Claire Preston
Director, Network Expenditure
Australian Energy Regulator
Melbourne VIC 3000

By email: Claire.Preston@aer.gov.au

10 November 2020

Jemena Electricity
Networks (Vic) Ltd
ABN 82 064 651 083

Level 16, 567 Collins Street
Melbourne, VIC 3000
PO Box 16182
Melbourne, VIC 3000
T +61 3 9173 7000
F +61 3 9173 7516
www.jemena.com.au

Dear Claire

Feedback on the draft 2020 Annual Benchmarking Report

Jemena Electricity Networks (Vic) Ltd (**JEN**) welcomes the Australian Energy Regulator's (**AER**) draft 2020 Annual Benchmarking Report (**draft report**) for comments. In the draft report, the AER has incorporated JEN's data updates, provided more explanation on the correction of the Multilateral Total Factor Productivity (**MTFP**) output weights and presented its analysis on the difference in capitalisation practices that may impact the comparability of opex benchmarking results.

We appreciate that benchmarking is still an evolving area. However, given the significant error identified in MTFP output weights and the continued reliance on a single expert by the AER over a very long time we believe there is need to undertake a more comprehensive and independent review of the benchmarking framework and analysis. Implementing this review will create confidence amongst stakeholders that the regulatory decisions and mitigate against anchoring and unconscious biases that can occur when relying on a single expert for a long time. It will also provide the AER an opportunity to consider using a different independent expert and bring in more diverse and fresh views to base its decisions on.

In this feedback, we outline our concerns in relation to the use of simplified ratios in assessing the difference in capitalisation practices, MTFP weights and an explanation of why it is incorrect to assume that JEN's service reliability has deteriorated.

1. Impact of capitalisation practices on opex benchmarking

The AER in its draft report recognises that differences in capitalisation practices may affect the comparability of opex benchmarking results. In the draft report, the AER expressed its preference to rely on the opex to totex ratio in assessing whether a Distribution Network Service Provider (**DNSP**) has a materially different capitalisation practice to its benchmark comparators.[1] The AER and Economic Insights (**EI**) further note that the opex to totex ratio or opex to capex ratio is preferred as it captures not only

[1] AER, *2020 distribution network service provider benchmarking report - November 2020*, Pg. 82

the allocation of overheads between opex and capex but also opex capex trade-offs. The AER then concludes that the opex to totex ratios are similar across DNSPs, therefore, the capitalisation practices are unlikely to have a sizeable impact on efficiency results for most DNSPs.[2]

We consider that the opex to totex ratio accounts for more than just overheads capitalisation and can include opex capex trade-offs. However, this ratio also captures other differences that make them unsuitable for use in the assessment of opex efficiency. Some examples of these factors include differences in capex as a result of a different asset replacement cycle, asset age profiles, and capital contribution levels. These factors may not drive a DNSP's opex but influence the opex to totex ratio. The AER itself recognised this in 2014:

> *"The relative efficiency of a service provider's opex and capex will also affect the opex to capex ratio, as will service providers' location in their asset replacement cycles."*[3]

We provide a stylised example below to show how even a simple difference in capital contribution level (as an example of capex difference that should not be included in opex assessment) could impact the opex to totex ratio and give incorrect conclusion on opex efficiency.

The two example DNSPs in the table below have the same outputs, direct gross capex (item [1] in the table below), opex excluding overheads (item [4]), total overheads (item [5]) and overheads capitalisation ratio (item [6]). The only difference between the two DNSPs is that DNSP1 has higher capital contributions (item [2]).

		DNSP1	DNSP2
Direct gross capex	[1]	100	100
Capital contributions	[2]	30	10
Direct net capex	[3]=[1] -[2]	70	90
Opex excl. overheads	[4]	100	100
Pre-capitalised overheads	[5]	50	50
Capitalisation ratio (of overheads)	[6]	50%	50%
Opex incl. expensed overheads	[7]=[4]+[5]*(1-[6])	125	125
Gross capex incl. capitalised overheads	[8]=[1]+[5]*[6]	125	125
Net capex incl. capitalised overheads	[9]=[3]+[5]*[6]	95	115
Totex based on gross capex	[10]=[7]+[8]	250	250
Totex based on net capex	[11]=[7]+[9]	220	240
Totex 'efficiency' based on gross capex	[12]=1/([10]/min([10]))	1.00	1.00

[2] AER, *2020 distribution network service provider benchmarking report - November 2020*, Pg. 49

[3] AER, *Draft decision – Ausgrid distribution determination 2014–19 – Attachment 7: Operating expenditure, November 2014*, Pg. 7-123.

		DNSP1	DNSP2
Opex to totex ratio (based on net capex[4])	[13]=[7]/[11]	57%	52%
Opex 'efficiency'	[14]=1/([7]/min([7])	1.00	1.00

In the above example, both DNSPs incur the same totex based on gross capex level. There is no difference in their opex efficiency (item[14]). However, when looking at the opex/totex ratio, DNSP1 appears inefficient. This is because the totex (based on net capex as assessed by the AER) for DNSP1 is higher due to lower capital contributions. This outcome demonstrates in a simple way how other factors that are irrelevant from an efficiency perspective can impact opex to totex ratio and result in incorrect conclusions on opex efficiency.

Therefore opex to totex ratio cannot be relied upon as a useful tool in benchmarking without a proper understanding of the drivers behind the difference in capex. It could inadvertently capture capex differences unrelated to opex and provide a misleading assessment of the cost disadvantages faced by a DNSP due to capitalisation differences or other capex opex decisions. We recommend the AER consult on the usefulness of the opex to totex ratio more broadly before relying on this measure in making decisions on the impact of capitalisation policy differences.

For now, we recommend the AER considers including the benchmarking results under the most recent Cost Allocation Methodology (**CAM**) (i.e. freezing 2019 CAM and back-casting to historical years) in determining a capitalisation OEF for DNSPs under the 2014 CAM. The AER noted in its draft report that moving to benchmarking under the most recent CAM could create future incentives for DNSPs to change CAMs to improve benchmarking positions. As far as we know, the accounting requirements of a DNSP drive changes of a capitalisation policy changes rather than regulatory changes. Even so, we consider it is not reasonable to continue relying on 2014 capitalisation policy to make decisions going to 2025 and 2030 given the numerous changes taken over fifteen years are not captured properly in the benchmarking analysis. The AER should utilise the latest information in front of it to make an assessment of base year efficiency. Currently, the use of 2014 policy materially impacts JEN's efficiency score and is likely to result in an erroneous regulatory decision if adjustments are not made to account for these issues.

We also recommend that the AER seeks a second opinion on the advice it has received from EI on how to account for capitalisation policies. This approach will broaden the inputs into benchmarking and mitigate against regulatory decisions having anchoring or unconscious biases caused by the reliance on a single expert over a very long time.

If the AER intends to continue relying on the various ratios (opex to totex, opex to total cost and opex to capital inputs) in assessing the difference in capitalisation practices used in opex benchmarking, we consider it is important for the AER to –

[4] The AER indicated that the opex to totex ratio is calculated based on the Economic Benchmarking RIN, which only reports capex net of capital contributions in table '3.3.1 – Regulatory asset base values'

1. undertake a detailed bottom-up investigation on the drivers of capex differences and adjust the opex to totex ratio to exclude factors unrelated to the assessment of opex efficiencies, and
2. only assess factors that have been clearly identified to be relevant to opex efficiency (e.g. capitalisation of overheads) to avoid unintendedly including irrelevant and misleading capex differences

The AER notes in the draft report that over the next 12 months it intends to consult on issues around the differences in capitalisation practices and an approach to account for these differences. Whilst we appreciate the efforts being taken to investigate this issue further, we consider the timing will not address a material issue in JEN's price reset determination process. We therefore, seek to accelerate this work to ensure robust a regulatory decision is made for JEN's 2021-26 price reset determination.

2. MPFP weights are not reliable

While EI prefers to use Leontief cost function regressions for measuring MPFP weights (used to form the output weights), there are significant challenges with the non-robust results it produces. 28 out of 52 models (54%) produce:

- only a single significant output coefficient of 17 (33%),
- two significant coefficients and
- two (4%) produce three significant coefficients.[5]

The majority of the coefficients are not statistically different from zero, and when they are, they vary significantly across DNSPs. EI has previously noted it is willing to accept statistically insignificant coefficients.[6]

Given the importance of these coefficients in setting the output weights and the majority of the R^2 values are very low, no conclusion on the weights can be meaningfully drawn. Any assessment based on non-robust results cannot meet the AER's own assessment principles that are set out its expenditure forecast assessment guidelines:[7]

- The extent of the weight changes from the 2014 estimate to the 2020 estimate and the corresponding illogic that an output can account for double the overall opex from one year to the next – this does not meet the '**accuracy and reliability**' or the '**validity**' principles.
- The limited statistical significance of the weights – this does not meet the '**robustness**' principle.
- The materially different coefficients in the Leontief cost function regressions – this does not meet the '**accuracy and reliability**' or '**robustness**' principles.

Given the EI has advised the AER to use the new weights based on non-robust results, we believe that the AER should seek a second opinion from an independent expert (other than EI) to validate this, to make a well informed decision.

---

[5] Economic Insights (2020a), page 123.
[6] Economic Insights (2019), *Memorandum: Forecast Opex Productivity Growth, to 'AER Opex Team'*, 4 Feb 2019
[7] AER (2013b), pages 17-18.

3. JEN's reduction in MTFP reliability in 2019

The AER notes in the draft report that JEN's reliability reduced in 2019 compared to last year[8]. The reliability measured under the MTFP reflects the unplanned outage duration for all customers. We would like to highlight that the reduction in 2019 was caused by a severe weather event on 21 Nov 2019 (lightning and strong winds) which is outside of JEN's control. After excluding this one-off event, JEN's reliability is in line with performance over the last three years and continues to outperform the AER's target.

Summary

We hope our response provides the AER a different perspective to its expert and we encourage the AER to seek a wider set of evidence, and not just the advice from its own expert, before making a final decision. We summarise our recommendations below –

- The AER should reflect upon the benchmarking results based on the 2019 CAM in its opex assessment as part of determining an OEF for capitalisation practices
- The AER must not rely on opex to totex ratio due to it capturing irrelevant factors
- Given the significant error in MTFP output weight, the AER must re-engage with businesses on the overall benchmarking framework and how to make it more robust. The AER should also seek alternate expert advice other than EI to avoid any anchoring or unconscious biases from using the same consultant time and time again.

We are committed to working constructively with the AER and welcome any further queries in relation to the above mentioned feedback. Please contact [redacted] if you would like to discuss this letter further.

Yours sincerely

[signed]

Sandeep Kumar
Group Manager Regulatory Analysis and Strategy

[8] AER, *2020 distribution network service provider benchmarking report - November 2020*, Pg. 23-24