18 February 2022



Mr Sebastian Roberts General Manger, Network Expenditure Australian Energy Regulatory (AER) GPO Box 520 Melbourne Vic 3001

Dear Mr Roberts,

AER CONSULTATION PAPER: HOW THE AER WILL ASSESS THE IMPACT OF CAPITALISATION DIFFERENCES ON OUR BENCHMARKING

Endeavour Energy appreciates the opportunity to provide feedback to the AER's Consultation Paper on accounting for the impact of different capitalisation practices in its benchmarking (the paper). We support continued refinements to the AER's approach (where necessary) and welcome the AER's commitment to provide clarity on this issue ahead of the 2024-29 regulatory determinations.

The issue at hand is that there are differences in capitalisation practices between distribution network service providers (DNSPs). These differences are not problematic in and of themselves but from a benchmarking perspective they have the potential to materially impact the relative performance of a DNSP if not normalised. For instance, a DNSP that capitalises a higher amount than peers will appear more efficient from an opex perspective all else being equal. This is an important issue to consider given opex benchmarking scores directly inform the opex allowances set by the AER.

The AER has recognised this potential issue in the paper and has analysed firstly the variation between DNSPs' opex/capital ratios relative to those of benchmark comparison networks and secondly, the change in opex benchmarking scores from applying the current rather than the 2014 capitalisation policies. Based on this analysis the AER outlines the following options to address differences in capitalisation policies:

- Applying a capitalisation Operating Environment Factor (OEF) adjustment to modelled opex efficiency scores based on how a DNSP performs relative to benchmark networks on various opex/capital ratios. (AER preferred option)
- Adding a capitalisation explanatory variable to the econometric models used to derive average opex efficiency scores.
- Benchmarking on the basis of a DNSP's current capitalisation policy. This could involve either deriving benchmark efficiency scores using current policies a applying an OEF adjustment based on the difference in efficiency scores between current and 'frozen' 2014 capitalisation policies.
- Obtaining benchmarking efficiency scores based on a common opex/capex ratio or fixed proportion of total overheads.

We recognise that benchmarking is an important but imperfect exercise. Whilst capitalisation differences create inaccuracy in the current measures the question is whether this is material. Any change to address the issue must be tested against principles like regulatory stability and the validity, accuracy and reliability, and robustness principles as outlined in the AER's Expenditure Forecasting Assessment Guideline.

We therefore have reservations about using opex/capital ratios to derive an OEF as suggested in the paper. Based on our analysis there is no clear evidence to suggest these ratios – collectively or in isolation – are sufficiently representative of the capitalisation differences between DNSPs. Instead, we suggest the AER's current approach could be improved by adopting each DNSPs prevailing

capitalisation policy for the purposes of opex benchmarking. Our views on these key issues are discussed in further detail in Appendix A below.

If you have any queries or wish to discuss our submission further please contact or via email at

on

Yours sincerely

Colin Crisafulli Head of Network Regulation

Appendix A: Detailed feedback on capitalisation in benchmarking consultation paper

Opex/capital ratios capture more than capitalisation policy differences

The AER has indicated its preference for introducing a capitalisation OEF based on the divergence of a DNSP's opex/capital ratios compared to the customer-weighted average of benchmark efficient networks.¹ This reflects the approach used in the 2021-26 opex determinations for Jemena and AusNet Services. Specifically, the opex/capital ratios include:

- Opex/totex (an expenditure-based measure)
- Opex/total cost (a cost-based measure)
- Opex/total inputs (a physical quantity-based measure)

Given data issues make the introduction of a capitalisation explanatory variable in econometric models complex and problematic, post-modelling adjustments to opex efficiency scores would be a pragmatic way to improve the comparability of benchmarking data and opex performance. The paper acknowledges each ratio has various strengths and weaknesses and suggests whilst they are imperfect measures, they can provide a high level gauge of capitalisation practices.²

However, we are unconvinced that the ratios are sufficiently robust and fit-for-purpose to inform a capitalisation OEF adjustment. The opex/totex ratio in particular is sensitive to other factors unrelated to capitalisation and therefore makes it unsuitable for assessing opex efficiency. Factors which affect a DNSP's opex/capex mix include opex/capex trade-offs, asset replacement cycles, service reliability, capital contributions, customer growth rates, DER take up levels and constraints, and the efficiency of historical operating and capital expenditure.

These factors are irrelevant to the assessment of opex efficiency but will influence capex levels and therefore impact the opex/capital ratios. Although they might give an indication of whether a DNSP might be adopting a greater level of opex solutions relative to capex solutions, the ratios do not provide insights into the specific question of whether the DNSPs' capitalisation policies impact on the opex benchmarking results. Rather, the ratios can mask the material differences in capitalisation policies and therefore opex efficiency assessment.

Regarding opex/capex trade-offs specifically, we note the AER considers capitalisation practices should reflect both a DNSP's method of reporting expenditure as either opex or capex and a business's utilisation of opex versus capital inputs (i.e. opex/capital trade-offs).³ In contrast, Cambridge Economic Policy Associates (CEPA) considered it important to separate opex/capex trade-offs and capitalisation issues. In their report for Jemena on the impact of capitalisation and model reliability, they state:⁴

The former (opex/capex trade-offs) is about selecting particular options in order to deliver outputs, the latter (capitalisation policies) is about accounting choices. The volume of capex and opex will affect the dollar level of capitalisation, but capitalisation practices are related to the accounting policies and the polices are not affected by the volume of opex and/ or capex.

We agree with CEPA and consider a DNSP's decision to invest in either an opex or capital solution is unrelated to the accounting choices made via its capitalisation policy. In other words, opex/capex trade-offs should not be conflated with the difference in capitalisation policies that may be affecting the comparability of opex efficiency scores and benchmarking performance.

Separating the impacts of capitalisation from other factors that influence a DNSPs opex/capex mix could allow the opex/capital ratios to be used to assess opex efficiency with greater confidence. However, we accept the AER's claim that separately analysing capitalisation policy and opex/capex trade-off differences would be a complicated exercise, if possible at all. Without a method to assess and adjust

¹ These DNSPs include Powercor, CitiPower, SA Power Networks, United Energy and TasNetworks.

² AER, Consultation paper, How the AER will assess the impact of capitalisation differences on our benchmarking, Nov. 2021, p.14

³ ibid, p.3

⁴ CEPA, CEPA review of the impact of capitalisation and model reliability - AER's opex benchmarking, Dec. 2020, p.12

for these factors, opex/totex ratios provide little insight into differences in capitalisation policies between DNSPs.

The limitation of relying on opex/totex ratios has been demonstrated in generalised examples provided by CEPA. Whilst hypothetical, they reveal scenarios could arise where different DNSPs have the same (or similar) opex/totex ratios despite having significantly different capitalisation policies.⁵ This is attributed to the ratios being affected by a range of factors beyond the DNSPs' capitalisation policies, including opex/capex trade-offs.

Our analysis shows there is significant variation between the opex/capital ratios and capitalised overheads for most DNSPs, suggesting there is limited correlation between opex/capital ratios and capitalisation policies. We consider the opex/capex split of total overhead expenditure provides a good proxy for the impact of capitalisation given accounting standards and norms generally limit DNSP discretion in how expenditure related to plant, property and equipment is treated. Greater variation between DNSPs is more likely in the capitalisation of indirect costs (i.e. overheads) which is determined via the methodology typically outlined in an entity's capitalisation policy. Corporate overheads have also been included in this analysis recognising recent capitalisation policy updates made by some DNSPs relate exclusively to this sub-category of expenditure.





Furthermore, examples of significant changes in annual opex/totex ratios for individual DNSP are abundant despite most DNSPs not having changed their since or before 2014. For instance, Endeavour Energy's ratio is approximately 0.36 in 2014 and increases to 0.57 in 2017 before falling back to 0.37 in 2019. Such volatility in a measure reflecting capitalisation practices would not be reasonably expected where a DNSP like Endeavour Energy has maintained a consistent capitalisation policy. This volatility is likely explained by the presence of factors unrelated to capitalisation and means opex/totex ratios are also incongruously sensitive to the averaging period selected to derive an OEF adjustment. Table 1 below shows the variances between the AER's long and short run averaging period.

Opex/Totex ratio	ACT	AGD	CIT	END	ENX	ERG	ESS	JEN	PCR	SAP	AND	TND	UED
2006 - 20	0.47	0.36	0.31	0.37	0.36	0.36	0.39	0.43	0.40	0.46	0.37	0.40	0.44
2012 - 20	0.46	0.40	0.31	0.40	0.40	0.39	0.42	0.41	0.37	0.44	0.36	0.42	0.42
Difference (%)	-3.3%	10.9%	1.6%	8.0%	12.9%	6.6%	8.8%	-3.6%	-6.4%	-5.1%	-2.3%	7.1%	-5.8%

Table 1: variation in average opex/totex ratios	Table 1:	Variation	in average	opex/totex ratios
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⁵ ibid, p.14

Like most benchmarking measures, the opex/capital ratios do not precisely reflect the underlying efficiency of DNSPs and therefore should be interpreted with a level of caution. Nevertheless, for the reasons outlined above we consider using the ratios in the manner proposed by the AER fails to sufficiently satisfy the validity, accuracy and reliability, and robustness principles as outlined in the AER's Expenditure Forecasting Assessment Guideline and therefore does not demonstrably enhance the AER's benchmarking capabilities.

Consequently, the AER's claim that opex/capital ratios can provide a high-level gauge of the net effect of capitalisation policies is tenuous, noting the AER's preliminary finding on the materiality of capitalisation differences on DNSP benchmark performance is largely based on these limited measures. We accept that sacrificing accuracy may be necessary in order to improve data comparability for benchmarking purposes, but these competing characteristics are not appropriately balanced under the AER's preferred approach.

Modelled opex efficiency scores based on 2014 capitalisation policies distorts the 'real' opex performance of all DNSPs

The AER's econometric cost function models benchmark DNSPs' opex on the basis of historical (2014) rather than current capitalisation policies. The main reason for this is to avoid benchmarking improvements that DNSPs could achieve by reallocating costs from opex to capex which in reality does not represent an efficiency gain. Importantly, the AER has previously determined that capitalisation policies in place in 2014 were broadly consistent across DNSPs (with the exception of Evoenergy) although we note this assessment was made using the flawed opex/totex measure.

We note that the changes made by DNSPs to capitalisation policies after 2014 have generally involved a reallocation of overheads from capex to opex. To some, this may suggest the frozen Cost Allocation Methodologies (CAMs) approach has been effective in eliminating any gaming incentive. However, it is more likely the case that capitalisation practices are primarily driven by accounting standards and a range of commercial factors.

It is worth noting the AER review and approve any changes to a network's CAM and have the ability to interrogate changes in capitalisation practices. These powers alone should be sufficient to ensure that networks do not opportunistically modify their policies. Even failing these controls there are also counter-veiling regulatory incentives. For instance, networks must disclose changes in capitalisation policy changes annually; the AER use a formulaic approach to estimate capitalised overheads in setting the overall capex allowance; incentive outcomes (and potentially capex for RAB roll-forward purposes) can be adjusted for mid-period changes and; there is a strong focus from stakeholders and the AER on high level metrics such as RAB growth and RAB per customer.

Given these factors, it would be quite obvious to the AER and stakeholders if a network were attempting to game its capitalisation policies and straight-forward to prevent. As a result, we consider 'freezing' the 2014 policies is an overreaction to a perceived risk and that current policies remain as unbiased as the 2014 policies.

However, if the AER remain of the view that the gaming risk remains valid and material, freezing the 2014 policies is becoming an increasingly tenuous solution. As networks continue to make routine adjustments over time (particularly as accounting standards change) DNSPs are being benchmarked on opex derived from increasingly outdated accounting approaches that are no longer representative of their current corporate structures and cost allocation practices. As DNSPs are benchmarked on their relative performance, all DNSPs are impacted by each change in policy.

In failing to capture the recent trend to expense more overhead expenditure, the AER's current approach results in the opex efficiency scores of these DNSPs being artificially overstated and in turn those of other networks being understated. Significantly, these changes have been made by some DNSPs in the group of 'efficient' comparator networks including Powercor which, as the benchmarking frontier firm to which the opex efficiency scores of all DNSPs are set relative to, lowers the opex efficiency scores of other DNSPs.

The materiality of this distortion on modelled efficiency scores is evident in Figure 5 of the paper which is copied below.⁶ It demonstrates that under the AER's current approach, the scores of each DNSP is being supressed with the exception of Powercor and CitiPower who as entities under the Victoria Power Network (VPN) group both updated their capitalisation policies in 2016.

Importantly, the relatively consistent change in the modelled scores of DNSPs who have not changed their policy post 2014 (approximately 15% improvement) does not necessarily infer that capitalisation differences are materially different between DNSPs but rather, the impact of the change in capitalisation policy made by the frontier firm on other DNSPs efficiency scores is material. That is, the impact of capitalisation on a DNSP's efficiency score is sensitive to the capitalisation policy change made by Powercor.



Figure 2: 2014-capitalisation versus current capitalisation benchmarking model-average scores

As a result of these changes, it is clear that using the 2014 capitalisation policies for benchmarking purposes has emerged as a significant shortcoming of the AER's opex assessment that will only worsen over time as more DNSPs update their policies. By persisting with this approach on the basis it removes incentives to game capitalisation policies, fewer DNSPs are being benchmarked on opex that accurately reflects how they conduct their practices and diminishes the comparability of opex performance.

Notably, the paper dismisses alternative approaches to address opex comparability concerns through applying a common opex/capex ratio or fixed proportion of overheads on the basis doing so would be an artificial construct that is not reflective of DNSPs actual costs or capitalisation practices.⁷ Critically, we believe this same criticism is also valid of the AER's current approach and supports its discontinuation in place of benchmarking using a DNSP's prevailing capitalisation policy. Not only would this allow efficiency scores reported in the AER's annual benchmarking report to reflect actual opex performance, but it also avoids the comparability issues encountered under the AER's preferred OEF option whereby capitalisation impacts on modelled scores would only be considered and quantified at the time of a DNSP's reset and limits the cross-DNSP comparability of the benchmarking report.

Given all current capitalisation policies are free from gaming bias, we consider they could be used in lieu of the 2014 policies to assess relative opex efficiency for the upcoming round of distribution determinations. However, a more enduring approach would likely be required to balance the need to benchmark DNSPs on their true opex (which may change with as policies are updated) whilst managing

⁶ AER, Consultation paper, *How the AER will assess the impact of capitalisation differences on our benchmarking*, Nov. 2021, p.26

⁷ Ibid, p.36

the risk of DNSPs gaming their policies. As aforementioned, we think the risk of gaming is low and other controls exist that better protect against this perceived issue.

However, the AER notes in the paper that capitalisation policy changes can occur outside of the CAM which implies AER oversight could be limited. However, we note that it is a requirement of the Annual RIN (Schedule 1) to disclose any capitalisation policy changes that materially impact performance. We therefore consider the AER has the ability to both monitor and investigate any changes in capitalisation policies on an annual basis. Further, the AER also has the ability to conduct an ex-post review of a DNSPs capex where an overspend against allowance is driven by a capitalisation policy change (amongst other factors).

The benchmark comparison score of 0.75 is appropriate given the limitations of econometric opex cost function models remain

The improvement in opex efficiency scores achieved by using current capitalisation policies would result in an increase in the number of DNSPs having average opex efficiency scores exceeding the current 0.75 benchmark comparison point (prior to post-modelling OEF adjustments). Whilst a general improvement would be expected given several DNSPs have made opex efficiency gains since 2012, the paper raises the question of whether the comparison point should be increased.

In our view, the use of current capitalisation policies does not resolve the deficiencies inherent in the AER's benchmarking techniques. These deficiencies were highlighted by the Australian Competition Tribunal (the Tribunal) in 2016 and pertain mainly to the AER's reliance on the econometric models and their limitations with respect to the specification and weights of output and inputs, and data imperfections related to the reliability of information provided by DNSPs in RINs and the reliance on 'comparable' international data to populate the models.

Following the Tribunal and subsequent Federal Court proceedings findings, the AER has adopted a 0.75 score to reflect the upper quartile of possible scores as the 'efficient' point to distinguish efficient and inefficient DNSPs and inform the size of the base year opex efficiency adjustment. Whilst it remains reasonable to consider a DNSP with an average score of 0.75 to be considered efficient (or more relevantly not materially inefficient) it also provides an appropriate error margin accounting for the general limitations of the AER's econometric models.

The need for a conservative comparison point is underscored by the impromptu adjustments made by the AER to the models' non-reliability output weights in its 2020 DNSP benchmarking report to correct for previously undetected errors that impacted the historical scores and rankings of DNSPs. Also, violations involving the Translog models are becoming more frequently observed and raise concerns about its reliability and how results are reported and applied in conjunction with the Cobb-Douglas models to derive a model-average score.

Notably, the limitations of the econometric models and the AER's selection of the 0.75 score predate the capitalisation policy changes made by select DNSPs. Therefore, redressing capitalisation concerns using any of the options identified by AER would not likely have an influence on the underlying issues with the AER's econometric models and its deterministic use of them that predicated the application of the 0.75 comparison point. In short, the use of current capitalisation policies does not represent a sufficient maturing of the AER's models or refinement of the underlying data to support an increase in the benchmark comparison point.