



Your ref:
Our ref:

30 August 2017

Mr Warwick Anderson
General Manager – Network Finance and Reporting
Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601

Lodged by email: evan.lutton@aer.com.au

Dear Warwick

re: Review of Economic Benchmarking of TNSPs – Position Paper

ElectraNet appreciates the opportunity to comment on the Australian Energy Regulator's (AER) *Review of Economic Benchmarking of TNSPs Position Paper* prepared for the AER by Economic Insights and published on 18 August 2017.

ElectraNet has been working with other TNSPs in consultation with Energy Networks Australia to assist the economic benchmarking improvement process by seeking, where possible, to harmonise TNSP interpretations of RIN reporting measures where annual responses are currently not aligned.

A range of issues have been identified in relation to appropriate measures for output variables for the partial and multilateral productivity factors in the context of the current review. The key outstanding issues from ElectraNet's perspective are addressed in turn below.

Voltage-weighted connections versus end-user numbers

ElectraNet does not believe that end user (i.e. distribution customer) numbers is a reasonable measure of efficiency, and would not support the substitution of jurisdictional end-user numbers for the current voltage-weighted connections output.

As was noted by Powerlink and other TNSPs at the workshop of 31 May 2017, end-user customer numbers are not an effective measure of the scale of service being provided by a transmission network, nor does the number of downstream customers directly influence the number and size of exit points required by the TNSP. For example, a transmission connection point serving a 20MW load in a given location requires the same effort to serve whether it delivers energy to one large customer or 20,000 small customers.

ElectraNet Pty Ltd

ABN 41 094 482 416 ACN 094 482 416

Postal Details: PO Box 7096, Hutt Street Post Office, Adelaide, South Australia, 5000

Telephone: +61 8 8404 7966 **Toll Free:** 1800 243 853 **Facsimile:** +61 8 8404 7956

Email: enquiry@electranet.com.au electranet.com.au

For this reason, the number of downstream customers served in the distribution network does not provide a measure of the scale of the transmission task, nor does it provide a good proxy for the complexity of the task facing the TNSP. The number and size of transmission connection points provides a far more reliable indicator of the complexity of the task performed by the TNSP.

As noted by ElectraNet at the above workshop, customer numbers may have a role in distribution networks, where each downstream customer is served by a physical point of connection to the distribution network that must be operated and maintained by the distribution business.

An urban DNSP may be expected to have a high number of customers per km of line whereas a rural DNSP may be expected to have a low number of customers per km of line (and conversely a high number of km per customer served as a more realistic measure). The rural DNSP will require significantly more staff and other resources to serve each customer than the urban DNSP due to the network topology required to service its sparse customer network rather than due to poor efficiency in service delivery. In this context, end user customer numbers would be more appropriately used to moderate the apparent efficiency of the urban DNSP.

In addition, at a transmission level end user customer numbers do not take account of differences in external operating environments and will unreasonably disadvantage networks with low customer density. Taking South Australia as an example the transmission and distribution networks were vertically integrated until privatisation. The demarcation between distribution and transmission network, while pragmatic, left the transmission network with a large number of relatively lightly loaded, older, 132kV lines and small 132/66kV and 132/33kV substations.

An alternative demarcation may have seen these assets form part of the distribution network (as is the case in networks in other States) and the transmission network not burdened with this challenging network topology. In each case the end user customer numbers would be the same but the apparent efficiency of the transmission network vastly different.

ElectraNet therefore remains supportive of voltage weighted connections as an appropriate relative measure of output where voltage is measured at each transmission connection point on the high side / transmission side.

As noted previously, the low side / distribution voltage does not provide a meaningful indicator of the transmission services involved and is an essentially arbitrary measure. For a TNSP the overwhelming majority of the equipment owned, operated and maintained within each connection point will be at the high side / transmission voltage. Therefore, reporting the voltage at the high side / transmission more reasonably reflects the scale and costs of the connection point owned and maintained by the transmission business.

In addition to voltage weighted connections, as also noted previously, the number of transmission entry and exit points on each network would be a valuable addition to the output measures.

While as noted above, the volume weighted connection point variable is a measure of the scale of connection capacity required, the number of connection points across the transmission network would be a good practical measure of the complexity of each network, provided this is meaningfully standardised.

The addition of this measure could also meaningfully replace the energy throughput measure, which has no bearing on network efficiency, as discussed below.

Other Issues

As raised in previous submissions, in terms of the specification of other model inputs and outputs, ElectraNet would note that:

- As noted above, energy throughput is not an appropriate output measure to be included in the weighted multilateral total factor productivity (MTFP) output calculation. The level of energy throughput across the network bears no relationship to the efficient costs incurred by the TNSP and has no impact on the level of effort required by a TNSP to maintain its assets. Energy throughput is unrelated to the service being provided by a transmission network, which is focused on ensuring adequate safe, secure and reliable levels of network capacity. Using energy throughput as an output measure therefore artificially distorts the relative performance of networks under the MTFP measure, and should be removed as an output of the model.
- Network support and operational refurbishment activities should be removed or appropriately adjusted in the Partial Factor Productivity (PFP) measure. The use of network support services (funded by opex) is an alternative to network augmentation (funded as capex). These services are non-standard costs not present in many network businesses, but account for over 10% of annual operating expenditure in the case of ElectraNet for example. Failing to adjust for these payments significantly distorts the opex benchmarking results.

Submissions on the draft 2014 AER Economic Benchmarking Report noted that there is no robust basis for determining that the model specification for MTFP developed by Economic Insights is ‘the most appropriate’. The adoption of alternative model specifications leads to significant variations in measured MTFP and relative rankings across the businesses. This remains the case based on the current refinements being considered. It is important that further testing and development of the model takes place prior to further application in revenue determination processes.

In this context, the current review process would benefit from a fresh independent assessment by an appropriately qualified third party in order to evaluate the robustness of the current multilateral and partial productivity measures and advise on any changes or improvements that potentially could be made, in the interests of the ongoing development and maturity of the benchmarking framework.

More broadly, ElectraNet remains concerned that there are limitations to benchmarking TNSPs in Australia due to the small sample size and the diversity between the transmission networks being compared. It is important that these limitations remain transparent in the annual benchmarking review report in order to provide a balanced view of the use of the data, and that differences are considered in interpreting the results.

Noting such limitations with the current multilateral and partial productivity measures, it is not possible to draw firm conclusions about efficiency from the PPI benchmarks due to the exclusion of external factors, and the MTFP results remain more reflective of sector productivity changes rather than relative business efficiency.

Whilst ElectraNet remains supportive of the general thrust of the AER’s benchmarking analysis, ElectraNet looks forward to working closely with the AER and its advisers to develop more suitable measures for meaningful comparison of performance between TNSPs.

I look forward to your further consideration of these issues. Please contact Bill Jackson on (08) 8404 7969 to discuss the issues described above in more detail.

Yours sincerely

A handwritten signature in blue ink, appearing to read "D. L. Appleby". The signature is fluid and cursive, with a long, sweeping underline.

Simon Appleby
Senior Manager Regulation and Land Management