regulation, including the EBSS.¹⁰⁹ We consider including them as a category specific forecast would be inconsistent with the intent of the AEMC in making this rule change, and instead consider they should be included in the total opex allowance as a step change.

3.3.5 Category specific forecasts

Powerlink's proposal included 2 category specific forecasts, which were not forecast using the base-step-trend approach. These were for:

¹⁰⁶ AEMO, *Final, Budget and Fees FY26*, June 2025, p 44.

¹⁰⁷ AEMO, *Final, Budget and Fees FY26*, June 2025, p 48.

¹⁰⁸ Powerlink, *Response to information request IR#012b*, May 2026.

¹⁰⁹ AEMC, National Electricity Amendment (RECOVERING THE COST OF AEMO'S PARTICIPANT FEES) RULE 2022, October 2022, p i.

- AEMO participant fees (\$80.1 million)
- Debt raising costs (\$22.0 million).

As discussed in section 3.3.4.4, we have included AEMO participant fees as a step change in our alternative estimate and not a category specific forecast as proposed by Powerlink.

3.3.5.1 Debt raising costs

We have included debt raising costs of \$20.3 million in our alternative estimate. This is identical to the estimate proposed by Powerlink.

Table 3.14 Debt raising costs (\$ million, 2026–27)

	2027–28	2028–29	2029–30	2030–31	2031–32	Total
Powerlink’s proposal	4.3	4.3	4.4	4.4	4.5	22.0
AER alternative estimate	4.3	4.1	4.0	4.0	3.9	20.3
Difference (\$)	0.0	-0.2	-0.4	-0.4	-0.6	-1.6

Source: Powerlink, *2027-32 Operating Expenditure Model*, January 2026; AER analysis
 Notes: Numbers may not add up to totals due to rounding. Values of ‘–’ represent zero.

Debt raising costs are transaction costs incurred each time a business raises or refinances debt. Our preferred approach is to forecast debt raising costs using a benchmarking approach rather than a service provider’s actual costs in a single year. This provides consistency with the forecast of the cost of debt in the rate of return building block. This is the basis for our alternative estimate shown in Table 3.14. We used our standard approach to forecast debt raising costs, which is discussed further in Attachment 1.

Glossary

Term	Definition
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AIO	Annual information order
capex	capital expenditure
CCP34	Consumer Challenge Panel sub panel 34
EAM	enterprise asset management
EBA	enterprise bargaining agreement
EBSS	efficiency benefit sharing scheme
ICT	information and communications technology
HSE	health, safety and environment
MPFP	multilateral partial factor productivity
MTFP	multilateral total factor productivity
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
NPV	net present value
NSP	network service provider
OT	operational technology
opex	operating expenditure
PPI	partial performance indicator
PTRM	post-tax revenue model
RAB	regulated asset base
RBA	Reserve Bank of Australia
SaaS	software as a Service
SoCI	security of critical infrastructure
S&S	support and sustain

TNSP	transmission network service provider
TSAP	Transmission Stakeholder Advisory Panel