

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

Our members are highly exposed to movements in both gas and electricity prices and have been under increasing financial stress due to escalating energy costs. These increased costs are either absorbed by the business, making it more difficult to maintain existing levels of employment or passed through to consumers in the form of increases in the prices paid for many everyday items.

Powerlink's Proposal provides an excellent perspective on the rapidly changing business and operating environment faced by electricity networks in the National Electricity Market.

While it presents the proposed revenue requirement for the 2022-27 period, this is seen in the context of what needs to be done in that period to ensure it meets stakeholders needs well beyond the end of the five-year reset period. What it is planning to do in the face of rapidly decreasing minimum demand, higher and shorter demand peaks, expansion in connection of large-scale distributed generation, development of renewable energy zones and declining delivered energy are all critical components of its forward looking plan. Powerlink's Integrated Electricity Pathways work presented to the Consumer Panel provided confidence that Powerlink is actively researching how to understand and address the challenges ahead.

This submission:

- Complements Powerlink on their best practice consumer engagement
- Welcomes a Proposal that is not an 'ambit claim' with its focus on affordability (with the price falls for business customers) and efficiency – falling capex, opex productivity and a declining Regulated Asset Base (RAB)
- Suggests that, given the excellent consumer engagement, the Proposal should support a 'lighter touch' by the AER as it undertakes its review of the prudent and efficient level of expenditure
- Welcomes the 0.5% opex stretch productivity target but highlights the risks to consumers under the EBSS if the stretch target of 0.5% opex productivity improvement is not achieved, and
- Proposes an even greater focus on capital productivity.

In addition to the consumer impact of how these technical challenges are met by networks, consumers on all networks face the risk post the next revenue period that rising interest rates will raise WACC and prices. Networks will not be able to rely on falling WACC to compensate for high non-load driven capex and consumers could well be facing rising prices for an increasingly underutilised network built for demand patterns pre DER.

We think that the Proposal shows Powerlink is well positioned to respond to that WACC challenge but a lot of work and hard decisions remain to be done. Governments subsidising distributed energy generation cannot avoid the unintended consequences of stranded asset risk.

## CONSUMER ENGAGEMENT

The EUAA is a long-term member of the Customer Panel and a member of the Revenue Proposal Reference Group used for this reset process. Given our wide experience across the NEM in network resets, we judge Powerlink's approach to be best practice in a constantly improving landscape. There is no 'one size fits all' engagement model. It needs to be network specific drawing on factors such as – electricity vs gas, distribution vs transmission and the maturity of a network's BAU engagement including the knowledge of the consumer advocates in that BAU engagement. We believe that the Powerlink model well suits its particular circumstances.

Our views on Powerlink's consumer engagement leading up to its submission, were set out in the joint December 2020 [Customer Panel Statement on Engagement](#) submitted as part of Powerlink's Proposal. The Panel said:

*"The panel are unanimous in our view that Powerlink's engagement with us has been genuine, consistent and deep. We also acknowledge the consistent high-level efforts of PQ staff to ensure that they engage meaningfully with us."*

This was the case right from the start with the co-design process, development of the business narrative, development of the engagement plan and continued through the various drafts presented for the RPRG consideration and feedback.

There were many instances of Powerlink listening to and responding very well to suggestions we made through this process. We can clearly see the impact of our engagement on the Proposal. All questions were following up in a comprehensive and understandable way and this is shown in Table 3.6 'How feedback influenced decision-making' in the Proposal<sup>1</sup>.

In important cases Powerlink arranged for subject matter experts to directly address the RPRG/Customer Panel e.g. a deep dive on impacts of the changing insurance markets. In many other areas we asked lots of questions that required further analysis and modelling e.g. impact of changes in WACC on prices, and Powerlink responded in a timely way with comprehensive answers.

Importantly, unlike other network Proposals we have seen in recent years, the Powerlink Proposal is not an 'ambit claim'. They do not seem to be using it as a starting point in a negotiation to gain an otherwise higher final allowed revenue.

Perhaps the greatest compliment is that other networks we are involved with are looking at how they might adapt the Powerlink model to their particular circumstances as the continuous improvement in engagement models continues. That is a great compliment to Powerlink.

Powerlink sought to achieve a 'capable of acceptance' from the Panel for their Proposal. As we said in our Statement on Engagement, we were unable to give that assurance. The EUAA looks to the AER's analysis of the building block expenditures in the Draft Decision to support the EUAA to consideration of whether to make such a definitive statement.

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<sup>1</sup> Proposal pp 30-35  
EUAA Submission: Powerlink Queensland Revenue Proposal 2022-27 | 26 May 2021

Powerlink provides its own self-assessment against ‘capable of acceptance’ criteria<sup>2</sup> drawing on CCP23 and 24 experience. We consider that Powerlink has meet or substantially met the criteria under ‘Nature of engagement’, ‘Breath and depth’ (a comment that perhaps breadth could be improved especially with stakeholders outside of the South East) and ‘Clearly evidenced impact’. The question is around ‘Proof point’.

Scoring well on the ‘Table 3’ assessment is a necessary, but not sufficient, condition for an unconditional ‘capable of acceptance’. While there is no real growth in opex, a 3% reduction in capex and falling nominal/real RAB, the AER still has to undertake its role under the rules to assess whether those proposed expenditures are ‘prudent and efficient’. Consumer advocates are unable to do that and hence the EUAA is unable to come to a view on ‘capable of acceptance’ until after reviewing the Draft Decision by the AER.

What we can say now is that Powerlink is well advanced on the journey and the Proposal is ‘capable of support’. Its comprehensive engagement should provide comfort to the AER that consumer representatives are very supportive of the progress made and that this should lead to a lighter touch as the AER fulfils its role is assessing the prudent and efficient level of allowable expenditure. We expect that the extent of any AER substitution of an alternative estimate is likely to be narrow and should be able to be quickly resolved by further targeted consumer engagement and a slightly revised final Proposal.

More detail is provided in the separate Consumer Panel submission on the Proposal.

### **SOME COMMENTS ON PRODUCTIVITY**

The Proposal draws on a Houston Kemp study of Powerlink’s productivity performance – total factor, capital and operating – to draw conclusions about its relative performance<sup>3</sup>.

*“HoustonKemp’s review indicates that our capital and operating expenditure during the current regulatory period is in line with other TNSPs. Other performance metrics and PPIs explored by the AER in their 2020 Annual Economic Benchmarking Report also indicate that Powerlink’s performance is in line with expected trends and does not suggest that we are operating inefficiently compared to other TNSPs.”*

The reduction in opex in the current period compared to 2013-17 led to an improvement in operating expenditure MPFP in 2017/18 and this was sustained in 2018/19. This supported the increase in MTFP in those two years.

Our main comment on Powerlink productivity trends is that performance is generally presented in relative terms – how Powerlink compares with the other networks – rather than in absolute terms<sup>4</sup>. The problem with the former approach is that Powerlink’s performance is seen as ‘good’ if it is similar to other TNSPS even if all are collectively performing poorly. These Figures, from the AER’s Annual Benchmarking Report<sup>5</sup> show the poor productivity

<sup>2</sup> See Table 2.3 p. 18-19 <https://www.aer.gov.au/system/files/Powerlink%20-%20TRP%202022-27%20-%20Revenue%20Proposal%20-%20January%202021.pdf>

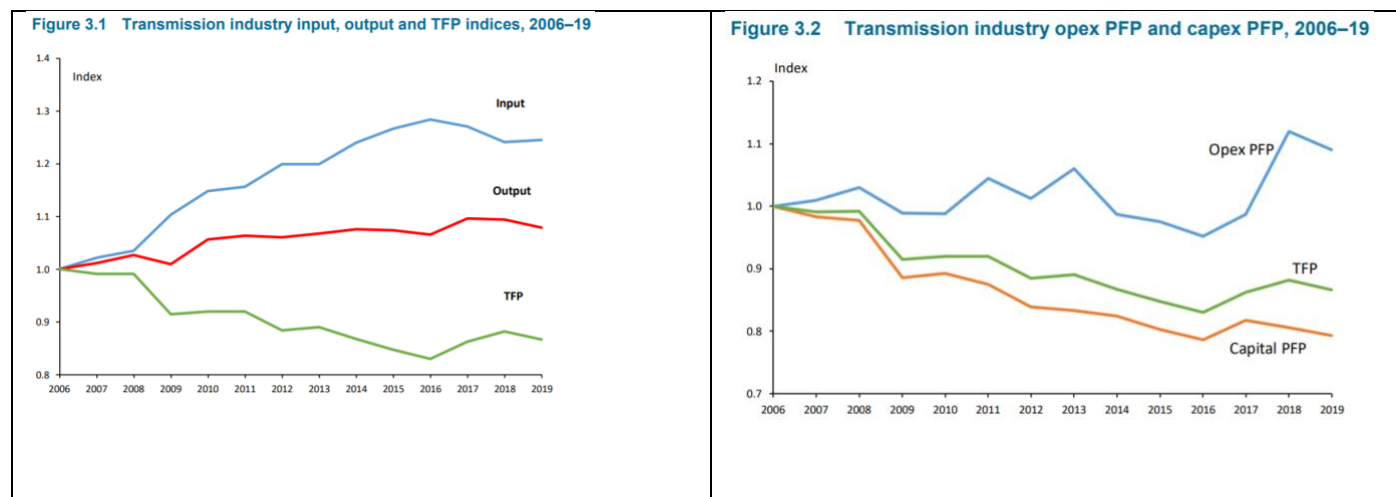
<sup>3</sup> Revenue Proposal p. 55

<sup>4</sup> The Proposal (pp 90-92) provides forecasts of partial productivity measures - circuit length, customer numbers and energy transported showing improved performance over the period to 2027. But these are still relative comparisons – Powerlink compared to itself. While they show improvement, they do not indicate how close (or far apart) Powerlink is from the TNSP efficiency frontier.

<sup>5</sup> See p. 13

<https://www.aer.gov.au/system/files/AER%202020%20transmission%20network%20service%20provider%20benchmarking%20report%20-%20November%202020.pdf>

performance of all TNSPs over the long term. Yes, the recent improvement is welcome, but it will need to be sustained for many years to even get back to the level of 2006.



The AER notes that in respect of the 14 year period from 2006-2019:

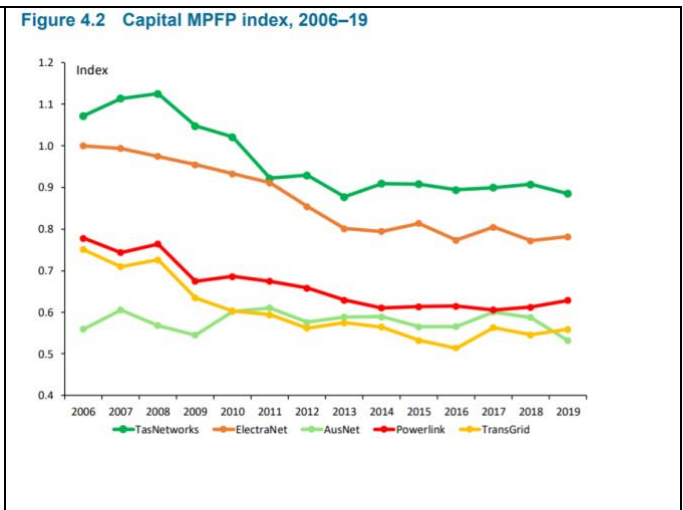
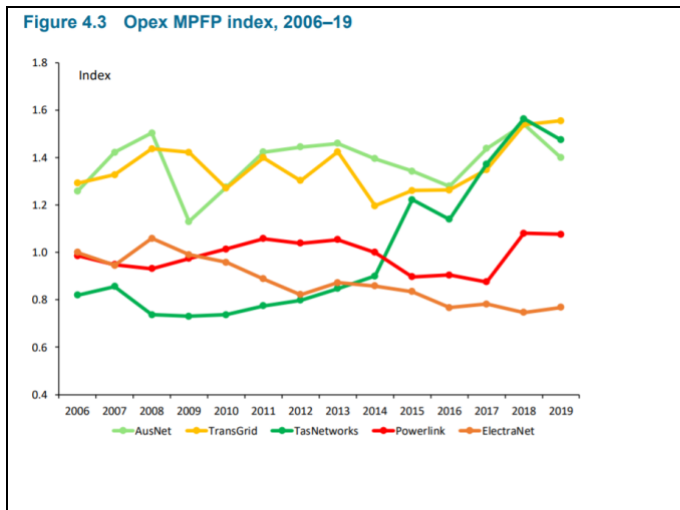
*“... input use grew faster (1.7 per cent per year on average) than outputs (0.6 per cent per year on average). This resulted in a decline in long-term TFP by 1.1 per cent per annum on average. There was an improvement in transmission industry productivity for two years from 2016, although this trend did not continue in 2019 when TFP declined by 1.8 per cent.”*

The figure on the right above<sup>6</sup>:

*“...shows that the long term decline in capital PFP is largely driving this long term reduction in transmission network productivity. Over the last 14 years (2006–19), capital PFP declined at average annual rate of 1.8 per cent compared to opex PFP average annual growth of 0.7 per cent. The improvement in transmission productivity from 2016 can be linked to both opex and capex PFP. Figure 3.2 shows significant opex PFP growth in 2017 and 2018, while capital PFP grew only in 2017. In 2019, declining opex PFP (2.6 per cent) and capital PFP (1.5 per cent) contributed to the 1.8 per cent reduction in TFP.”*

Powerlink’s experience mirrors this overall trend. Apart from the last couple of years, declining overall productivity has been driven by falling capex productivity. As we noted above, the improvement in the last couple of years was driven by improving opex productivity.

<sup>6</sup> Op cit p.14

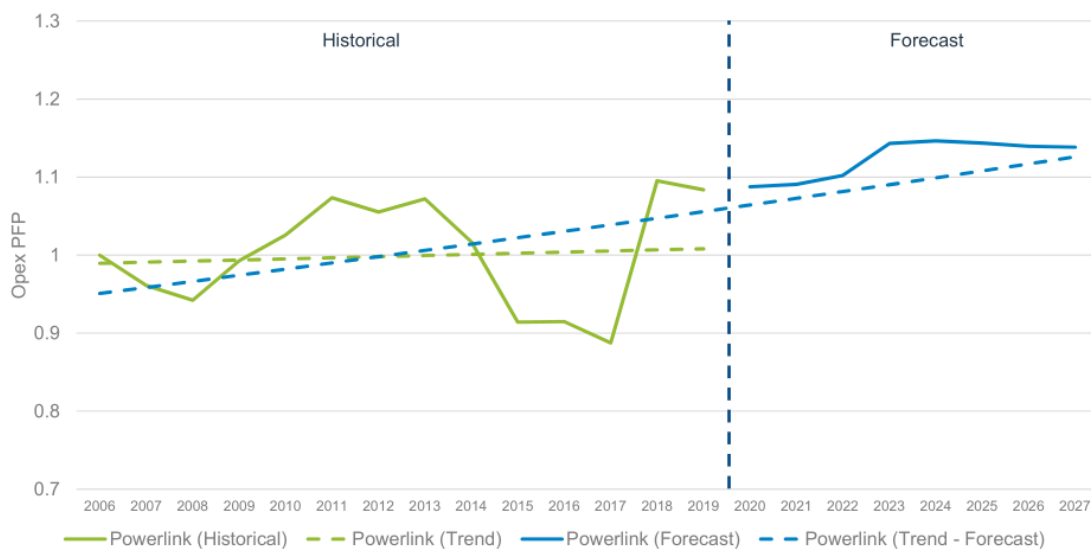


The issue of productivity was a particular focus of RPRG discussions and we appreciated the sector leading this, the open and transparent way it was discussed and information provided. Powerlink correctly notes in its Proposal<sup>7</sup>:

*“Our Revenue Proposal Reference Group (RPRG) also recognised that changes to certain inputs in the analysis can improve the benchmarking performance of a business without improvements to outcomes for customers. Our customers want us to focus on genuine improvements in capital and operating expenditure, rather than changes that might improve benchmarking performance but deliver no tangible customer benefits. We have had regard to this feedback as we developed our operating expenditure forecasts and our no real growth approach is designed to deliver real benefit to customers.”*

For the first time in our knowledge Powerlink provides forecasts of opex productivity<sup>8</sup> and we comment on this further below:

Figure 6.13: Powerlink historical and forecast operating expenditure productivity



<sup>7</sup> Proposal p. 88

<sup>8</sup> Proposal p.98

Our simple message is that a lot more needs to be done, particularly in capex productivity, given the risks ahead to consumer prices with falling grid demand and rising WACC. Performance should have an ‘absolute’ as well as a ‘relative’ perspective. It is unlikely that many EUAA members would still be in business if they had the same long term productivity trend. But then they are not regulated monopolies that are, in theory, regulated to reflect what occurs in a workably competitive market.

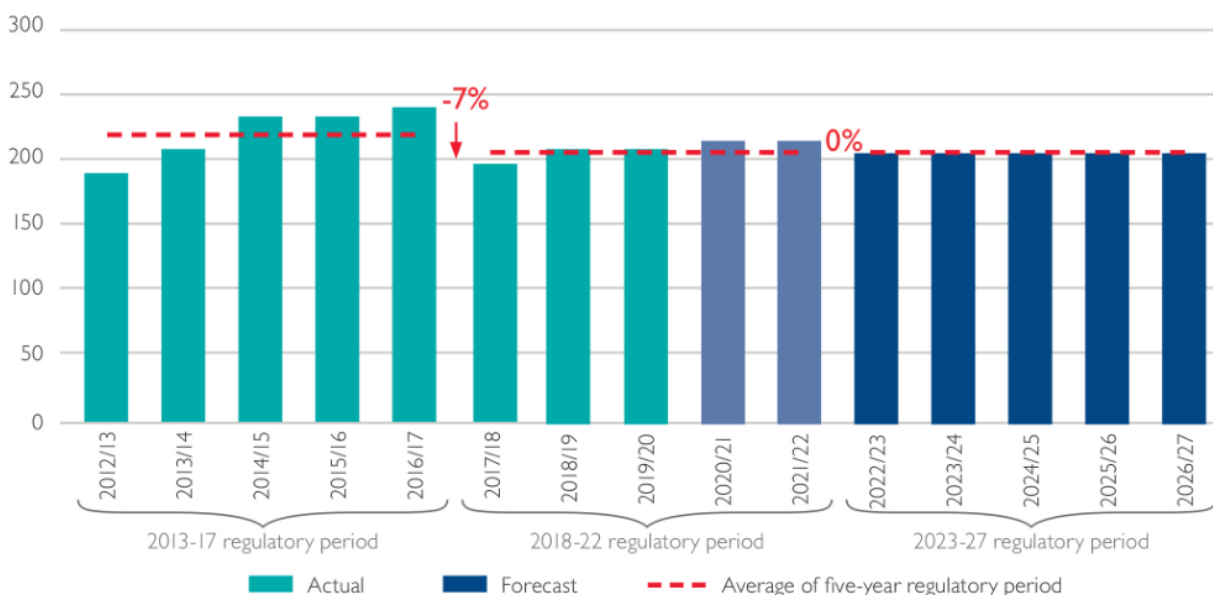
**THE PRODUCTIVITY IMPROVEMENT IN OPEX IS WELCOME BUT THERE ARE RISKS**

Forecast opex in the current period is \$9.5m or 0.9% above the allowance. It was the reduction in opex in 2017/18 that drove the improved opex productivity in that year which was sustained in 2018/19. However, the Powerlink forecast above is that the increase in actual/forecast opex in the latter years of the current period leads to no productivity improvement in those years.

The Proposal has the same real level of opex for 2022-27 as the current period based on underlying actual/forecast opex in the current 2018-22. To meet this target there are no step changes and a productivity factor of 0.5%, above the TNSP average. Powerlink forecast potentially up to \$26.1m of cost increases (e.g. insurance premiums and cyber security requirements) over the 2023-27 regulatory period that they may need to absorb over and above their operating expenditure forecast. We welcome the approach of no step changes and the decision to commit to top down productivity improvements to achieve the opex target.

Houston Kemp have advised that the proposed base year (2018/19) is ‘not materially inefficient’. Again this is a relative, not absolute, measure with all the limitations that come with this. We acknowledge the difficulties the AER faces in trying to measure TNSP efficiency given the small sample size, influence of OEFs etc. This seems to have the result that Powerlink is considered ‘not materially inefficient’ even though it ranks fourth in productivity in a sample of five. Again this is difficult for our members to understand and accept the costs that result from this regulatory outcome as the competitive market does not provide them with the same leeway.

Figure 3: Actual and forecast total operating expenditure (\$m real, 2021/22)<sup>(1)</sup>



Pathways are still being developed to achieve this stretch productivity target and the willingness of Powerlink to commit in the absence of those pathways is certainly welcome. A recent Customer Panel meeting provided the following details on potential pathways.

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

Our main concern is, given that<sup>9</sup>:

*“Our operating expenditure productivity trend was 0.1% between 2005/06 and 2018/19...”*

if the stretch target of 0.5% opex productivity improvement is not achieved, under the EBSS consumers would pay 70% of the overrun. While an efficiently designed EBSS would be symmetrical in outcomes, the incidence of EBSS carryover benefits to consumers across networks seems to have been much higher than EBSS carryover penalties to consumers<sup>10</sup>.

Given Powerlink’s historical 0.1% trend and the 0.5% stretch target, which it highlights as<sup>11</sup>:

*“...higher than the industry benchmark average of 0.3%”*

we would argue that there is a lower chance of the EBSS risk to consumers being symmetrical and the higher the risk to consumers that they will end up paying 70% of an overrun.

The level of risk to consumers will crucially depend on how Powerlink can navigate its industrial relations/EBA framework that may constrain the deliverability of the productivity improvements e.g. field delivery optimisation and IVAMS.

EUAA members do not want to see a situation where they are paying 70% of the increased costs from a failure to meet the stretch opex target. We are encouraged by progress to date and hope that continues.

<sup>9</sup> Proposal p. 97

<sup>10</sup> Powerlink is in the latter camp for 2022-27 given forecast opex in the current period is above the allowance.

<sup>11</sup> Proposal p.80

## THE REDUCTION IN CAPEX IS WELCOME BUT WHAT WILL HAPPEN WITH CAPEX PRODUCTIVITY?

Forecast capex in the current period is \$1.8m or 0.2% lower than the allowance of \$893.1m. Forecast capital expenditure for the 2023-27 period is \$863.9m or 3.1% lower than the current period forecast. This forecast is a significant 12% reduction on preliminary forecast capex in the Draft Plan which attracted significant pushback from the Customer Panel in [their submission](#). This reduction is welcome.

The majority of this forecast (\$726.1m or 84%) is non load-driven network expenditure given the continued decline in minimum demand and energy delivered means there is little augmentation expenditure.

Figure 5.1: Capital expenditure by driver (\$m real, 2021/22)

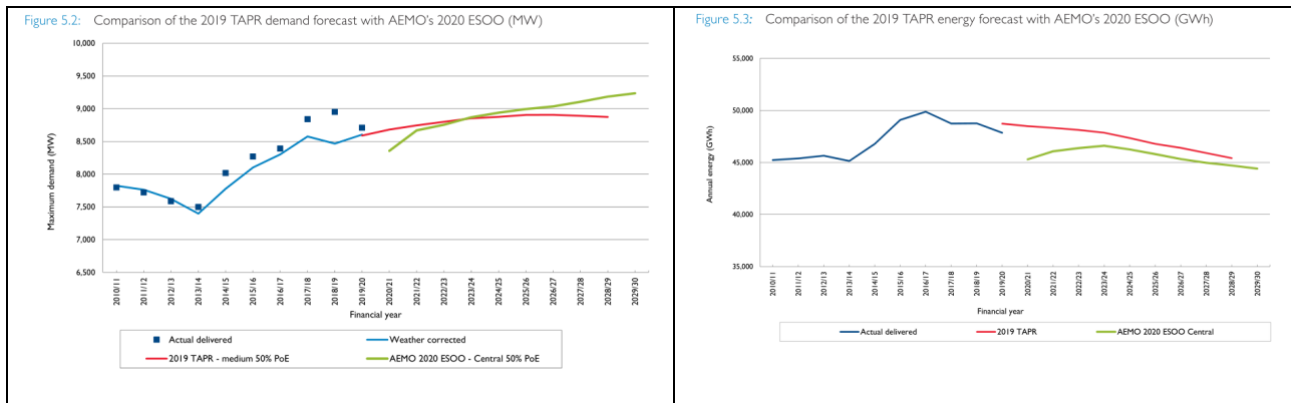


We leave it to the AER to assess how the proposed expenditure meets the capital expenditure rules. We support the hybrid approach used by Powerlink and note a relatively high proportion (76%) of capex that has been subject to a bottom-up analysis. The major expenditure category is replacement of towers given the large investment in the 1970s and 1980s.

A key uncertainty is the demand forecasts and how quickly minimum demand falls. These two graphs show the Powerlink (AEMO) assumptions<sup>12</sup>:

<sup>12</sup> Proposal pp. 66-67





We look to the AER in its assessment to be satisfied that the replacement capital is indeed prudent and efficient given this fall in demand.

### Contingent projects

The Proposal identifies one contingent project – Central to North Queensland Reinforcement – due to increased customer demand at an indicative cost of \$52.3m. This demand could come from a combination of expansion in coal mining in the Galilee Basin and the potential connection of the Copperstring line to connect Mt Isa and the NW Minerals Province to the NEM. We have two concerns about this project:

- Given the potential reduction in international demand for Queensland coal as our export markets adopt net zero emissions targets, we are cautious about building a 60-year asset that may have an economic life considerably less than 60 years; this would suggest potential stranded asset risk that should not be borne by all Powerlink customers, and
- If there is an economic case for Copperstring then it should be made based not only on the cost of the transmission line itself but also any shallow connection costs associated with the existing grid; these costs should be recovered from the beneficiaries of Copperstring, not all Powerlink customers.

### Capex productivity

Given our comments above, it would be helpful for Powerlink to provide forecasts of capex productivity over the reset period - to what extent will the reduced spend (inputs) compensate for the reduced output (energy carried)?

## PRICING METHODOLOGY

The EUAA was involved in the extensive process of engagement that Powerlink undertook to review its pricing methodology. We have a range of members – some direct connected, others ICC customers. We do not get involved in the detailed circumstances of individual members and in this case encouraged them to deal directly with Powerlink to understand how the proposed changes might impact them.

Given the potential range of impacts on our members from the changes with some facing rising and some falling prices, we take a high-level approach. We strongly support any move to more cost reflective pricing policy. We think efficient prices results in the removal of inefficient cross-subsidies and more efficient investment decisions which lead to lower prices in the long run.

So in principle we supported the move to 60/40, locational charges based on demand only and MVA tariffs. We saw the need for further consultation on the side constraint and the pace of any change in pricing.

We did note that the discussion on the side constraint around the benefits of ‘price stability’ can have range of meanings. Limiting the change in 8% of the delivered price to  $\pm 2\%$  is perhaps small in comparison to the costs that some of our members have had in other jurisdictions flowing from RERT or ancillary services that are not bound by a side constraint.

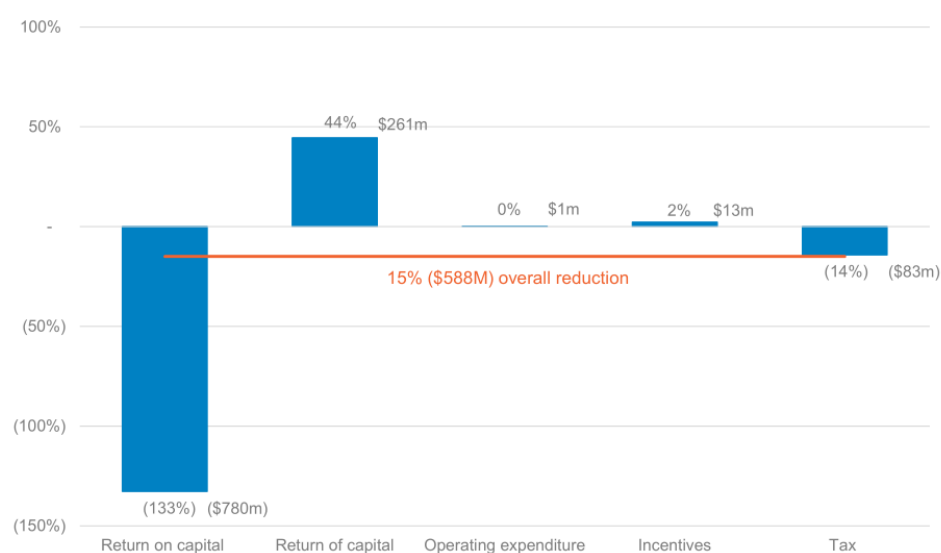
We concluded that we would leave the decision on which option to follow to Powerlink on the basis of their discussions with individual users impacted. So, we understand why Powerlink decided to not pursue a change in the locational/non-locational split to 60/40.

### RISK MITIGATION FOR A FUTURE RISE IN WACC

While some networks (not Powerlink) have complained about the fall in equity returns in recent years, an upside has been their ability to increase capex and still produce network price falls. And where they are investing in a 30/40/50/60 year asset, the low returns may only apply to a relatively short part of their asset life.

This ability to ‘cover’ capex rises with lower WACC is likely to be near its end given the recent moves on interest rates. Given this raises many issues for both consumers and networks we welcome Powerlink’s leading role in providing transparency on the impact of falling WACC as they consulted on their Proposal. The figure shows how the major driver for the price falls in 2022-27 is the lower WACC<sup>13</sup>.

Figure 11.2: Drivers of revenue change



The next reset period from 2027 might be a quite different situation of rising WACC. Our focus on capital productivity is because of our concern on the impact of a turn in the interest rate cycle and increasing WACC in the future. Powerlink provided the following estimates of an impact of a 1% rise in WACC on the Proposal to a Customer Forum meeting on 12<sup>th</sup> May. It would reverse the proposed price falls.

<sup>13</sup> Proposal p. 124

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

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

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

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

To maintain the same price forecast from the Proposal would require either:

- opex to decrease by 36% or \$370m; or
- RAB to decrease by 36% or \$2.5b.

We understand that capex contributes a relatively small proportion to MAR (<5%) in a particular reset period, but once it gets into the RAB bucket it is there for the asset life. For much of the asset base consumers pay return on capital for decades, irrespective of whether it is economically stranded. As minimum demand and asset utilisation of a network built for a pre-DER world fall, Powerlink will have particular challenges in limiting future price rises with large non-load driven repex.

We take confidence in Powerlink understanding these challenges as it develops its culture of 'constructive discomfort' as it drives innovation and pushes boundaries.

Do not hesitate to be in contact should you have any questions.

Kind regards,



Andrew Richards  
Chief Executive Officer