


27 October 2022

Mr Arek Gulbenkoglou  
General Manager  
Expenditure  
Australian Energy Regulator



Dear Arek

**re: AER Draft Annual Benchmarking Report 2022**

ElectraNet appreciates the opportunity to provide feedback on the AER's draft Annual Benchmarking Report 2022 for TNSPs and accompanying analysis by Quantonomics.

As noted in previous submissions on the AER's benchmarking measures, there remain several material limitations with the current economic benchmarking approach. We remain concerned that these limitations, in particular as they relate to flawed output measures, have neither been acknowledged nor addressed in either the AER's or Quantonomics' report. We would support broader review of the measures to ensure that the AER's benchmarking properly reflects the outputs of a modern electricity transmission network.

We discuss our specific concerns further below.

**Sample size and diversity**

Five TNSPs are discussed in Quantonomics' report. Those five TNSPs operate networks that vary substantially. South Australia's network is the oldest on the mainland and is the longest when measured in 'per MW of peak demand' terms. Powerlink's network in Queensland is similar in (normalised) length, but is much younger. AusNet's network in Victoria is nearest to South Australia in network age, but is much shorter in normalised terms with much greater customer density.

In summary the networks are diverse and the sample size is small. We have raised these issues previously and, in doing so, noted that Quantonomics predecessor, Economic Insights, agreed with us, describing the process as being 'in its infancy' and stating that it has 'always been cautious' in interpreting the transmission benchmarking outcomes as a result.

We were concerned when this caution seemed to disappear from last year's Benchmarking Report and we remain concerned at its continued absence this year.

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Notwithstanding the lack of acknowledgement of the shortcomings, Quantonomics repeats the point made in past reports by Economic Insights, for example, that this analysis “allow[s] comparisons of productivity levels as well as productivity growth to be made”<sup>1</sup> but does so without the cautionary notes of previous reports. The AER makes the same point in its report, without acknowledging the limitations identified in past years but not addressed.

It is important that the limitations of the transmission benchmarking analysis continue to be clearly acknowledged.

### **Flaws in output measurement**

Our primary concern with the AER’s benchmarks is that the output measures used bear little or no resemblance to the output of an electricity transmission network. While this is the case, the results of the analysis will always be flawed.

Two of the four measures currently in use, namely energy throughput and end use customer numbers, bear no direct relationship to the output of a transmission network. In simple terms, if maximum demand is held constant, it does not cost any more to serve more or less end customers at an existing connection point. Equally it does not cost more to deliver more or less energy to the same number of customers, unless this increases maximum demand.

We note that Quantonomics’ model is based on outputs that are readily available to the electricity sector and that are convenient from a modelling perspective. However, in our view, the current measures do a poor job of measuring the output of a modern transmission network, which has changed substantially since the measures were derived in 2014. Worse, the measures will do an increasingly poor job of measuring our output in future years as the period of analysis begins to capture the time when ElectraNet has made substantial investments to support the ongoing transformation of the power system. These investments include:

- Four synchronous condensers in South Australia, which provide system strength and inertia services and have delivered substantial benefits by reducing constraints on renewable generation and the need for expensive gas generation;
- Project EnergyConnect, which was identified in the Integrated System Plan as an actionable project and is an investment of national significance that will help improve affordability, reliability and security of supply for customers and strengthen the National Electricity Market.

These investments are fundamental to the energy transition and, importantly, assist in driving down total delivered energy costs for customers. However, only Project EnergyConnect will be reflected in the current output measures, through a small increase in the circuit length parameter. This clearly demonstrates the shortcomings in the current output measures.

With the ever-increasing uptake of variable renewable generation, we expect to be called on to provide more ‘non-traditional’ services than ever before as the role of transmission expands to meet the needs of the energy transition.

However, from the perspective of the ‘output measures’ this activity does not exist. Holding other things constant, investments in system strength and inertia services will add nothing at all to our measured output. While they add appreciable value for customers the current transmission benchmarking model will conclude that efficiency has fallen because we are incurring greater costs while producing the same measured output.

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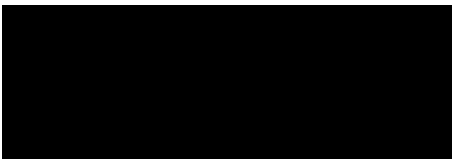
<sup>1</sup> Economic Insights, draft report p.15

We note that the synchronous condensers were built in response to our service obligations under the National Electricity Rules (Rules) to provide system strength and inertia. The failure of the output measures to capture this increase in output also shows they are not well aligned with the Rules.

We again encourage the AER to further develop the output measures to reflect the changing role of transmission before any weight is placed on the benchmarking results. In the meantime, appropriate caution should be applied to the use of benchmarking results given its inherent limitations.

We look forward to engaging further on these issues in future. Should you wish to discuss any aspects of this response, please contact Jeremy Tustin in the first instance on [REDACTED].

Yours sincerely

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Simon Appleby  
**Manager Regulation and Investment Planning**