Consumer Challenge Panel

AER Consumer Challenge Panel (CCP) 34

Powerlink Queensland Transmission Revenue Reset 2027-32

Consumer Engagement Report and Response to the AER Issues Paper

Advice to the Australian Energy Regulator

Report

13 May 2026

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Acknowledgement of country

We recognise the traditional owners of the lands on which the Australian Energy Regulator and Powerlink operate. We respect the Elders of these nations, past and present, along with emerging leaders.

Acknowledgements

CCP34 wishes to acknowledge the staff from Powerlink, including the senior executive, who have been generous with their time, always willing to share insights into the business and to include us in their engagement activities leading up to the Regulatory Proposal.

We were also welcomed by the Powerlink Revenue Proposal Reference Group (RPRG) to all their meetings and to participate where appropriate.

We extend our gratitude to the AER staff for their support and guidance throughout this process.

Confidentiality

We wish to advise that, to the best of our knowledge, this Advice neither presents any confidential material nor relies on confidential information for any aspect of this Advice.

About the Consumer Challenge Panel sub-panel CCP34

The AER established the Consumer Challenge Panel (CCP) framework in July 2013 as part of its Better Regulation reforms. These reforms aimed to deliver an improved regulatory framework focused on the long-term interests of consumers.

The CCP assists the AER to make better regulatory determinations by providing input on issues of importance to consumers. The expert members of the CCP bring consumer perspectives to the AER to better balance the range of views considered as part of the AER's decisions.

CCP34 is a sub-panel of the AER's Consumer Challenge Panel. The AER established the sub-panel to focus specifically on the AER's regulatory determinations for the Victorian (AusNet Services) and Queensland (Powerlink) electricity transmission businesses for the period 2027-2032.

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Executive summary

Since March 2025, Consumer Challenge Panel sub-panel 34 (CCP34) has observed Powerlink's engagement with its customers and stakeholders on the 2027–32 regulatory proposal (RP4). This advice to the AER reflects those observations, together with CCP34's views on key aspects of the proposal lodged by Powerlink in January 2026.

CCP34's observations over the course of the reset process are that Powerlink's proposal has been developed through a mature, transparent and well-structured engagement process and reflects the increasing investment pressures facing the Queensland transmission network. At the same time, the proposal represents a material increase in forecast expenditure and customer prices relative to previous periods, particularly in relation to replacement capital expenditure. In reviewing the proposal, CCP34 focused particularly on matters relevant to long-term customer outcomes, including the effectiveness of consumer engagement, affordability and price impacts, the scale and drivers of capital investment, the treatment of expenditure incentives and ex-post review mechanisms, and the extent to which investment timing, scope and optimisation were demonstrated to deliver value to consumers.

The engagement process subjected the proposal to sustained and informed external challenge and materially improved its transparency, structure, communication and evidentiary support, particularly in relation to deliverability, uncertainty and customer impacts, despite not fundamentally altering the underlying expenditure profile or asset investment framework.

Like recent regulatory proposals in other jurisdictions, Powerlink's 2027–32 proposal represents a material step-up from current allowances across all building blocks, driven primarily by increased capital investment (and resulting growth in the Regulated Asset Base), alongside a higher allowable rate of return. For customers, this translates to transmission charges increasing at around 5% p.a. (nominal), with an indicative first-year impact of approximately +$7 for residential and +$14 for small business bills. This is a marked shift away from the constructive discomfort approach[1] adopted by Powerlink in its revenue proposal for the previous 2022–27 regulatory period, toward a more explicitly cost-reflective, bottom-up framework.

The ultimate impact on customer prices nevertheless remains uncertain. Queensland's electricity demand and energy consumption are forecast to increase steadily over the period, with Powerlink's Central scenario projecting transmission-delivered energy to grow by approximately 14% over 2027-32, driven by industrial electrification, new large loads and electric vehicle uptake. System stability, related to the continued fall in minimum demand and driven by the uptake of rooftop generation, presents a risk to system security.

Energy forecasts are also a critical determinant of customer prices, as regulated revenues are recovered over forecast energy volumes, and higher throughput can moderate unit prices. Powerlink's forecasts remain highly sensitive to the timing, scale and diversity of new large-load connections – including prospective data centre developments and the retirement of Gladstone Power Station – which materially influence forecast demand growth, network utilisation and resulting prices to consumers.

[1] For a succinct explanation of the constructive discomfort approach, see for example the cover letter to Powerlink's 2022-27 Revenue Proposal dated 28 January 2021 in which Powerlink's Chief Executive wrote: "Our business has pushed itself to develop and propose the key positions on forecast capital and operating expenditure in our proposal. This has created constructive discomfort within the business as ultimately it represents stretch targets, especially for operating expenditure, which we will need to do our best to deliver on." This is available on the AER website at https://www.aer.gov.au/industry/registers/determinations/powerlink-determination-2022-27/proposal

Consumer Engagement

Powerlink's consumer engagement has built on the framework that received positive feedback from both consumers and the AER in the previous (2022–27) reset. Centred on the well-credentialed Revenue Proposal Reference Group (RPRG), which draws on — yet operates independently from — Powerlink's Customer Panel, the engagement process has been mature, credible and respectful, with active participation from Powerlink's senior executives.

The RPRG operated within a structured, co-designed program and maintained an appropriate relationship with Powerlink that balanced close working involvement with the need for independent challenge. The upward pressures on Powerlink's costs have increased markedly, and the mitigating impact of the constructive discomfort approach is not present in this reset proposal.

Engagement was complemented by targeted forums with large customers and industry, particularly in Central Queensland where much of the proposed capital investment is concentrated and has clearly influenced the development and transparency of the proposal, including approaches to output measurement and cost allocation.

The RPRG is not a substitute for detailed regulatory prudency review, with its members primarily consumer representatives and energy users, not specialist asset management or engineering experts. The assessment of expenditure efficiency, replacement timing and asset risk methodologies appropriately remains with the AER and its advisers.

The RPRG engagement process is nevertheless valuable and effective. It subjected the proposal to sustained external scrutiny, improved transparency and accountability, and tested whether the proposal was understandable, credible and capable of acceptance from a customer perspective. Its influence is best characterised as refining ***how*** the proposal is developed and explained, rather than fundamentally altering the underlying investment decisions themselves.

Following extensive engagement and challenge, the RPRG concluded that the proposal is "capable of acceptance" within the framework established for the engagement process,[2] notwithstanding the materially higher costs proposed for consumers and the continuing need for close scrutiny of expenditure efficiency, deliverability and future price impacts.

Given the high quality and transparency of the engagement process, and the marked skills and industry experience of the RPRG members, CCP34 recommends that the AER should have regard to the RPRG's advice, particularly in relation to operating expenditure inputs, project deliverability and the treatment of capital forecasts.

Affordability

Affordability emerged consistently throughout Powerlink's engagement as an important customer concern, particularly in the context of broader cost-of-living pressures and rising energy prices. The RPRG examined and challenged, at a high level, the principal capital and operating expenditure drivers contributing to the proposed revenue and price outcomes.

While the proposal and engagement process place considerable emphasis on affordability, there is less evidence of how affordability considerations materially influenced expenditure outcomes, investment timing, risk calibration or the overall scale of the proposal. The engagement process appears to have focused primarily on improving customer understanding of the underlying expenditure pressures and the resulting price impacts, rather than demonstrating where expenditure scope, timing or risk appetite had been materially adjusted in response to affordability concerns.

Powerlink may have inherently made trade-offs or moderated aspects of the proposal in response to customer price impacts. These trade-offs are not always clearly identifiable within the proposal itself. In CCP34's view, clearer articulation of how customer affordability considerations influenced investment and expenditure decisions would have strengthened the customer value proposition underpinning the proposal.

Capital Investment

Powerlink is proposing a substantial increase in capital expenditure, consistent with broader transmission sector trends, and following a period of relatively constrained investment. The program is predominantly driven by asset replacement rather than load growth. Much of the traditional capacity augmentation investment has shifted to the Priority Capital Investment (PTI) framework, now sitting adjacent to the regulated capital investment programme.

The proposal includes significant uplift in secondary systems expenditure, reflecting large-scale renewal of protection and control assets, alongside increased easement costs driven by the need to deliver projects in a high-renewables environment. This area deserves particular attention regarding the need, efficiency and timing of this work.

Replacement decisions are underpinned by Powerlink's asset Health Index (HI) framework. This methodology is substantially mature for primary plant, but less so for protection and control (secondary system) assets. Heavily influenced by factors such as age and obsolescence, the application of this framework to secondary systems is less transparent, and the supporting option analysis appears limited, with insufficient testing of other options for timing and scope.

Compared to peers such as AusNet Services, the business cases we have reviewed suggest that Powerlink places greater reliance on internal condition and risk thresholds, with less explicit evidence of economic optimisation of replacement timing. This raises questions as to whether investment decisions are fully considered to minimise long-term consumer costs.

The previous reset appears to have placed greater weight on top-down efficiency outcomes and may have reduced the emphasis on scrutinising Powerlink's investment appraisal methodologies, to some extent limiting visibility into how individual business cases were developed and tested.

While consumer engagement has improved the transparency and structure of the proposal, it has had limited influence on the scope and timing of the capital program. Investment decisions remain largely driven by internal asset management frameworks, constraining the extent to which consumer preferences shape key cost drivers.

In addition, the current proposal may not fully capture the extent of network investment that could emerge during the 2027–32 period. Powerlink has identified nine substantial contingent projects, including investments associated with Gladstone-region load growth, system strength and broader network augmentation requirements. The extent, timing and recovery of these investments remain uncertain and may have consequential implications for future customer prices. In particular, the timing and nature of the retirement of Gladstone Power Station will have an impact on the triggering of some of these contingent projects.

It is important that the AER subject the contingent projects to close scrutiny, noting that such projects do not always receive the same depth of consumer engagement, option assessment and customer affordability testing as expenditure included within the primary regulatory proposal.

Treatment of Capital Expenditure Sharing Scheme (CESS) and ex-post review (2022–27)

An outcome of Powerlink's 2022–27 proposal, which emphasised cost restraint, was a level of planned expenditure that proved extremely challenging to deliver in the context of exogenous cost pressures and rapidly evolving system requirements.

In this context, ex-post outcomes or CESS penalties could create unintended incentives, discouraging networks from pursuing ambitious efficiency improvements in future proposals. At the same time, it is important to ensure that the step-change up in forecast expenditure is not simply an inefficient rebound from previously constrained settings.

The CESS and ex-post processes applied by the AER have limited flexibility for interpretation or application. The AER will need to be very clear in distinguishing between the impact of external cost pressures and internal decision-making factors such as deferral, scope and risk calibration. Clear articulation of this approach in the draft decision will be important to support efficient expenditure outcomes while maintaining incentives for cost discipline over time.

Powerlink and the RPRG discussed Powerlink's proposed reallocation of certain costs incurred in the early years of the current period from the regulated accounts. Consistent with matters raised in the AER's Issues Paper, these arrangements, which we view as reasonable, warrant careful examination to ensure cost allocation and customer risk exposure remain transparent and appropriate.

Key considerations for the AER

In addition to asset-level considerations, there are other specific matters regarding the transparency, consistency and robustness of investment decision-making that the AER could consider:

- **Transparency and traceability**: The line of sight from asset condition and risk assessment through to investment outcomes could be much clearer, particularly for programmatic replacement activities.
- **Use of probabilistic analysis:** It is difficult to see where some key investment decisions are underpinned by probabilistic assessment of failure risk and consequences, with reliance on deterministic assumptions in some cases.
- **Governance and challenge:** There is limited visibility regarding the extent to which internal processes provide independent challenge to business cases and underlying assumptions.
- **Influence of consumer engagement:** While engagement has improved transparency, there is limited evidence that it has materially influenced the scope, timing and scale of investment.
- **Improved forecast integration**: Strengthen alignment between demand forecasts and investment decisions and deliverability, including sensitivity analysis to different load and DER scenarios.

Strengthening these elements would improve confidence that the proposed expenditure reflects a considered approach to expenditure pressure that is in the long-term interests of consumers.

Conclusion

Overall, CCP34 considers that Powerlink's proposal for 2027-32 is credible and supported by a mature and transparent engagement process. The step-change in expenditure – particularly in replacement capex – places increased importance on demonstrating that investment timing and scope are prudent and efficient, and aligned with consumer interests. While the underlying need for reinvestment is generally well established, there is less visibility on whether decisions have been optimised from a whole-of-system, least-cost perspective.

For the AER, the central task is to strike an appropriate balance: supporting prudent and efficient expenditure, while rigorously testing the calibration of risk, timing and scope. This includes careful scrutiny of replacement decision frameworks, and clear articulation of the extent to which expenditure outcomes reflect external cost pressures, delivery constraints and investment efficiency decisions.

Getting this balance right will be critical to ensuring that consumers receive value from the proposed investment for 2027-32 while preserving incentives for efficient expenditure planning by utilities over the longer term.

1. Consumer and stakeholder engagement

1.1. The engagement process

Powerlink states that its engagement approach for the 2027–32 proposal builds on and refines the framework adopted in the previous regulatory period, with the Revenue Proposal Reference Group (RPRG) continuing as the central engagement mechanism.[2]

1.1.1. Joint planning for engagement

The engagement plan for the reset was initiated in late 2024 through a planning exercise that highlighted:

- engagement would proceed under the oversight of Powerlink's long-term Customer Panel
- a clear commitment to the engagement from senior management
- the use of an 'Engagement Scope Map' (often referred to as a 'bubble diagram') to identify areas of greatest value for detailed discussion
- a commitment to a 'capable of acceptance' benchmark
- a primary focus on a Revenue Proposal Reference Group (RPRG), comprising customer representatives from the Customer Panel, Powerlink representatives, and invited stakeholders including the AER and the AER CCP.

Unlike distribution businesses, transmission network businesses typically engage consumers on broader system-level matters rather than customer-facing service issues such as billing, supply reliability or metering. Transmission investments can have significant economic and operational implications across the power system, particularly for landholders, directly connected customers and generators. It is therefore appropriate that engagement focuses on matters such as network planning, maintenance and capital investment, system reliability and stability, and pricing and connection arrangements for transmission-connected users.

Powerlink identified these priorities and engaged a range of stakeholder groups, establishing an audience that reasonably reflects the interests of its customers. The composition of the RPRG was broadly appropriate for a transmission reset, but it lacked direct participation from small and medium business enterprises and distribution businesses, as well as coal and gas generators, and emerging stakeholder groups such as environmental NGOs, First Nations representatives and prospective large-load proponents. Their participation may have strengthened the deliberations of the group, including in relation to testing of forecasting assumptions and cost allocation issues.

While the formal membership of the RPRG was relatively concentrated to six members, Powerlink also stated that it sought broader input through supplementary consultation activities, including engagement with commercial and industrial customers, regional forums and broader customer research. Emerging large-load developments, including prospective data centre connections, were recognised within Powerlink's planning and forecasting materials, although direct representation of these interests within the RPRG itself remained comparatively limited.

Overall, the joint engagement planning delivered a balanced agenda and framework, was well supported by Powerlink's executive, and provided an effective platform for the operation of the RPRG and the elicitation of meaningful feedback.

[2] Powerlink Queensland, *2027–32 Revenue Proposal Engagement Plan*, June 2025

1.1.2. Interaction with distributors

It is useful to consider the role of distributors in the transmission reset engagement process. On one hand, there is a close working relationship between transmission and distribution service providers in Queensland, supported by a common shareholder and aligned strategic objectives – noting that the Queensland Energy Roadmap 2025[3] is more strongly focused on generation development than its predecessor, the Queensland Energy and Jobs Plan (QEJP).[4]

On the other hand, distributors often view transmission costs as largely a pass-through and therefore have limited direct involvement in the transmission regulatory reset process.

In our view, it is important to demonstrate how distributors and the transmission business interact in areas such as risk allocation (between transmission, distribution and consumers), shared planning assumptions, integrated project delivery, and the pursuit of network efficiencies. We encourage the AER to seek greater transparency in this area.

A key input into the transmission plan is the energy forecast provided by Energy Queensland (EQL). We suggest the AER consider two issues regarding the relationship between Energy Queensland and Powerlink in the reset context:

a) the incentives on distributors, as key contributors to demand forecasts, to adopt a balanced approach to risk and avoid over-forecasting demand growth. To what extent does Powerlink independently verify information from EQL? (noting that in this reset, augmentation of connection points is not a significant cost item)

b) Greater clarity is warranted regarding cost-sharing arrangements for large distribution-connected loads (such as data centres) that may in turn trigger a transmission upgrade. Distributors may offset augmentation costs through their own capital contribution arrangements. Greater clarity is needed regarding how material transmission augmentation costs resulting from large step increases in distribution demand should be allocated and recovered.

   Should part of the contribution flow from the distributor to the transmission operator, or should the transmission augmentation be part of routine capacity upgrades funded by all customers?

1.1.3. Direct customer and stakeholder contact

Over the course of the engagement, Powerlink undertook a range of information sessions with commercial and industrial customers, including surveys and one-on-one meetings. In addition, regional information sessions were held through Powerlink's Transmission Network Forums.

While the CCP did not attend these sessions directly, publicly available materials indicate that the forums were well received and provided useful context for stakeholders to understand the proposal.

We expect that this engagement will support informed responses to the AER's call for public submissions.

1.2. The Revenue Proposal Reference Group (RPRG)

1.2.1. CCP observations

The Revenue Proposal Reference Group (RPRG) was established in February 2025 to provide customer-focused input into Powerlink's 2027–32 Revenue Proposal.[5] The group considered whether

[3] Queensland Government, Queensland Energy Roadmap (2025) https://www.epw.qld.gov.au

[4] Available at https://cabinet.qld.gov.au/documents/2022/Sep/QEJP/Queensland%20Energy%20and%20Jobs%20Plan.DOCX

[5] Powerlink Queensland, *2027–32 Revenue Proposal Reference Group (RPRG) Terms of Reference* (Feb 2025)

the proposal reflects long-term consumer interests, promotes network efficiency, and aligns with regulatory requirements.

This enabled deeper and more frequent engagement, guided by its Terms of Reference. CCP34 members were invited to attend and participate in all the RPRG meetings.

Our observations include:

a) Powerlink demonstrated a clear commitment to consumer engagement, with strong representation from senior executives, including at times the acting CEO.

b) The RPRG typically met monthly under a structured and well-developed engagement program. Members were generally familiar with Powerlink and were able to engage effectively from the outset.

c) Meetings were well facilitated and supported by appropriate pre-reading, a flexible agenda responsive to participant needs, and accurate record keeping.

d) The RPRG represented a balanced mix of regulatory expertise and informed customer perspectives, including representatives of large customers. Energy Queensland, the primary distribution stakeholder, was not directly represented, and nor were small business customers or coal and gas generators. While some members contributed more frequently than others, all participants were encouraged and able to contribute.

e) The RPRG challenged Powerlink across technical, commercial and customer-focused issues.

f) There was no evidence that the group was dominated by particular commercial interests or that members pursued narrow objectives.

g) Information was presented by relevant subject matter experts within Powerlink, rather than solely by the regulatory team.

h) Capex 'deep dives' tended to focus on broader subject areas rather than detailed examination of individual business cases. While investment need was discussed extensively, there was comparatively less focus on delivery efficiency and optimisation.

i) While information was necessarily presented from Powerlink's perspective, it was not unduly leading. The expertise within the RPRG enabled members to effectively challenge assumptions and explore other approaches where appropriate.

Notwithstanding these strengths, the ability of engagement processes to materially influence underlying investment decisions appeared more limited in areas driven primarily by internal asset management and risk frameworks.

1.2.2. Independence of the RPRG

Independence is a critical consideration for the RPRG.

Throughout the engagement, we did not observe any action that suggested that the RPRG's independence had been compromised. Information was generally presented in a balanced manner, and the group frequently sought to test counterfactuals and other options.

While some technical material was necessarily complex, the RPRG frequently sought assurance through broader questions regarding forecast validation, including counterfactual or 'do minimum' scenarios, and comparative approaches adopted by other utilities.

We did not observe any behaviour that could be interpreted as advancing the interests of stakeholders with commercial relationships with Powerlink.

Powerlink supported the independence of the RPRG through the appointment of an independent chair and by providing remuneration arrangements that enabled Customer Panel members to meet independently of Powerlink. We also observed informal interactions outside formal meetings, where members sought additional information or provided feedback directly from Powerlink staff.

1.2.3. Meeting content

The RPRG met formally thirteen times in accordance with its engagement program as well as several 'ad-hoc' additional meetings. These sessions generally involved detailed presentations and workshops led by Powerlink staff on key elements of the developing proposal, supported by discussion, challenge and requests for further information from a customer perspective.

Discussions typically focused on clarifying assumptions, exploring implications, and testing the reasonableness of proposed approaches. At times, discussions extended into more detailed regulatory and economic considerations.

The RPRG reported back to the full Customer Panel after each meeting, seeking feedback and broader input.

Key topics included:

- engagement model and narrative
- forecasting approach and demand uncertainty
- capital and operating expenditure
- deliverability and workforce constraints
- cybersecurity and ICT
- pricing and cost allocation
- depreciation and CESS
- operational technology requirements.

1.2.4. CCP involvement with the RPRG

Members of CCP34, along with the AER, were invited to attend and participate in all RPRG meetings. This included sharing observations from other regulatory resets and providing context on AER approaches and precedents.

CCP34 members were invited to be active participants in the meetings. Our involvement included observations of resets in other jurisdictions including common themes, novel approaches, effective practices and lessons observed in other jurisdictions. We were very conscious not to guide the RPRG in its thinking, nor to represent the AER in any way.

At least one CCP34 member attended each RPRG meeting from early 2025, sometimes in-person and sometimes remotely.

1.3. Powerlink's engagement objective

1.3.1. Capable of Acceptance

Powerlink adopted an overarching objective of delivering a Revenue Proposal that is "capable of acceptance" by customers, the AER and Powerlink itself.

While only the AER can ultimately determine whether this standard is met, the concept provided a useful reference point throughout the engagement process, focusing attention on demonstrating the credibility, transparency and customer acceptability of the proposal, while also testing Powerlink's explanation of prudency and efficiency issues.

The RPRG recognised that the operating environment has changed since the AER's Better Resets Handbook was developed. However, it sought to retain the intent of that guidance, applying four criteria to assess engagement quality:

1. Nature of engagement – sincerity, independence and balance
2. Breadth and depth – appropriate scope, consultation and access to expertise

3. Evidenced impact – clear linkage between engagement and proposal development
4. Overall credibility – whether the proposal was supported by sufficient explanation, supporting analysis and customer engagement to be considered capable of acceptance.

Importantly, the RPRG did not regard its role as independently validating Powerlink's forecasts or business cases, but rather as assessing whether the proposal development process, supporting rationale and customer engagement were credible, transparent and capable of acceptance.

1.4. Summary – CCP34 comments on the engagement process

Overall, the engagement process is consistent with best practice observed in recent regulatory resets. It has been robust, extensive and credible.

While there were close working relationships between some RPRG members and Powerlink staff, we have no concerns regarding the independence of the RPRG or its ability to maintain an appropriate degree of separation.

Powerlink's engagement to inform its 2027–32 proposal has been professional, appropriate and effective. Powerlink has committed sufficient resources and has made effective use of a capable and representative group of stakeholders through both the Customer Panel and the RPRG.

We have confidence that any submission made by the RPRG to the AER will reflect the considered views of an informed and independent customer and stakeholder group.

2. Where engagement has influenced the proposal

The RPRG engagement provided sustained and iterative challenge across the development of Powerlink's 2027–32 Revenue Proposal. The meetings progressed from early consideration of pricing, expenditure trends and engagement design, through to examination and challenge of the proposed capital and operating expenditure, deliverability, depreciation, incentive mechanisms, revenue impacts and the final form of the proposal itself.

Across the engagement program, issues were often revisited and refined as Powerlink's proposal developed. While the engagement does not appear to have materially altered the overall level or composition of expenditure, it had a meaningful influence on the structure, transparency and articulation of the proposal, and in some areas influenced specific positions adopted by Powerlink.

The RPRG's role was not to replicate the AER's technical prudency assessment, nor to independently validate Powerlink's engineering, asset health or replacement modelling methodologies. Rather, its function was to test whether the proposal was transparent, credible, reasonably explained and capable of acceptance from a customer and stakeholder perspective.

Judged against that objective, the engagement process has been effective. The RPRG applied sustained and informed challenge across a broad range of issues and materially improved the transparency, communication and evidentiary support of the proposal, even where it did not significantly alter the underlying expenditure profile or asset investment framework.

Stakeholder input materially influenced the transparency, structure, supporting evidence and communication of the proposal, particularly regarding deliverability, uncertainty, customer impacts and regulatory credibility.

2.1. Areas where engagement materially influenced the proposal

2.1.1. Cost forecasting methodology and transparency

The RPRG placed consistent emphasis on understanding and testing Powerlink's cost forecasting framework.[6] This included challenge regarding the appropriateness of the FY26 opex base year, whether the base year was efficient, how increasing network complexity was reflected in output growth measures and step changes, and whether proposed productivity improvements were achievable.

The RPRG questioned whether cost drivers were being captured consistently across opex, capex and step changes. Later discussions tested the extent to which external cost pressures, Enterprise Agreement outcomes, contractor market conditions and changes in technology costs were reflected in the forecasts.

These discussions contributed to improved disclosure of forecasting assumptions, clearer articulation of cost drivers and stronger presentation of the relationship between historical expenditure, forecast expenditure and the operating environment.

2.1.2. Capital expenditure – scale, composition and option selection

Capital expenditure was a central and recurring focus of the engagement.[7] The RPRG examined the drivers of the 66% increase in forecast capex, including higher unit costs, increased workload, replacement needs, easement requirements and deliverability constraints.

The group tested whether project deferrals reflected efficient portfolio reprioritisation rather than cost shifting, whether easement expenditure was required for projects that may not proceed within the

[6] Powerlink Queensland, *Revenue Proposal Reference Group Meeting 2 – April* 2025

[7] Powerlink Queensland, *Revenue Proposal Reference Group Meeting 4 – May* 2025

period, and whether the proposal clearly distinguished between ex-ante capex, contingent projects, Priority Transmission Investments and ISP-related projects.

This led to specific follow-up actions for Powerlink to provide clearer explanations of deferred projects, excluded projects and the treatment of contingent and ISP-identified projects.

To some extent, the RPRG explored Powerlink's general approach to option selection, including whether deferral or lower-cost alternatives were actively considered, and how Powerlink balances cost-effectiveness, technical feasibility and risk. Powerlink's response was that it does not allow asset performance to fall below critical thresholds, and that reinvestment is often approached at a site level rather than purely component-by-component.

This analysis was largely conducted at a high level and did not extend to detailed examination of individual business cases. Elsewhere in this advice, CCP34 raises concerns regarding the determination of the asset Health Index, the depth of options analysis, and the extent of timing and risk sensitivity testing undertaken for individual project proposals.

Overall, the engagement helped clarify the basis of Powerlink's replacement and reinvestment framework but did not materially alter the scale or timing of the proposed program.

2.1.3. Priority Transmission Investments (PTIs)

The RPRG acknowledged the significant expansion in Powerlink's investment programme associated with Priority Transmission Investments (PTIs) and the broader energy transition, while also expressing concern regarding the scale, governance and customer affordability impacts of these projects. The RPRG noted that Powerlink's draft proposal involved a substantial increase in forecast capital expenditure and sought greater transparency regarding the expected network pricing impacts of PTIs, including projects that sit outside the core 2027–32 revenue proposal.

In response, Powerlink provided additional pricing impact scenario analysis covering major externally directed investments such as the Gladstone PTI and associated system strength projects.

The RPRG also highlighted the distinct regulatory treatment of PTIs under the Queensland legislative framework, under which Ministers may direct project delivery and determine the allocation of PTI expenditure into the regulatory asset base. While the RPRG did not oppose PTIs or the broader SuperGrid[8] development in principle, it emphasised the importance of maintaining appropriate transparency, customer protections and regulatory accountability given the scale, complexity and execution risks associated with these large strategic transmission investments.

2.1.4. Operating expenditure and cost drivers

Operating expenditure was tested in some detail, including base year selection, trend assumptions, step changes and input cost pressures.[9] The RPRG challenged Powerlink on the use of FY26 as the base year, the implications of declining productivity, the treatment of Enterprise Agreement costs, and whether productivity offsets had been realised.

The December 2025 meeting examined this in more detail, with Powerlink explaining that the Enterprise Agreement had an estimated average wage impact of around 30 per cent over the life of the agreement, partly offset by productivity savings. The RPRG also explored the impact of BPIC (Best Practice Industry Conditions, as legislated by the then Queensland Government but since

[8] The "Queensland SuperGrid" is the Queensland Government's long-term electricity system development program involving the expansion of transmission infrastructure, Renewable Energy Zones and associated renewable generation and storage assets across Queensland. See https://www.treasury.qld.gov.au/files/Queensland-Energy-Roadmap-2025-25-043.pdf

[9] Powerlink Queensland, *Revenue Proposal Reference Group Meeting 6 – 16 July* 2025

rescinded)[10] on contractor markets, the treatment of cloud-based services, and the interaction between the Queensland Energy Roadmap and Powerlink's opex forecast.

This engagement improved transparency around opex cost drivers, but the RPRG's influence over the overall opex forecast was limited, particularly where cost pressures reflected external market or regulatory factors.

The RPRG's consideration of operating expenditure step changes was relatively limited. The group identified and described four step changes — relating to physical security obligations under the Security of Critical Infrastructure framework, transition to cloud-based systems, control room staffing, and synchronous condenser maintenance — but did not subject these to detailed scrutiny regarding scope or quantum. This reflects the largely exogenous nature of these drivers, which were broadly accepted as necessary.

The RPRG identified potential interactions between step changes and other elements of the opex forecast, particularly the treatment of increasing system complexity within both trend and step components. Overall, while the RPRG accepted the underlying drivers of the step changes, these measures received only limited testing from an efficiency perspective.

2.1.5. Pricing methodology and price path

Pricing is one of the areas where the RPRG has clearly influenced the proposal.[11] The RPRG accepted that some pricing methodology changes were largely administrative and appropriately treated at an "inform" level, with more active engagement on price path smoothing.

The RPRG supported further exploration of a more balanced smoothing approach that reduced the first-year price impact and provided a steadier path across the period. Powerlink later adopted a custom smoothing approach consistent with RPRG and surveyed customer preferences. This is a clear example of engagement influencing the form of the proposal.

2.1.6. Deliverability and program risk

Deliverability became a significant theme in the later meetings.[12] The RPRG asked how Powerlink would deliver the proposed capital program given workforce constraints, contractor availability, CopperString[13] and broader market competition. It also asked for evidence that Powerlink's improved governance and two-stage approval process were producing better outcomes.

Powerlink responded by explaining its lessons-learnt process, project governance improvements, contractor panel arrangements, apprentice intake, regionalisation of staff and portfolio-level delivery assessment. The RPRG encouraged Powerlink to include details of these processes and supporting performance data in the Revenue Proposal, and Powerlink subsequently included additional deliverability material and appendices.

This is a meaningful area of engagement influence. It did not reduce the program, but it improved the evidence base and transparency around whether the program can be delivered.

2.1.7. Incentives, CESS, output growth and ex-post review

The RPRG gave close attention to the Capital Expenditure Sharing Scheme (CESS) and potential ex-post review of current-period capex.[14,15] It encouraged early engagement on ex-post matters and sought clarity on timing, information availability and customer impacts.

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[10] See https://www.hpw.qld.gov.au/__data/assets/pdf_file/0014/20435/best-practice-industry-conditions.pdf

[11] Powerlink Queensland, *Revenue Proposal Reference Group Meeting 6 – 16 July* 2025

[12] *Powerlink Queensland, 2027–32 Revenue Proposal – Appendix 4.09 Deliverability Assessment* (Jan 2026)

[13] See https://www.powerlink.com.au/projects/copperstring

[14] Powerlink Queensland, *Revenue Proposal Reference Group Meeting 9 – 15 October* 2025

Powerlink also sought feedback from the RPRG regarding an alternative approach to CESS carryover that would re-state the allowance to reflect cost escalations outside Powerlink's control. The RPRG explored whether this could create precedent, whether it would increase prices for customers, and whether Powerlink could demonstrate how much of the overspend was outside its control. Powerlink indicated that if the RPRG was not supportive it would be unlikely to proceed.

This is one of the more direct examples of RPRG influence: the group was not merely informed of the proposal but was asked to provide a view on whether the approach should proceed.

2.1.8. DMIAM and non-network alternatives

The RPRG also considered Powerlink's position on the Demand Management Innovation Allowance Mechanism (DMIAM). Powerlink explained that it did not consider the DMIAM necessary to incentivise additional activity, as existing initiatives around flexible loads, congestion management, contingency support and battery developer guidance would continue in any event.

Following consideration of Powerlink's briefing,[16] the RPRG supported Powerlink's proposal not to apply for the DMIAM in the 2027–32 Revenue Proposal.

This issue is discussed in more detail later in this report in CCP34's response to question 18 of the AER Issues Paper.

2.2. Influence of later-stage engagement on the Revenue Proposal

As the engagement process progressed, the focus of discussion evolved from high-level strategic issues toward detailed examination of proposal deliverability, expenditure justification, uncertainty management and regulatory credibility. Later Revenue Proposal Reference Group (RPRG) meetings demonstrate that stakeholder feedback influenced not only individual expenditure issues, but also the structure, evidentiary basis and communication approach of the final Revenue Proposal.

A recurring theme in later meetings was the RPRG's focus on proposal deliverability and the adequacy of supporting evidence.

Members requested additional information regarding:

- project governance,
- delivery performance,
- contingency treatment,
- workforce capability and
- expenditure estimation practices.

In response, Powerlink committed to provide additional supporting information, including detailed deliverability assessment material and project performance metrics by project value range. Subsequent proposal documentation incorporated additional appendices and supporting information relating to deliverability, lessons learned and project governance processes.[17]

In the later engagement, stakeholders materially influenced the presentation and communication of the proposal itself. RPRG feedback influenced:

- the consolidation of historical and forecast expenditure information into integrated capital expenditure and operating expenditure chapters,

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[15] Powerlink Queensland, *Revenue Proposal Reference Group Additional Meeting – November* 2025

[16] See Powerlink's DMIAM briefing paper to RPRG which is available under the heading RPRG briefing papers at https://www.powerlink.com.au/2027-2032-regulatory-period

[17] Powerlink Queensland*, Notes of Meeting and Actions Arising – RPRG Meeting No.10 (November 2025)*

- the inclusion of additional appendices, including deliverability-related material, and
- a stronger alignment of narrative themes across the proposal and supporting documentation.[18]

The RPRG also sought clearer explanation of uncertainty associated with contingent projects, ISP-identified investments and future customer impacts. This included requests for clearer identification of excluded projects, explanation of contingent project treatment and additional transparency regarding future price impacts and easement acquisition strategies. Powerlink subsequently committed to provide additional supporting information in the Revised Revenue Proposal.

The later meetings also reflected a more collaborative and iterative process focused on testing proposal credibility, deliverability and "capable of acceptance" considerations. Discussion increasingly focused on regulatory expectations, evidence requirements, proposal communication and coordination of stakeholder submissions and participation in the AER consultation process.[19]

2.3. Areas where engagement influence was more limited

2.3.1. Capital program scope and timing

While the RPRG explored Powerlink's approach to option selection and programme governance, there is limited evidence that engagement materially changed the quantum, timing or scope of the core replacement capital program. Those decisions continue to be driven primarily by Powerlink's internal asset management frameworks, condition assessments and risk thresholds. The RPRG did not delve deeply into individual business cases, focusing on the project framework, governance processes and assurance, and not the nature of the projects or their justification.

This is understandable, as the RPRG's composition is primarily energy users and consumer groups, not asset management specialists or protection engineers. The RPRG appropriately refers these matters to specialists within the AER.

2.3.2. Asset management frameworks and replacement drivers

The RPRG examined Powerlink's approach to asset risk and reinvestment decision-making, including whether projects could be deferred, staged or subject to alternative delivery approaches.

Powerlink explained that its reinvestment decisions compare cost-effective bundling options with the cost of timing replacements for optimum performance, but that it does not allow transmission asset performance to fall below critical thresholds because the consequences of failure are typically high.

For example:

> *"Powerlink targets reinvestment in transmission line structures that will reach a health index (HI) of 8 or greater within the next five years."*[20]

This is consistent with modern ISO55000-style transmission asset management practice.

Powerlink also explained that site-based reinvestment is commonly preferred through the bundling of projects, whereas component-level obsolescence and failure risks may be managed through spares. This contrasts somewhat with the approach to the replacement of secondary systems, current and voltage transformers, where the practice tends to take the form of wider multi-site replacement programmes or opportunistic bundling of additional less critical projects at a particular site.

[18] Powerlink Queensland, *Notes of Meeting and Actions Arising – RPRG Meeting No.12* (February 2026)

[19] Powerlink Queensland, *Notes of Meeting and Actions Arising – RPRG Meeting No.13* (March 2026)

[20] Powerlink - 2027-32 - CP.02750 Ross to Chalumbin Life Extension - January 2026 - PUBLIC (1).pdf

Replacement timing appears primarily driven by Powerlink's internally developed asset management, health index and risk threshold methodologies, with economic optimisation occurring within those parameters rather than through an externally validated assessment of optimal timing.

The RPRG explored the interaction between demand forecasts, large-load connections and future network utilisation, including the implications of industrial electrification, data centre development and broader economic growth assumptions. While engagement improved visibility regarding forecast drivers and uncertainties, there is limited evidence that engagement materially altered the underlying forecasting approach or key demand assumptions adopted by Powerlink.

2.3.3. Cyber / SOCI / security expenditure

The RPRG also considered expenditure associated with Security of Critical Infrastructure (SOCI) obligations and cyber security uplift. Members sought clarification regarding the nature of the obligations and associated expenditure drivers, and there was some detailed scrutiny of the underlying scope or efficiency of these programs, reflecting both the technical complexity and sensitive nature of the subject matter.

2.4. CCP34 observations

The RPRG engagement was characterised by sustained, informed and iterative challenge. It had clear influence on the transparency, structure and presentation of the proposal, and in several specific areas — including price smoothing, CESS treatment, DMIAM, deliverability evidence and the explanation of excluded projects — it had a more direct influence on Powerlink's approach.

Notably, the RPRG promoted the importance that non-core capital investments, such as the PTI projects, require a similar level of transparency and consumer consideration as the proposed regulated expenditure.

This does not diminish the quality of the engagement. Rather, it highlights the distinction between engagement that improves transparency and accountability, and engagement that changes underlying investment decisions.

For the AER, the implication is that while the RPRG process has materially improved the proposal's credibility and transparency, the efficiency and optimisation of the major expenditure drivers — particularly replacement capex — remain matters for detailed regulatory assessment.

3. Treatment of CESS and an ex-post review

3.1. Powerlink's regulatory journey

Regulatory reset 2022-27

In the 2022–27 regulatory proposal, Powerlink responded to strong engagement signals and took clear steps to constrain costs. The broader energy market volatility emerging during 2021–22, combined with broader cost-of-living pressures, prompted a strong government focus on affordability, including direct market interventions and price mitigation measures. The CEO at the time reflected strong state government shareholder pressure to keep electricity costs down, with the shareholder supporting restraint during a period of heightened political and public scrutiny.

In this context, Powerlink's adoption of a constructive discomfort approach was consistent with the expectations to constrain costs and minimise price impacts. While to the best of our knowledge not explicitly directed, the prevailing policy environment created clear incentives for conservative expenditure settings and a strong emphasis on demonstrating efficiency and restraint.

This approach was strongly reflected in the consumer engagement for the 2022-27 reset, with the proposal receiving broad support from the Customer Panel and the Revenue Proposal Reference Group (RPRG). The strength of that support, combined with the broader emphasis on affordability and expenditure restraint at the time, appears to have contributed to greater acceptance of Powerlink's proposed expenditure settings and risk assumptions than may otherwise have occurred.

In April 2022, in its Final Decision for the 2022–27 regulatory determination, the AER reflected positively, stating:

> *"This final decision recognises the collaborative efforts of Powerlink and its stakeholders, particularly Powerlink's Customer Panel and its Revenue Proposal Reference Group (RPRG), who worked together constructively in developing Powerlink's proposal over almost three years for the long-term interests of consumers.*
>
> *The high-quality nature of Powerlink's initial proposal has meant that the final stage of this process, where we assessed Powerlink's revised proposal, has been non-contentious and a more efficient regulatory process for all stakeholders, including Powerlink, consumers and the AER."*[21]

Similarly, in its advice to the AER following the lodgement of the 2022-27 proposal, CCP23 noted:

> *"Powerlink is proposing an 8.5% reduction in costs for the 2022-27 regulatory period… there has been a strong focus in bringing prices down for consumers. The approach, outcome and continuing vigilance are all welcome."*[22]

Stakeholder support during the previous reset was generally qualified and strongly conditioned on affordability and prudency outcomes. Consumer representatives repeatedly emphasised the need for ongoing scrutiny of capex, productivity and customer price impacts before concluding that the proposal was "capable of acceptance". CCP23, for example, stated that acceptance should remain conditional on "further review of capex" and "ongoing review of opportunities for opex productivity".

Similarly, the Customer Panel noted that support for the proposal was contingent on the AER confirming that it was "prudent and efficient."

Powerlink's subsequent expenditure above regulatory allowances in the 2022–27 period, particularly in the final two years of that period, should be considered in the context of this deliberately

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[21] AER - Powerlink 2022-27 - *Final Decision* - Final decision document - April 2022, p4

[22] CCP23, *Submission to the Australian Energy Regulator – Powerlink 2022–27 Revenue Proposal* (2021) p3

constrained starting position. The proposal was accepted by the AER as "capable of acceptance"[23] in all material respects, and Powerlink did not materially reforecast its capex following the draft decision, other than updating inflation assumptions.

Powerlink states that it did not apply a specific cost escalation or estimation risk factor and did not anticipate the scale, duration or breadth of the global cost pressures that subsequently affected transmission construction, equipment procurement and labour markets.

Exogenous factors

Powerlink attributes these outcomes to a materially different operating environment in the period that commenced on 1 July 2022 from that assumed in its January 2021 proposal. It states that its original forecasts of reduced capex and no real opex growth were reasonable at the time and were intended to keep costs low for Queenslanders. However, subsequent events - including COVID-related supply disruption, Russia's invasion of Ukraine, global demand for equipment and labour, and broader supply chain constraints - could not reasonably have been foreseen.

The 2027-32 Proposal

As has been the case in recent regulatory proposals in other jurisdictions, Powerlink's regulatory proposal for 2027–32 represents a clear step change from both the expected expenditure for the current 2022–27 regulatory period, as well as the AER approved expenditure for that period.

Powerlink is proposing a substantial increase in capital expenditure for 2027–32. Total forecast capex of approximately $2.50 billion represents a step increase of around 66% relative to forecast expenditure in the current 2022–27 period. This uplift is driven primarily by reinvestment in ageing assets, new regulatory and security obligations, and the need to support the integration of renewable generation and storage.

Operating expenditure also increases, albeit more moderately. Forecast opex of $1.81 billion represents an increase of around 19%, reflecting the higher cost of operating an increasingly complex transmission system.

These increases translate into a higher revenue requirement. Powerlink proposes a Maximum Allowed Revenue of approximately $5.27 billion (real), an increase of around 25% relative to the current period.

The transition from the constrained settings of the 2022–27 proposal to the higher expenditure and revenue profile proposed for 2027–32 highlights the central regulatory question: whether this step change reflects efficient and prudent costs in a materially changed operating environment.

Similarly, increased investment in long-life assets within the RAB exposes consumers to long-term cost risk, particularly if interest rates (and therefore cost of capital and expected rate of return) increase over the life of those assets.

3.2. A key challenge for the AER

In its 2022–27 proposal, Powerlink deliberately adopted a strongly cost-constrained approach intended to drive expenditure discipline and deliver lower prices. This strategy was welcomed by consumers but also exposed the business to downside risk when conditions changed.

Powerlink responded to strong engagement signals and took specific steps to constrain costs. The AER explicitly endorsed the quality of that engagement—and importantly, it resulted in real outcomes. Powerlink did not merely respond to engagement; it tightened forecasts and made difficult decisions to reduce prices. With hindsight, that position appears optimistic given subsequent cost escalation, and there is now a material overspend relative to the AER allowance.

[23] AER - Powerlink 2022-27 - *Final Decision* - Final decision document - April 2022, p3

This creates a challenge for the AER. The issue is not simply whether actual expenditure exceeded forecast allowances, but the extent to which that divergence reflects matters within Powerlink's reasonable control, as opposed to exogenous events and forecast uncertainty inherent in contemporary transmission planning and project delivery.

The AER recognised the forecasting risks in the CESS context in its April 2023 Review of Incentive Schemes for Networks[24], noting that divergences between forecast and actual expenditure may reflect forecasting error, information asymmetry and factors outside NSP control, particularly for large transmission projects.

The review commented (pp 5–7, 16–22 and 25–26) that: [25]

- "The extent to which an underspend … genuinely reflects an efficiency gain, or is the result of forecast error … can be difficult to ascertain";
- … forecast allowances "can never be a fully accurate representation" of actual expenditure requirements and are never "completely devoid of any forecast error";
- "… increasing congestion risks penalising TNSPs for factors which are outside their control"; and
- … identifying contextual factors relevant to whether and how the CESS should apply, including "the degree of capital expenditure forecasting risk" and "stakeholder views".

However, rather than adopting a broad discretionary adjustment mechanism, the AER retained the CESS in largely formulaic form, introducing only limited flexibility in relation to transmission contingent projects and capital expenditure forecasting risk.

The CESS and ex-post review framework will require the AER to apply these principles within relatively structured incentive arrangements. This means the AER will need to distinguish carefully between the impacts of external cost pressures and impacts arising from internal decision-making factors such as deferral, scope and risk calibration. Clear articulation of this approach in the draft decision will be important in signalling to the industry the support for efficient expenditure outcomes while maintaining incentives for cost discipline over time.

In addition, it is useful to examine how Powerlink responded to those increasing cost pressures in a manner consistent with efficient and prudent utility management under conditions of rising costs and affordability pressure. This includes the extent to which Powerlink sought to mitigate rising costs through expenditure reprioritisation, scope optimisation, procurement responses, delivery trade-offs and the acceptance of appropriate operational risk.

Powerlink should be able to present clear evidence of how it responded to the increases in costs.

[24] AER, *Final Decision, Review of incentives schemes for Networks – April 2023 (p1)*

[25] Ibid

4. Response to the AER Issues Paper

4.1. Questions on preliminary issues

1) What are your views regarding Powerlink's justification for its proposed increase in replacement expenditure?

1. Top-down assessment of the increase in replacement expenditure

Powerlink's 2027–32 regulatory proposal is characterised by a material step-up in replacement (reinvestment) expenditure, which becomes the dominant driver of total capex. On an annual basis, replacement expenditure increases from a relatively stable historical level of approximately $170 million per annum to around $300 million per annum by the end of the current regulatory period and remains at approximately that level throughout 2027–32.

The increase in replacement expenditure should not be viewed as unexpected or inappropriate in the current operating environment. Queensland's transmission network is operating in a period of materially increased complexity associated with the energy transition, including ageing asset fleets, increasing system utilisation volatility, rising cyber and operational resilience expectations, in an environment of supply-chain constraints and sustained labour and material cost escalation.

In addition, the relatively low level of recent augmentation investment means there are fewer opportunities for asset renewal to occur incidentally through network expansion projects. In this context, a structural increase in replacement expenditure is understandable.

From a consumer and regulatory perspective, the key issue is therefore not whether replacement expenditure should increase, but whether the timing, scope and sequencing of replacement investment represent the most efficient long-term outcome for consumers, having regard to reliability, operability, deliverability and long-term RAB impacts.

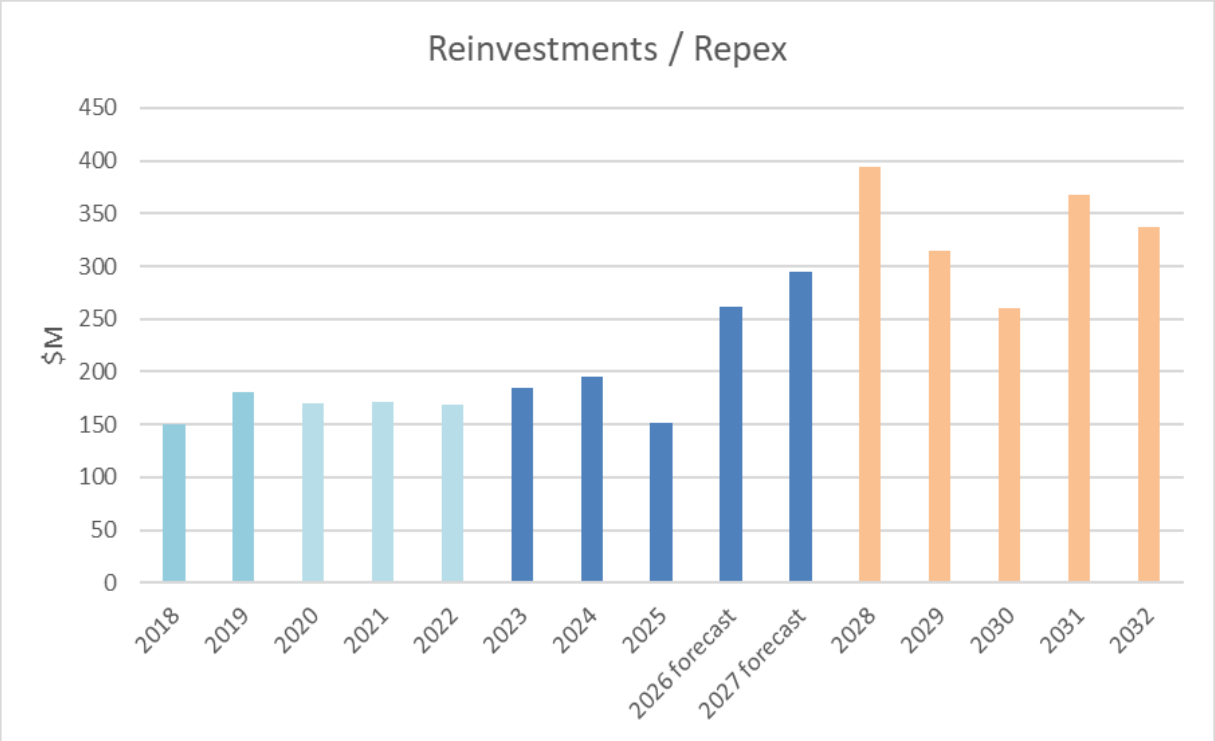

Figure 1: Powerlink replacement expenditure trend ($M real 2027)

In assessing the justification for this increase, it is appropriate to consider:

- the underlying cost drivers – materials, labour, logistics and overheads
- the replacement (reinvestment) methodology – condition monitoring, minimal or bundled work
- changes in expenditure by asset category
- the extent of any carry-over or deferral from earlier periods

The composition of expenditure is also notable. Secondary systems (SCADA, protection and control) represent the largest share at approximately 33% of total repex, followed by 'other repex' (notably operational technology), substation switch bays (~18%) and transmission towers (~15%), with transformers contributing a relatively modest ~3%.

This indicates that the increase is not being driven by singular, high-value primary plant replacement, but rather by a broad-based, programmatic renewal of secondary and substation assets.

2. Assessment of cost drivers

Powerlink's justification for increased repex can be broadly split into several drivers.

Unit costs

Powerlink has presented a credible case that unit costs have increased materially, reflecting:

- labour cost escalation
- increased equipment costs
- supply chain constraints
- higher transport and delivery costs

These trends are consistent with broader industry experience across Australian and international utilities. On this basis, the argument for higher unit costs is generally well founded, although benchmarking against other TNSPs would strengthen the evidence base.

Volume (asset condition, age and obsolescence)

The business cases demonstrate increasing asset age, obsolescence and environmental degradation as drivers of higher replacement volumes. While these factors are valid, there is some uncertainty regarding how Health Indices (HI)—particularly for obsolescence—translate into optimal replacement timing.

There is also evidence of opportunistic replacement (e.g. DC systems), which may contribute to higher aggregate volumes.

Equipment delivery constraints and lead times

Powerlink notes materially longer delivery lead times for key equipment. This has implications for forward planning, risk management and expenditure timing. While this supports earlier intervention in some cases, it also raises the question of whether alternative strategies—such as increased spares holdings or active co-ordination with other utilities—have been fully explored.

Productivity and efficiency offsets

Improvements in asset management, inspection technologies, data analytics and work packaging should, in principle, offset some cost pressures. There is limited evidence presented on the realised benefits of these initiatives.

Given the scale of recent ICT and asset management investments, there is a case for more explicit demonstration of productivity gains and their impact on replacement expenditure.

Risk profile

Changes in risk exposure may also influence replacement decisions, including:

- increased climate-related risks
- evolving reliability and availability expectations

There is limited evidence of a step-change in community or regulatory expectations that would independently justify the magnitude of the increase in replacement volumes. In addition, there have been no changes to Powerlink's Transmission Authority since the move in 2014 to a more probabilistic approach to network security.[26]

3. Replacement methodology and calibration

Powerlink's replacement framework is consistent with standard industry practice. It is risk-based, condition-driven and supported by Health Indices. The framework appropriately positions replacement as the final intervention after maintenance and refurbishment options are exhausted, and considers a range of alternatives including:

- life extension
- staged replacement
- line refit
- network reconfiguration
- non-network solutions

The key issue is not the existence of the framework, but its calibration.

The central question is whether the intervention thresholds, planning lead times and/or obsolescence assumptions result in efficient timing of replacement, or whether they result in replacement timing that is more precautionary than economically optimal.

This is particularly relevant given extended delivery lead times, which may reinforce a tendency toward earlier intervention.

4. Deliverability and portfolio sequencing

There is also an important interaction between replacement timing and overall portfolio deliverability. Powerlink's broader capital program is occurring in a period of sustained supply-chain constraints, workforce limitations and increasing competition for specialised transmission resources across the NEM.

Where large replacement programs are advanced concurrently, there is potential for outage access constraints, procurement pressure and delivery complexity to increase total project costs and reduce implementation flexibility. This reinforces the importance of demonstrating that replacement timing and project sequencing have been prioritised on a least-cost basis across the portfolio, rather than assessed predominantly at an individual project level.

5. Changes by asset category

The composition of repex highlights a structural shift toward secondary systems and substation assets. Secondary systems (SCADA, protection and control) account for approximately 33% of total repex, followed by:

- substation switch bays (~18%)
- transmission towers (~15%)
- cables (~7%)

[26] Powerlink – Asset Planning Criteria – Framework V4.0 issued Dec 2021

- transformers (~3%)

This distribution reinforces that the increase is driven by programmatic replacement rather than discrete, high-value projects. This has implications for regulatory assessment, as drivers are less visible and harder to validate, the benefits are less directly observable, and risk and obsolescence assumptions play a larger role.

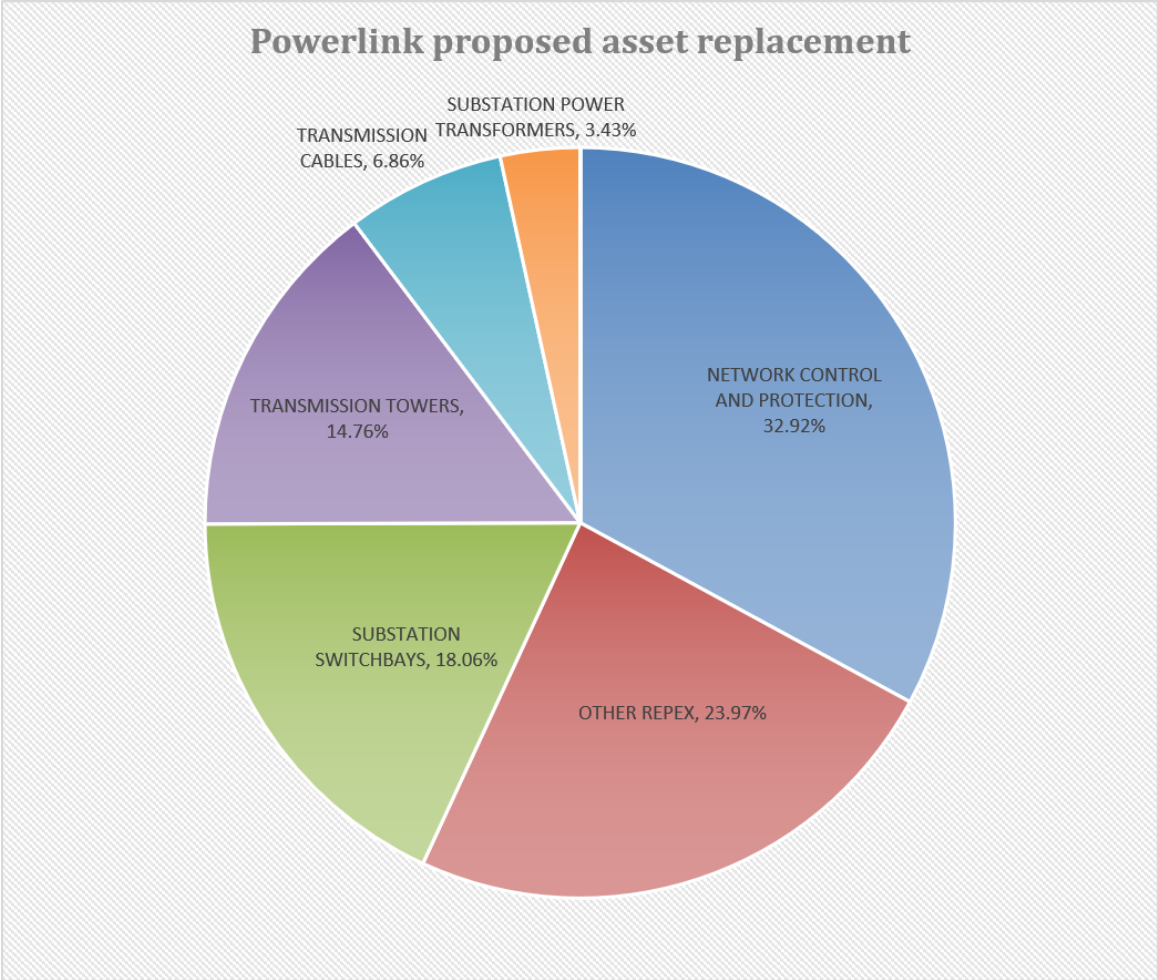

Figure 2: 2027/32 Proposal asset refurbishment by category (source: RIN 1)

6. Secondary systems (protection and control) replacement

The secondary systems business cases are consistent with standard TNSP practice, typically citing ageing assets, obsolescence and loss of OEM support, increasing maintenance burden and operational complexity.

These are valid drivers. At the same time, the risks associated with unsupported secondary systems should not be understated, particularly in relation to cyber security exposure, interoperability limitations, increasing operational complexity and restoration capability following failure events.

Several issues emerge.

a) Role of Health Index

Health Index appears to function primarily as a screening tool rather than a mechanism for optimising timing. Once assets reach a threshold, replacement is generally assumed, with limited evidence of granular differentiation between immediate replacement, deferral or staged or partial replacement.

b) Alternative strategies

There is limited detailed analysis of alternatives such as enhanced spares strategies, selective or component-level replacement, and operational workarounds.

This is notable given that secondary systems are often duplicated and typically exhibit non-catastrophic failure modes and may therefore be more amenable to managed deferral than primary plant. Powerlink's use of relay self-monitoring or regular condition assessment is unknown.

Some options may include recovering some of the rare or obsolescent relays, refurbish and test them, and hold as strategic spares. Also, the replacement assessment makes no mention of the self-test condition monitoring capability of many relays and control devices.

c) Scope expansion

There is consistent evidence of scope expansion through bundling and standardisation. Projects frequently transition from targeted replacement to full system replacement, reasonably justified by standardisation, the efficient use for skilled staff and reduced future disruption. While valid, these considerations can bias decisions toward larger, earlier interventions, particularly where the cost of staged approaches is not fully quantified.

Overall, the need for replacement is generally established, but the optimisation of timing and scope would benefit from a more detailed analysis of the costs and benefits of an expanded scope of works.

7. Substation refits and primary plant

Substation and primary plant replacement cases are generally more robust. They are supported by condition monitoring data, clear failure modes and well-understood consequences. In these cases, Health Index is more closely aligned with physical degradation and provides a stronger basis for decision-making.

Similar issues arise in relation to bundling of works, site-wide rebuilds and potential bringing forward of otherwise deferrable assets. While operational efficiencies are cited, the least-cost pathway over time is not always fully demonstrated.

8. Transmission line refurbishment

Transmission line refurbishment programs are one of the stronger elements of the proposal. They reflect targeted life extension, condition-based intervention and deferral of full rebuilds.

This aligns with good practice and is supported by Powerlink's Asset Reinvestment Review.

The balance between bundled interventions and targeted, condition-driven works still requires scrutiny to ensure efficient timing.

9. Health Index as a key driver

Health Indices are a central input to Powerlink's replacement forecasts, linking asset condition to capex decisions. While their use is appropriate, there is limited transparency on calibration of thresholds, sensitivity to assumptions and the relationship to actual failure outcomes.

Small changes in these parameters can materially affect replacement timing.

Given the scale of the forecast program, relatively small changes in intervention thresholds or underlying assumptions may materially affect portfolio timing and expenditure profiles. The key issue is therefore not the use of Health Indices themselves—which are standard and appropriate utility practice—but whether the calibration of those indices has been sufficiently demonstrated to support economically efficient replacement timing.

Conclusion

Powerlink's justification for increased replacement expenditure is broadly credible at a high level. The key drivers - ageing assets, higher unit costs and increased system complexity - are consistent with industry trends.

The assessment of efficiency turns on more detailed issues, particularly:

- the calibration of risk and condition thresholds
- the optimisation of timing
- the treatment of scope and bundling
- the consideration of deferral and alternative strategies

Individually, many of the proposed replacement decisions appear technically reasonable and are supported by credible asset management processes. At a portfolio level, there remains a legitimate question as to whether the aggregate timing and scope of replacement expenditure reflects the most economically efficient pathway for consumers over the long term.

2) In your view, has Powerlink considered all avenues to ensure its replacement capital program is prudent and efficient?

Powerlink has presented a formal reinvestment criteria framework and applied a risk-based asset management approach.

Across the business cases, there is consistent evidence that alternative options—such as life extension, refurbishment, staged replacement and non-network solutions—have been identified and considered. The program is also supported by planning evidence from the TAPR and incorporates stakeholder engagement, including input from the RPRG. Taken together, these elements indicate that Powerlink has made a structured and credible effort to ensure its forecast reflects prudent and efficient decision-making.

While the process is robust, the evidence suggests that the application of that framework may, in some cases, favour earlier or broader intervention than is economically optimal. In several areas—most notably secondary systems and substation-wide programs—the assessment of alternatives appears relatively high-level, with limited detailed analysis of deferral options such as staged replacement, enhanced spares strategies or operational workarounds.

At the same time, the operational and cyber-security risks associated with unsupported secondary systems should not be understated, particularly where vendor support limitations increase restoration complexity or constrain interoperability with modern digital systems.

There is also a consistent tendency toward bundling and full replacement, which, while operationally efficient, can bring forward expenditure and expand scope relative to a more incremental approach. In this context, the key issue is not whether Powerlink has considered the relevant avenues - it largely has - but whether those avenues have been sufficiently and transparently tested through an economic optimisation framework that explicitly considers the value of deferral, staged replacement and incremental intervention.

A useful point of comparison is the recent AusNet Services Transmission proposal. The comparison between Powerlink’s Tarong transformer replacement case and AusNet’s Keilor Terminal Station A-transformer replacement illustrates a difference in emphasis in project justification methodologies.

While both businesses identify asset condition and failure risk in a broadly similar manner, Powerlink’s approach appears more closely anchored to Health Index thresholds and predefined intervention triggers. In contrast, AusNet places greater emphasis on explicit economic optimisation of replacement timing, including comparison of replacement and deferral scenarios.

As a result, AusNet provides a clearer demonstration that investment timing reflects an economically efficient trade-off between cost, risk and the value of deferring capital expenditure where appropriate. Powerlink’s approach, while robust from an asset management perspective, provides less visibility on how replacement timing has been economically optimised beyond the application of internal risk thresholds.

This becomes increasingly important at a portfolio level, where relatively small changes in replacement timing or scope across multiple programs may materially affect aggregate capital expenditure, deliverability risk and long-term RAB growth.

4.2. Questions on consumer engagement

3) Do you consider Powerlink's revenue proposal reflects the outcomes consumers want at a reasonable cost? Why?

4) How effective has Powerlink's engagement been on the key areas of its revenue proposal, including its capital expenditure program?

5) Where do you consider consumer preferences are most evident in Powerlink's proposal?

While price, as reflected in electricity bills, remains a primary consideration for consumers, engagement for this reset indicates a general recognition that underlying cost pressures in the energy system are increasing. In this context, upward pressure on network costs may be unavoidable, provided that expenditure is considered, reflects fair value and is demonstrably efficient. Consumers have consistently emphasised the importance of cost discipline, transparency, and a clear line of sight between expenditure and outcomes, recognising that they ultimately bear the cost of the proposal.

This engagement has occurred in a materially different operating environment as compared with previous resets, characterised by sustained cost escalation, increasing system complexity and growing uncertainty associated with the pace and scale of the energy transition.

Powerlink's revenue proposal broadly reflects the outcomes consumers have indicated they value, namely the continued provision of a safe and reliable transmission network, capable of supporting the transition to higher levels of renewable generation. This is underpinned by a high-quality, mature and credible engagement process. Whether these outcomes are being delivered at a reasonable cost remains contingent on the efficiency of the underlying expenditure, particularly in relation to the scale and timing of replacement investment and the robustness of operating cost forecasts.

As outlined in Section 2 of this advice, the engagement with the RPRG and Customer Panel has been substantive and influential, particularly in shaping the transparency, structure and presentation of the proposal, as well as specific elements such as price path smoothing, where consumer preferences for a more gradual price trajectory have been incorporated.

As discussed in Section 3, the proposal involves a material step-up in both capital and operating expenditure, driven largely by replacement investment and increasing system complexity. While the underlying drivers are broadly credible, the benefits to consumers—particularly for replacement expenditure—are less directly observable, and there remains uncertainty as to whether the timing, scope and aggregation of investments represent the most efficient pathway over time.

The RPRG has also considered broader issues such as the treatment of incentive mechanisms (including CESS), deliverability of the capital program, and the overall price impact on consumers. While these considerations have improved the robustness and accessibility of the proposal, they have necessarily had more limited influence over some of the underlying external cost drivers and asset condition drivers informing the proposal.

On balance, the proposal is aligned with the broad outcomes consumers have identified as important and reflects a mature, transparent and substantively influential engagement process. The scale of the proposed increase in capital and operating expenditure means that continued regulatory scrutiny remains important—particularly in relation to expenditure efficiency, replacement timing, deliverability and long-term consumer cost impacts—to ensure that these outcomes are delivered at an efficient and sustainable cost.

4.3. Questions on capex

6) Do stakeholders have comments on Powerlink's expenditure over 2020–25 compared with its forecast capex allowance?

Powerlink's expenditure over the 2020–25 period reflects a combination of external cost escalation, increasing delivery complexity and the practical challenges associated with forecasting capital expenditure in a period of significant market disruption and transition across the electricity sector.

In considering the degree of overspend relative to forecast allowance, it is important to distinguish between:

- inefficient expenditure, and
- reasonable divergence between ex-ante forecasts and ex-post outcomes under materially changed conditions.

The previous regulatory determination occurred in a markedly different operating environment, prior to the full emergence of sustained labour shortages, global supply-chain disruption, escalating equipment costs and broader energy transition pressures. In that context, Powerlink's earlier forecasts appear, with hindsight, to have been optimistic in regard to future delivery conditions and input cost escalation.

Importantly, Powerlink in the 2022-27 proposal constrained expenditure growth and moderated price impacts. This reflected a sincere attempt to balance affordability and investment needs. In addition, Powerlink has moderated and rephased elements of its expenditure program during the 2022–27 period in order to constrain expenditure growth and limit customer price impacts. This appears to have reflected a deliberate balancing of affordability, deliverability and investment requirements.

From a regulatory perspective, care is therefore required in interpreting ex-post overspend outcomes. If businesses perceive that prudent but ultimately optimistic forecasts will later attract material efficiency penalties, there is a risk of creating incentives toward more conservative forecasting behaviour in future resets, potentially leading to higher proposed expenditure and less constructive engagement outcomes over time.

This does not remove the need for detailed scrutiny of expenditure efficiency. The broader context suggests that at least part of the divergence between forecast and actual expenditure reflects changed operating conditions and forecasting uncertainty, rather than clear evidence of imprudent decision-making.

7) Are there any particular areas of Powerlink's capex proposal that you would expect further engagement on?

Further engagement would be beneficial in several areas of the proposed capital program, particularly where expenditure is large, programmatic in nature, or where the benefits to consumers are less directly observable.

In particular, additional engagement would be valuable in relation to:

- secondary systems replacement strategies
- optimisation of replacement timing and scope
- deliverability and portfolio sequencing
- treatment of uncertainty and contingency within the broader replacement program
- interaction between capital expenditure and long-term price impacts.

There would also be value in continued engagement on how alternative approaches—such as staged replacement, refurbishment, strategic spares holdings and targeted life extension—have been assessed relative to full replacement options.

Given the scale of the proposed capital program and the increasing complexity of the operating environment, ongoing engagement on deliverability assumptions, outage coordination and procurement pressures would also assist stakeholders in understanding the practical constraints informing expenditure timing and prioritisation decisions.

8) How do you consider the proposed capex programs reflect stakeholder preferences?

The proposed capex program broadly reflects the outcomes stakeholders have indicated they value, particularly:

- maintaining a safe and reliable transmission network
- supporting the transition to higher levels of renewable generation
- maintaining system resilience and operability
- avoiding unnecessary long-term cost escalation.

Engagement undertaken through the RPRG and broader Customer Panel processes indicates that stakeholders generally recognise that underlying transmission costs are increasing and that some increase in expenditure may be unavoidable in the current operating environment.

At the same time, stakeholders have consistently emphasised that expenditure should be prudent, transparent and demonstrably efficient, with a clear line of sight between investment decisions and consumer outcomes.

In this regard, the proposal appears broadly aligned with stakeholder preferences at a strategic level. There remains some uncertainty as to whether aspects of the replacement program—particularly in relation to timing, scope and bundling—represent the most economically efficient pathway over the long term.

As a result, while the overall direction of the proposed program is generally consistent with stakeholder expectations, continued regulatory scrutiny of expenditure efficiency remains important.

9) Do you consider that the areas we have identified for greater assessment focus are appropriate, and, if not, what other areas should be considered and why?

The areas identified for greater assessment focus appear appropriate and broadly consistent with the key issues arising from the proposal.

Further scrutiny of replacement expenditure is warranted given the material increase in forecast repex, the growing role of programmatic secondary systems replacement, increasing reliance on Health Indices and risk-based intervention thresholds and the potential impact of bundling and standardisation on expenditure timing and scope.

Additional focus should also be given to:

- the optimisation of replacement timing
- treatment of deferral and staged replacement options
- portfolio deliverability and sequencing
- demonstration of productivity and efficiency offsets associated with recent ICT and asset management investments.

Given the scale of the proposed capital program, relatively small changes in intervention thresholds or replacement timing assumptions may materially affect aggregate expenditure outcomes and long-term RAB growth. In this context, assessment should focus not only on whether individual projects are technically justified, but also on whether the overall portfolio represents the most economically efficient pathway for consumers over time.

10) Do you have any views on the prudency (need) and efficiency (cost) of any aspect of the proposed capex?

1. General issues

Deliverability and outage feasibility

Given the scale of concurrent transmission investment occurring across the NEM, continued scrutiny of delivery assumptions, outage feasibility, specialist workforce availability and procurement capacity remains important in assessing whether the proposed program is realistically deliverable within the regulatory period.

It would be very useful if there was a broader national or NEM-wide coordination of major plant, material and labour supply. For instance, several transmission utilities are currently, or are planning to, undertake large secondary systems and protection replacement programmes. As the technology expands, this is becoming a very specialised area, and skilled resources are at a premium in both availability and cost.

Productivity benefits from digital/IT investment

Where expenditure is justified on the basis of digital transformation, operational modernisation or enhanced asset intelligence capability, there should also be a clear expectation that resulting productivity, coordination and operational efficiency benefits are progressively reflected in future operating and capital expenditure requirements.

We ask: "*Where are the productivity offsets?"*

Similarly, some consumer groups have referred to 'a letter to the next RPRG' to maintain a level of corporate regulatory memory to determine the efficiency benefits that should feature in the next reset.

Contingency and estimate maturity

Several of the proposed programs remain at relatively early stages of development, with corresponding uncertainty in scope definition, delivery methodology and cost estimation. In this context, continued scrutiny of contingency allowances, estimate maturity and escalation assumptions remains important to ensure consumers are not exposed to unnecessary forecasting conservatism.

Interaction between capex and opex

The interaction between the proposed capital program and forecast operating expenditure also warrants careful consideration, particularly where investments are justified on the basis of improved asset visibility, operational efficiency and standardisation, or reduced supportability risk.

2. Network capital

At a high level, the need for increased replacement expenditure appears broadly credible and consistent with the condition and age profile of Powerlink's asset base, increasing system complexity and broader industry cost escalation trends.

The proposed program is supported by a structured asset management framework, risk-based decision-making processes and substantial supporting business case material. In general, the prudency of the underlying need for replacement investment is reasonably well established.

The more significant issue relates to efficiency, particularly:

- optimisation of replacement timing
- treatment of alternative intervention strategies
- scope expansion through bundling and standardisation
- demonstration that replacement decisions reflect the least-cost long-term outcome for consumers.

These issues are most evident within secondary systems and broader programmatic replacement activities, where asset condition, obsolescence and operational complexity can be more difficult to translate into economically optimised replacement timing decisions.

In several areas, the proposal would benefit from clearer demonstration that options such as staged replacement, refurbishment, targeted life extension and strategic spares approaches have been rigorously assessed against full replacement pathways.

Overall, while the proposal reflects a credible and mature asset management process, further regulatory scrutiny appears warranted to confirm that the scale, timing and sequencing of the proposed capital program appropriately balance reliability, operability, resilience and long-term consumer cost outcomes.

CT and VT replacement

The CT and VT replacement programmes are supported by a credible and generally well-developed asset risk justification. The identified asset cohorts exhibit demonstrated premature failure behaviour, with clearly articulated safety, reliability, operational and environmental consequences associated with in-service failure.

The programmes also appear reasonably mature from a delivery and operational planning perspective, including coordination of outages, staging, procurement, and integration with related replacement works. In contrast to broader corporate or technology proposals, the justification is based on identifiable physical asset degradation and observable failure mechanisms.

Some uncertainty remains regarding optimisation of replacement timing and scope. There is limited analysis of alternative risk mitigation measures such as enhanced monitoring, strategic sparing, selective deferral, refurbishment, or more granular condition differentiation.

While targeted replacement of high-risk assets appears justified, further scrutiny may still be warranted regarding the calibration of intervention thresholds and prioritisation methodology.

3. Non-network capital

The proposed non-network capital expenditure programs are broadly supportable in principle, particularly where they relate to maintaining the security, operability and long-term supportability of critical operational and enterprise systems.

In particular, proposed investments relating to operational technology and cyber security capability, core enterprise and spatial systems sustainment, grid planning systems and routine fleet and operational asset replacement appear generally consistent with prudent asset lifecycle management practices for a contemporary transmission network service provider. We have seen similar items in proposals from other transmission providers.

The increasing digitisation of transmission system operations, growing cyber security obligations for critical infrastructure operators, and reliance on vendor-supported enterprise platforms provide a reasonable basis for ongoing investment in these areas. At a high level, programs directed toward maintaining vendor supportability, reducing legacy customisation, improving operational resilience and addressing material cyber risks appear prudent.

That said, there remains value in continued scrutiny of the scope and prioritisation of these programs to ensure that:

- expenditure remains appropriately targeted toward sustainment and risk mitigation objectives;
- discretionary capability expansion or business transformation activities are not inappropriately incorporated within regulated capex allowances; and
- proposed investments are supported by clear risk-based prioritisation and measurable operational benefits.

The proposed easement and site acquisition program warrants relatively greater scrutiny from both a prudency and timing perspective.

While there may be legitimate benefits associated with preserving future transmission corridors and securing easements sufficiently early to reduce future delivery risk and stakeholder impacts, portions of the proposed expenditure appear to be associated with projects that remain contingent, are subject to future RIT-T assessment, or are not expected to proceed to construction until well into the 2030s.

In these circumstances, there is a risk that consumers may fund land and easement acquisition activities materially in advance of firm investment commitment or demonstrated need. We therefore consider that the timing of proposed acquisition activities, the degree of certainty associated with underlying network needs and the extent to which expenditure is linked to credible and reasonably foreseeable development pathways should be carefully assessed to ensure consumers are not exposed to unnecessary early-stage or speculative expenditure.

Redevelopment of the Virginia site

The proposal appears to be supported by a broadly credible need case associated with ageing facilities, compliance obligations, increasing workforce accommodation pressures and operational continuity requirements. There also appear to be very legitimate operational and safety drivers supporting redevelopment.

The efficiency case for the preferred option is less clear-cut. The options analysis includes a substantial weighting toward qualitative workplace, cultural and amenity benefits which, while potentially valuable from an organisational perspective, are less directly linked to the efficient delivery of prescribed transmission services.

Given the scale of the proposed expenditure, further scrutiny appears warranted in relation to:

- the scope of redevelopment,
- accommodation standards,
- treatment of hybrid work arrangements,
- assessment of staged or lower-cost alternatives,
- and the extent to which non-essential workplace enhancement objectives are embedded within the regulated expenditure proposal.

In particular, it is not yet fully clear from the material provided that the preferred option represents the least-cost long-term solution capable of meeting Powerlink's operational accommodation requirements.

Fleet capital expenditure

The proposed fleet capital expenditure appears broadly prudent and operationally well justified. The scale of expenditure is relatively modest in the context of the overall proposal and is supported by a structured fleet management framework incorporating utilisation-based replacement criteria, whole-of-life cost assessment and operational suitability considerations.

The proposed replacement lives and utilisation thresholds appear broadly consistent with standard utility fleet management practice, particularly given the operational demands associated with maintaining transmission infrastructure across geographically dispersed and often remote locations

throughout Queensland. The increasing deployment of field resources into regional locations such as Gladstone and Townsville also provides a credible basis for elements of the recent fleet uplift.

The fleet strategy also demonstrates reasonable attention to safety obligations, operational fit-for-purpose requirements, lifecycle optimisation, asset pooling and whole-of-life value considerations.

While some aspects of the plan incorporate broader sustainability and "future fleet" initiatives, these do not appear disproportionate in scale and are generally framed as incremental operational improvements rather than major transformational expenditure.

Overall, the fleet program appears comparatively low risk from a prudency and efficiency perspective, although continued discipline in relation to utilisation, replacement timing and allocation of fleet costs between regulated and non-regulated activities remains important.

Cybersecurity

The proposed cyber security expenditure also appears broadly prudent in principle, given the increasing reliance of transmission network operations on interconnected IT and OT systems, the evolving cyber threat environment, and Powerlink's obligations under the Security of Critical Infrastructure (SOCI) framework and related cyber security obligations.

The proposal is supported by a reasonably mature governance and risk management framework aligned to the Australian Energy Sector Cyber Security Framework (AESCSF) and recognises the increasing exposure of critical infrastructure operators to ransomware, supply-chain compromise and state-sponsored cyber threats.

Parts of the supporting narrative are necessarily qualitative and scenario-driven, and the proposal would benefit from continued scrutiny to ensure expenditure remains appropriately targeted toward demonstrable risk reduction, regulatory compliance and operational resilience outcomes, rather than broader discretionary capability expansion or technology uplift activities.

Telecommunications

The telecommunications network consolidation and MPLS/OpsWAN replacement programme appears to be supported by a relatively clear operational and asset replacement need. The existing legacy platforms are approaching end of manufacturer support, with some technologies dating from the late 1980s and support expected to progressively cease between 2023 and 2027.

The expenditure is also closely linked to maintaining core operational telecommunications capability supporting SCADA, protection systems, remote monitoring and operational voice services across the transmission network. The proposal reflects a staged migration away from legacy TDM-based architecture toward consolidated hybrid and IP/MPLS-enabled telecommunications infrastructure.

In contrast to more discretionary digital uplift initiatives, the programme appears substantially asset-condition and obsolescence driven, with Powerlink identifying increasing vendor support limitations, interoperability risks and operational dependency on ageing communications platforms.

The prudency case for the telecommunications consolidation and MPLS/OpsWAN replacement programme is strengthened by the direct linkage between telecommunications capability and Powerlink's obligations under clauses 4.8.1 and 4.8.2 of the National Electricity Rules, which require Network Service Providers to maintain operational awareness and notify AEMO of circumstances affecting secure system operation.

The telecommunications network underpins critical operational functions including SCADA, protection signalling, remote monitoring and operational voice communications. In this context, the replacement of ageing and increasingly unsupported telecommunications infrastructure appears broadly consistent with prudent operational risk management and system security obligations.

The proposal is also supported by a reasonably coherent long-term architecture strategy involving migration away from ageing TDM-based technologies toward a more consolidated and supportable hybrid/MPLS environment.

That said, there remains material delivery and integration complexity given the scale of deployment across numerous substations and communications sites, the dependency on multiple interrelated projects, and the reliance on assumptions regarding existing site infrastructure capacity, resource availability and interoperability outcomes. The proposal is also currently supported by Class 5 estimates with relatively high contingency allowances, indicating that cost uncertainty remains material at this stage of project development.

Overall, the telecommunications programme appears reasonably aligned with prudent asset replacement and operational resilience objectives associated with maintaining secure and reliable transmission network operations.

Final comment

Overall, Powerlink's proposed capital program appears to be supported by a generally credible asset management and operational planning framework operating within a period of significant industry transition, cost escalation and increasing system complexity.

The principal regulatory issue is therefore less about the existence of expenditure need, and more about ensuring that the scale, timing, sequencing and delivery of the proposed investments represent the most economically efficient long-term pathway for consumers.

4.4. Questions on opex

11) Do you consider Powerlink's opex forecast for the 2027–32 regulatory control period reasonably reflects the efficient costs of a prudent operator? Specifically, do you consider Powerlink's estimate of 2025–26 base year opex and proposed step changes are required to produce an opex forecast that reasonably reflects the efficient costs of a prudent operator?

Powerlink's proposed operating expenditure for the 2027–32 regulatory control period reflects a materially different operating environment to that assumed in the previous determination.

Factors include the increased operational complexity associated with higher levels of renewable generation, minimum demand conditions, system strength and operability requirements, increased coordination and monitoring obligations, as well as higher input costs and expanded cyber and physical security obligations under the Security of Critical Infrastructure (SOCI) framework. These drivers are broadly consistent with trends observed across the transmission sector and provide a reasonable basis for an increase in operating expenditure.

The assessment of whether the forecast reflects the efficient costs of a prudent operator rests on the selection and efficiency of the base year, and the justification for step changes.

Base year

Powerlink's selection of FY26 as the base year appears to be reasonably representative, as it captures current operating conditions, including increased compliance and monitoring requirements associated with critical infrastructure security and a more complex operating environment. However, the base year exceeds the regulatory allowance, and there is limited evidence to demonstrate that it is not materially inefficient.

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 embeds a higher cost structure.

This is particularly important given the potential for temporary or transition-related operating pressures to become embedded within the ongoing regulated cost base through base-year extrapolation.

Step changes

The proposed step changes are primarily associated with cyber security obligations, physical security requirements and increased real-time network monitoring. These are largely driven by factors outside

Powerlink's direct control, and are therefore broadly credible. Because many of these drivers are substantially exogenous in nature, the scope for consumers or regulators to exert material influence over the existence of the underlying obligations is limited. This puts greater importance on ensuring that these costs are incremental to the base year and are not already embedded within it.

While Powerlink has invested in asset management and operational improvements, there is limited evidence presented to demonstrate the extent to which these investments have delivered measurable productivity gains or offset underlying cost pressures. Given the scale of recent and planned investment in digital systems, asset management capability and operational technology, further transparency regarding realised productivity improvements, avoided costs and operational efficiencies would strengthen confidence that forecast opex appropriately reflects the benefits of these investments.

On balance, Powerlink's opex forecast appears broadly consistent with the increasing complexity associated with operating a modern transmission network undergoing rapid transition. Uncertainty remains regarding the efficiency of the selected base year, the extent to which recent operational pressures may become embedded in the ongoing cost base, and whether sufficient productivity offsets from recent digital and operational investments have been demonstrated.

Continued scrutiny by the AER therefore appears warranted to ensure that the combination of base-year expenditure and proposed step changes does not result in a structurally elevated operating cost base beyond that required for the efficient delivery of prescribed transmission services.

13) Do you consider that Powerlink's opex proposal, particularly the drivers of the rapidly increasing costs and benefits of the step changes were sufficiently consulted on during the stakeholder engagement processes? Has Powerlink adequately addressed the themes and issues raised by stakeholders?

Powerlink's operating expenditure proposal, including the key drivers of cost increases and the associated step changes, was clearly presented and discussed through the stakeholder engagement process, particularly via the RPRG.

The underlying drivers - such as increased system complexity, higher input costs, and additional cyber and physical security obligations under the SOCI framework - were explained in a transparent and accessible manner. The RPRG were given sufficient opportunity to understand these drivers and seek clarification and were able to relate Powerlink's responses with those of other utilities.

The depth of consultation on these issues was more limited than for other aspects of the proposal. In particular, the RPRG's consideration of opex step changes was largely descriptive rather than evaluative. While the group identified the key step changes and broadly accepted their underlying drivers, the scope, quantum or efficiency of these costs were not subject to detailed challenge or alternative analysis. This reflects, in part, the largely exogenous nature of many of these drivers, which constrained the scope for stakeholder influence.

Powerlink did respond to stakeholder feedback in several areas, including refinement of output growth measures, adjustments to step change presentation, and ongoing engagement on the treatment of cost drivers and forecasting methodology. The engagement also improved transparency and clarity in how operating costs were structured and justified.

However, the stakeholder input has not materially altered the underlying level of operating expenditure or the key cost drivers themselves. In this respect, the engagement provides confidence in transparency, but more limited assurance on efficiency.

Overall, the engagement process was effective in informing stakeholders and testing the narrative supporting the opex proposal, but less effective in challenging or reshaping the core cost assumptions. As a result, while the drivers of increasing costs and step changes were adequately explained and consulted on, they were not fully tested from an efficiency perspective. This suggests that further scrutiny by the AER is warranted to ensure that the forecast reflects the efficient costs of a prudent operator.

12) What are your views regarding our prioritised review of the base year opex and the step changes?

The AER's proposed prioritisation of the review of base year opex and step changes appears appropriate and well targeted, given the material increase in forecast operating expenditure and the role that the selected base year will play in establishing Powerlink's ongoing cost baseline.

In the current proposal, the interaction between a relatively elevated FY26 base year, increasing operational complexity and multiple proposed step changes is likely to be one of the most significant drivers of long-term opex outcomes over the 2027–32 period.

Particular scrutiny of the selected base year appears warranted because:

- the proposed base year exceeds the current regulatory allowance,
- measured productivity performance across parts of the transmission sector has weakened in recent years,
- and there remains limited external evidence demonstrating the extent to which current expenditure levels reflect sustainably efficient operating practices rather than temporary or transition-related cost pressures.

This is especially important given the potential for short-term operational pressures or transition-related costs to become embedded within the ongoing regulated cost base.

The AER's focus on step changes also appears appropriate, particularly in relation to:

- cyber security obligations,
- physical security requirements,
- increasing operational monitoring and system support activities,
- and the broader implications of the Security of Critical Infrastructure (SOCI) framework.

These drivers are broadly credible and, in many cases, substantially exogenous in nature. This increases the importance of ensuring that proposed costs are incremental to the selected base year, expenditure is appropriately scoped and prioritised, and there is no double counting between existing expenditure and proposed step changes.

Particular attention should also be given to the extent to which recent investments in digital systems, operational technology, asset management capability and process modernisation are expected to deliver measurable productivity improvements or offset future operating cost growth.

More broadly, the review should consider whether forecast opex appropriately reflects the balance between increasing system complexity and compliance obligations and the longer-term efficiency benefits expected from modernisation, standardisation and digital capability investment.

Overall, the AER's prioritised areas of review appear appropriate and proportionate to the key efficiency risks within the proposal.

Base year assessment

In reviewing the elevated base year, it will also be important to consider the extent to which Powerlink has actively sought to mitigate rising operating costs through productivity improvements, reprioritisation of discretionary activities, program rationalisation, automation, workforce optimisation or other offsetting efficiency measures.

While many of the underlying cost pressures appear credible and externally driven, there is comparatively limited visibility within the proposal regarding the degree to which existing programs or operating practices have been adjusted in response to these pressures. This is particularly relevant given the role of the selected base year in establishing the ongoing regulated cost baseline.

4.5. Question on pass through events

14) What are your views on the new nominated terrorism pass through event?

The proposed terrorism pass-through mechanism appears consistent with contemporary critical infrastructure risk management practice and reflects the low-frequency, high-consequence nature of terrorism-related events.

Three of the four proposed pass-through events already existed in the current period, with terrorism was the new addition. It had been recommended by Marsh (Powerlink's insurer/broker) and similar provisions had already been approved in other recent network determinations.

In a conversation with CCP32, the RPRG noted:

> *"*We had a productive discussion with Marsh at the November RPRG meeting and came away with comfort around Powerlink's approach to manage risk through a balance of commercial insurance, self-insurance and pass through events. We leave the AER to determine these matters"

While stakeholders were provided with detailed explanations and direct engagement with Powerlink's insurance advisers, the resulting discussion was primarily directed toward understanding the rationale and overall approach rather than independently testing the efficiency or setting of the proposed arrangements.

While we broadly support the proposal, we ask that the AER consider: *"How much corporate resilience investment is enough before additional residual risk is transferred back to consumers through pass-through arrangements?"*

A broader comment on pass-through events

On 30 April 2026, the AER approved cost pass-through applications from various electricity distribution businesses. The AER received two submissions to the cost pass-through application processes: from David Prins, Mark Henley and Robyn Robinson (members of the AER's Consumer Challenge Panel, sub-panel CCP32) and Jennifer Brownie on behalf of the consumer advocacy group Queensland Electricity Users Network (QEUN).[27]

While the submissions did not specifically oppose the cost pass-through applications, both raised broader concerns about consumer impacts, engagement, and consistency across the cost pass through and revenue determination frameworks.

The submissions highlighted that cost pass through applications can impose material costs on consumers through electricity bills but can receive limited and inconsistent stakeholder engagement compared to broader regulatory processes. They also raised concerns about insufficient consumer scrutiny, cumulative bill impacts, and potential substitution of insurance with cost pass through claims, and suggested businesses and the AER strengthen and review engagement approaches for these applications.

We commend ongoing consideration of pass-through events generally, in relation to their often-limited engagement, and their impact on customer bills.

[27] See https://www.aer.gov.au/news/articles/communications/aer-approves-cost-pass-through-applications-ausnet-services-jemena-cpu-evoenergy-and-energex

4.6. Question on contingent projects

15) What are your views on the proposed contingent projects? AER – Issues paper: Powerlink electricity transmission determination 2027–32 – March 2026

Powerlink indicates that the base capex proposal is approximately $2.5 billion, and proposed contingent projects could add up to approximately $4.3 billion. In addition, the broader transmission investment pipeline extending toward 2037 could exceed $7 billion when major ISP developments are included.

The RPRG makes a useful point that in the five revenue proposals Powerlink has lodged since 2002 there have been 33 contingent projects proposed, and only one project has been triggered.

1. **Non-ISP contingent projects** (Traditional load / generation / system security driven projects)

Project	Indicative Cost
Northern Bowen Basin Reinforcement	$442m
Southern Queensland System Strength	$225m
North Brisbane Area Network Development	$248m
Central Queensland System Strength	$450m

These are largely associated with mining load growth, generation retirement/change, system strength and regional network augmentation.

2. **Queensland Energy Roadmap contingent projects** (Much larger and more strategic)

Project	Indicative Cost Range
Central to North Queensland Reinforcement	$209m–$1.79bn
Gladstone Area Augmentation	$76m–$375m
Southwest Queensland Augmentation	$79m
Brisbane Area Network Development	$65m
Surat Basin Area Network Development	$644m

These are strongly linked to renewable integration, REZ development, industrial electrification, and Queensland Energy Roadmap implementation.

Powerlink also highlight QNI Connect and CQ-SQ Reinforcement as looming ISP projects.

Assessment

The scale is enormous.

We strongly support the AER's views on deliverability, sequencing, workforce availability and procurement. In particular, we ask whether the industry and regulatory framework are well adapted to managing a historically unprecedented volume of uncertain, overlapping, transition-driven transmission investment.

The proposed contingent projects reflect the increasing scale and uncertainty associated with transmission investment required to support the energy transition, renewable integration and evolving system security requirements across Queensland and the broader NEM. In principle, the use of the contingent project framework appears appropriate for projects where the underlying need is

reasonably foreseeable, but the timing, scope or triggering conditions remain uncertain at the time of the determination.

Given the very substantial scale of the proposed contingent project pipeline, it is important that the associated trigger mechanisms are clearly defined, objectively measurable and closely linked to demonstrable changes in underlying network need. This is particularly important where projects are linked to uncertain future developments such as renewable generation uptake, industrial electrification, mining expansion, or broader policy-driven transition scenarios. In our view, trigger events should provide a high degree of transparency and minimise the risk of materially premature or speculative investment.

The contingent project framework should also ensure that there is a clear and proportionate relationship between:

- the triggering event,
- the scope of expenditure proposed,
- and the timing of investment response.

Given the potentially large consumer cost impacts associated with some of these projects, continued scrutiny of staging, optionality and scalability will remain important.

Transparency

Contingent projects receive materially less consumer engagement and public scrutiny than expenditure included directly within the primary revenue proposal. This is understandable to some extent, given the uncertainty surrounding future need and timing. It creates a risk that significant expenditure decisions may ultimately proceed with comparatively limited stakeholder visibility or testing of alternatives.

In this context, it is important that contingent project assessment processes continue to provide:

- transparent publication of supporting assumptions,
- clear explanation of trigger satisfaction,
- robust options analysis,
- and meaningful stakeholder engagement prior to approval of major expenditure commitments.

This becomes increasingly important as contingent project mechanisms are used to manage larger and more complex transition-related investments across the transmission sector.

The scale of the proposed contingent project list reinforces the importance of realistic assumptions regarding deliverability, workforce availability, outage coordination and supply-chain capacity across the NEM. In an environment of concurrent large-scale transmission development, careful sequencing and coordination of projects may become as important as the technical justification of the projects themselves.

Gladstone area augmentation

There are parallels between the broader Gladstone Project narrative and the formal trigger event for the Gladstone Area Augmentation contingent projects.

Section 4.2 of Appendix 4.04 to the Powerlink revenue proposal[28] strongly links the augmentation need to the anticipated retirement of Gladstone Power Station (GPS), the Priority Transmission Investment (PTI) process and broader Central Queensland system security concerns. However, the

[28] Powerlink 2027-32 Revenue Proposal Appendix 4.04 - Contingent Projects

formal trigger event in section 4.5 is drafted much more narrowly around the need to meet increased demand. In effect, Powerlink appears to be treating the Gladstone PTI project as part of the assumed "base case" network configuration, with the contingent augmentation intended only to address incremental load growth beyond the post-PTI supportable load threshold of approximately 1,800 MW.

This distinction is important. The core Gladstone Project PTI is fundamentally driven by the need to replace the system strength, inertia, voltage control and thermal support currently provided by Gladstone Power Station. By contrast, the Gladstone area augmentation contingent projects are framed as subsequent capacity augmentation works that may become necessary if major industrial electrification and new customer loads exceed the capability of the network following completion of the PTI project. That is why the trigger event focuses on committed additional load, successful completion of a future RIT-T, and Powerlink Board approval, rather than explicitly referencing GPS retirement timing or ISP assumptions.

Nevertheless, the absence of any direct linkage to the Gladstone PTI outcome, the 2026 ISP, or GPS closure timing does create a degree of uncertainty. If GPS retirement were delayed, staged progressively across units, or otherwise altered from current assumptions, the timing and urgency of some network augmentations could change materially. Continued operation of some GPS units would likely preserve system strength, inertia and voltage support for longer, potentially deferring the need for some augmentation works or changing the supportable load threshold in the Gladstone region.

Similarly, changes in ISP assumptions or the final scope and timing of the Gladstone PTI could alter the underlying planning basis for the contingent projects.

Accordingly, while the trigger event may satisfy the formal requirements for a contingent project under the Rules, it arguably understates the extent to which the contingent augmentations remain strategically linked to broader developments in Central Queensland, including the Gladstone PTI, industrial electrification and the future operational profile of Gladstone Power Station.

The RPRG assessment

The views expressed by the RPRG regarding contingent projects appear both reasonable and well targeted. In particular, the RPRG appropriately focused on:

- the clarity and robustness of project trigger mechanisms,
- the cumulative impact of contingent and other out-of-period projects on customer prices,
- and the practical deliverability of the broader transmission investment portfolio where multiple contingent projects may proceed concurrently.

We agree with the RPRG's position that customers require greater visibility of expenditure that may ultimately proceed outside the ex-ante capital program, including contingent projects and Priority Transmission Investments. Given the very substantial scale of the potential future investment pipeline, transparency regarding possible future price impacts is increasingly important to support informed stakeholder engagement and long-term customer understanding of transmission cost trends.

We also agree with the RPRG's concern regarding the practical deliverability implications associated with multiple contingent projects being triggered within the same regulatory period. As discussed elsewhere in this advice, concurrent large-scale transmission development across the NEM is likely to place increasing pressure on specialist labour, outage windows, contractor capability and equipment supply chains. In this environment, deliverability risk becomes not merely a project management issue, but a material factor in assessing the realism and efficiency of the overall investment pathway.

Importantly, the RPRG also challenged the identified trigger events and estimated project costs in an effort to better understand the relationship between contingent project activation and the underlying need for prescribed transmission services. We consider this an appropriate area of focus. Given the uncertainty surrounding many transition-related developments, contingent project mechanisms should continue to rely on clearly defined, objectively verifiable and proportionate trigger conditions to minimise the risk of premature or inefficient investment outcomes.

4.7. Question on deliverability

16) Do you have comments on the deliverability risk of Powerlink's overall capex program?

Powerlink has taken credible steps to address deliverability risk, including improved governance, a two-stage approval process, and stronger incorporation of lessons learned from the current period. In addition, the close working relationship between Energy Queensland and Powerlink may provide greater flexibility in the deployment of materials, field resources and specialist skills across the two businesses.

The RPRG was broadly supportive of this approach but sought further evidence that these measures are translating into improved delivery outcomes in practice. We share this concern.

Notwithstanding these improvements, current experience shows that material deliverability risks are real, largely associated with the scale of the proposed capital program. The step-change in expenditure coincides with ongoing constraints in labour, contractors and supply chains across the transmission sector, which are not fully within Powerlink's control.

Many major transmission projects are being progressed concurrently across the NEM, increasing competition for both resources and equipment.

In particular, the availability of protection and control equipment, as well as the specialised skills required to install and commission these systems, is likely to be constrained. This creates a risk that delivery timelines and costs may diverge from forecast.

In this context, the key issue is not whether deliverability risks exist, but how they are managed. Greater clarity is required on contingency arrangements, including the flexibility of the works program, the ability to reschedule or reprioritise projects, and the extent to which alternative delivery strategies can be employed without transferring additional costs to consumers.

We recommend that the AER give further consideration to:

1. how transmission businesses manage material delays and resource constraints in practice, including whether sufficient flexibility exists within the regulatory framework to respond to these risks while maintaining cost discipline,
2. how the working relationship between Powerlink and Energy Queensland, including the potential sharing or coordination of regional resources and specialist field capability in northern Queensland, may improve delivery flexibility and operational efficiency, and
3. whether greater industry-level coordination of specialist resources, procurement and equipment scheduling—potentially facilitated through bodies such as the ENA—could improve delivery efficiency and reduce system-wide supply-chain pressures over time.

In some cases, persistent delivery uncertainty may itself contribute to higher forecast expenditure through increased contingency allowances, accelerated procurement strategies, contractor retention costs or duplicated resource arrangements. We ask the AER to be vigilant on this possible occurrence.

4.8. Questions on incentive schemes

17) What, if any, are your concerns with the application of the CESS or EBSS for Powerlink in the 2027–32 regulatory control period.

Please refer to Section 3 of this advice, which discusses the interaction between the CESS/EBSS arrangements, base-year efficiency, transition-related expenditure pressures and long-term consumer outcomes.

18) Do you consider Powerlink's proposed exclusion of opex categories from the EBSS for the 2027–32 regulatory control period is reasonable? Please explain why.

Powerlink's proposed exclusions from the EBSS appear broadly reasonable and generally consistent with the intent of the scheme and prior AER practice. The proposed excluded categories—including debt raising costs, network support costs, and AEMO participant and cyber security fees—largely relate to expenditure categories that are:

- externally driven,
- subject to limited management control,
- or not forecast using a conventional revealed-cost base year approach.

In these circumstances, exclusion from the EBSS appears consistent with the objective of ensuring that the scheme primarily applies to expenditure areas where management actions can realistically influence efficiency outcomes.

It is also relevant that Powerlink has not proposed broader exclusions for categories such as insurance and self-insurance costs, which suggests a relatively measured approach to the proposed exclusions.

However, the proposed exclusions further increase the importance of ensuring that the remaining operating expenditure subject to the EBSS is itself based on an efficient and appropriately scrutinised cost base, particularly given the elevated FY26 base year, increasing operating complexity and the material role of step changes within the proposal.

While many excluded expenditure categories are substantially externally driven, it remains important that businesses continue to pursue offsetting efficiencies and internal cost discipline in response to rising compliance and operating costs. A prudent operator would ordinarily be expected to respond to sustained external cost pressures not only through increased expenditure, but also through ongoing reassessment of priorities, operating models, automation opportunities and productivity improvements.

In this context, continued scrutiny of the underlying controllable cost base remains important to ensure that external cost escalation does not contribute to a broader structural ratcheting of operating expenditure over time.

Demand management innovation allowance mechanism (DMIAM)

We consider there is a legitimate question as to whether the material provided by Powerlink demonstrates actual demand management innovation activity sufficient to support the conclusion that a DMIAM allowance is unnecessary for the 2027–32 period.

The Powerlink proposal states that the RPRG supported the decision not to seek a DMIAM allowance on the basis that "demand management innovation is managed as part of business-as-usual work at Powerlink". [29] However, the supporting RPRG correspondence dated 22 December 2025 does not appear to have been published, despite being quoted in the proposal. This makes it difficult for stakeholders to understand the basis on which the RPRG formed its view or the extent of evidence that was provided to it.

Further, while the briefing paper provided by Powerlink[30] refers to "demand management innovations undertaken since 2021" and "key insights" from flexible load services work, we were unable to identify substantive examples of actual demand management innovation activities undertaken by Powerlink. The paper appears to focus primarily on system observations, conceptual opportunities and broader

[29] Powerlink, *2027–32 Revenue Proposal*, p.34. See also RPRG meeting slides, 11 December 2025, slide 41

[30] Powerlink, *Flexible Load Services – Demand Management Innovation Briefing Paper*, provided to the Revenue Proposal Reference Group (RPRG), December 2025

industry developments rather than implemented or trialled demand management initiatives involving customer load participation.

Demand management ordinarily involves some form of active customer-side participation or behavioural response intended to modify demand outcomes on the network. However, the examples discussed in the briefing paper appear largely directed toward network visibility, operational understanding or technology capability development rather than demonstrable demand-side management initiatives. At most, footnote 5 refers to use of technology tools, but this does not appear to constitute demand management innovation in the ordinary sense contemplated by the DMIAM framework.

Powerlink may be incorporating demand management considerations into broader business-as-usual planning activities. However, based on the material published to date, it is difficult to conclude that Powerlink has demonstrated a sustained program of demand management innovation activity that would justify dispensing with a dedicated DMIAM allowance mechanism altogether.

Accordingly, there may be value in the AER seeking further clarity from Powerlink regarding:

- what specific demand management innovation projects have been undertaken since 2021;
- which of those projects involved active customer participation or measurable demand response outcomes;
- what lessons or capabilities were developed through those activities; and
- how Powerlink intends to ensure ongoing incentives for non-network and demand-side innovation in the absence of a DMIAM allowance.

4.9. Questions on pricing methodology

19) Do you consider Powerlink's proposed changes to its pricing methodology for the 2027/32 period are appropriate and that they give effect to the pricing principles for prescribed transmission services?

Powerlink's proposed pricing methodology changes for the 2027–32 period appear appropriate and generally consistent with the pricing principles applicable to prescribed transmission services.

In particular, the proposed approach to smoothing the price path appears to reflect customer preferences identified through the engagement process, especially regarding:

- price predictability,
- avoidance of abrupt year-on-year increases,
- and improved ability for residential, commercial and industrial customers to manage future electricity cost expectations.

This approach is consistent with concerns raised by the RPRG regarding affordability, price predictability and limiting unexpected cost pressures for customers, particularly in the context of broader energy transition and infrastructure cost pressures.[31]

The proposed methodology also appears reasonably transparent in presenting indicative customer bill impacts and in identifying the potential effect of projects outside the ex-ante capital program, including contingent projects and Priority Transmission Investments. This improved transparency is an

[31] RPRG Submission on Powerlink Revenue Proposal, discussion of customer focus on "affordability" and "price predictability", p.12

important feature of the proposal given the scale of potential future transmission investment requirements.[32]

Price smoothing approaches inevitably involve trade-offs between short-term price moderation and longer-term revenue recovery. As noted during engagement, smoothing mechanisms may reduce near-term bill impacts while effectively deferring recovery into later years. In this context, it remains important that customers retain clear visibility of the longer-term pricing implications associated with the broader transmission investment pipeline.

Overall, the proposed pricing methodology changes appear broadly consistent with the pricing principles and reflect a reasonable balance between:

- customer preferences for price stability,
- transparency of future cost impacts, and
- recovery of efficient transmission costs.

20) More generally, do you have any comments on Powerlink's proposed transmission pricing methodology for the 2027–32 period?

The proposed transmission pricing methodology highlights the increasing challenge of balancing affordability, investment requirements, and long-term system transition objectives within the electricity sector.

Powerlink's proposal appropriately recognises that transmission prices can no longer be considered solely in the context of the ex-ante regulatory proposal, given the growing significance of:

- contingent projects,
- Priority Transmission Investments,
- ISP developments, and
- broader energy transition-related augmentation requirements.

In our view, one of the stronger aspects of the proposal is the relatively transparent presentation of possible future price impacts associated with projects outside the immediate revenue proposal. This responds to concerns raised by the RPRG regarding the need for improved customer visibility of cumulative future transmission costs and broader network development pathways. [33]

At the same time, the proposal reinforces the importance of ensuring that transmission investment timing, project sequencing, deliverability assumptions and expenditure efficiency remain subject to careful scrutiny, given their direct influence on long-term customer price outcomes.

In particular, there remains uncertainty regarding:

- the cumulative impact of future contingent and ISP-related investments,
- the ability of the sector to efficiently deliver concurrent large-scale transmission projects across the NEM to an approved budget and timing, and
- the extent to which future productivity improvements may offset rising capital and operating cost pressures.

[32] RPRG Submission on Powerlink Revenue Proposal, Recommendation 12 – Transparency of future price scenarios, p.11.

[33] ibid

As transmission investment requirements continue to increase, maintaining customer confidence will depend not only on the technical justification of individual projects, but also on continued transparency regarding:

- long-term price trajectories,
- alternative investment pathways,
- and the extent to which businesses are actively pursuing productivity improvements and cost mitigation opportunities in the interests of consumers.

Overall, Powerlink's proposed pricing approach appears thoughtful and responsive to customer preferences, although the longer-term affordability implications associated with the broader transmission investment pipeline remain a significant issue for ongoing regulatory scrutiny.

Appendix: Activities informing the engagement and the proposal

Informed by its strong engagement model for the 2022–27 reset and a commitment to ongoing consumer engagement outside the regulatory resets, Powerlink undertook a range of engagement activities that inform the 2027–32 Regulatory Proposal.

Many of these activities were not observed by the AER or CCP34. However, their outcomes have been included in the website notes and are seen to inform the RPRG. These include:

a) Early conversations with Powerlink's business-as-usual Customer Panel in March and June 2024 to discuss the proposed approach and timeframes

b) An optional introductory training session for Customer Panel members - 'Revenue Determinations 101' in September 2024

c) A half day in-person co-design workshop focusing on the proposed engagement scope, schedule and participation levels and involving the Customer Panel, Australian Energy Regulator, CCP34, government and other stakeholders in November 2024

d) Publication of a 2027-32 Revenue Determination Engagement Plan and Business Narrative in December 2024

e) Update of Queensland Household Energy Survey (QHES) questions to incorporate issues relevant to Powerlink's regulatory determination and conduct of the survey in March/April 2025

f) A survey of directly connected and C&I customers in June 2025

g) Hosting the inaugural Central Queensland Transmission Network Forum in Gladstone in August 2025

h) Optional substation and control room site tours for Customer Panel members in August 2025 to enhance real-world understanding of aspects of the regulatory proposal

i) At least thirteen formal RPRG meetings and ad-hoc additional meetings, with the agendas aligned with the engagement plan

j) Publication of a Draft Revenue Proposal in September 2025, to seek feedback on initial positions.