Ausgrid



9 October 2015

Ms Paula Conboy Chair Australian Energy Regulator GPO Box 520 Melbourne VIC 3001

Dear Ms Conboy

RE: AER's Draft Annual Benchmarking Report

The NSW Distribution Network Service Providers; Ausgrid, Endeavour Energy and Essential Energy (the NSW DNSPs) appreciate the opportunity to provide comments on the AER's Draft 2015 Annual Benchmarking Report (the draft report or ABR).

The NSW DNSPs consider benchmarking a valuable tool in general that can provide insight into the relative performance of businesses. However, we also note that Australian DNSPs are difficult to benchmark well, particularly using econometric benchmarking techniques, due to the small sample of DNSPs within the NEM and the heterogeneous nature of this dataset. It should be recognised that in jurisdictions which have been undertaking benchmarking for a much longer period of time and have more homogenous datasets such as Great Britain, benchmarking remains an evolving process and one used with caution.

Clearly, it will take time to develop a dataset and benchmarking approach that is of sufficient quality that it may reliably inform stakeholders of the relative efficiency of Australian DNSPs. In the absence of reliable benchmarking between DNSPs, we consider a more prudent approach to benchmarking in the current context is to benchmark individual businesses over time. This avoids the over-reliance on comparative benchmarks that are not sufficiently well developed to form views as to a firm's relative efficiency.

Additional approaches should be used to better accommodate the inherent variations between the DNSPs. It seems perverse to expect that the mix of inputs and outputs that would apply to a very dense urban network (CitiPower) could also apply to a very sparse rural operator (Essential). The particular focus on customers as a key output measure is particularly harsh for rural operators for whom, even if customer numbers halved, would see very little decrease in their costs. This is supported by the AER commissioned EMCa report that clearly stated that 60 to 70 per cent of a rural operator's operating costs are directly related to their assets.¹ As a rural network becomes less dense, line length (assets) becomes a more dominant cost driver, yet such weightings are not considered in the AER efficiency models.

We have identified a number of concerns with the AER's draft report, many of which could be addressed by improving consultation on the development of the ABR. We consider further consultation on the underlying benchmarking models and datasets used would improve the AER's approach over time and likely avoid the following issues identified in the draft report:

- insufficient time has been provided to conduct any detailed and meaningful error checking or analysis;
- it is not evident that the feedback provided by DNSPs has been incorporated or a refinement more broadly in the AER's approach since the 2014 ABR;
- as addressed further below, the draft report does not include the primary Stochastic Frontier Analysis (SFA) model the AER has relied upon in recent regulatory determinations;

¹ Relationship between Opex and Customer Density for Sparse Rural Networks; EMCa April 2015; pg.1



- there has been no proper consideration of the operating environment factors which impact the results or proper adjustment of underlying data to enable a more like for like comparison between DNSPs;
- little recognition and weight has been applied to each DNSP's predominant cost drivers;²
- the ratio of inputs and outputs used in the modelling is not disclosed in the report;
- the conclusions drawn in the report are vague and often misleading;³
- the report contains statements that are incorrect;⁴
- the report includes some data and associated statements that lack any real argument or context;⁵ and
- additional suggested benchmarking measures, such as opex per kilometre of line, repex as a portion of RAB, and a greater review of Totex have not been included.

Overall, we are concerned that the AER continues to draw conclusions on the relative efficiency of DNSPs on the basis of simplistic, limited benchmarking tools with insufficient analysis. These matters are addressed in further detail below.

Distribution determinations and merits review

The NSW DNSPs have provided extensive commentary on the AER's approach to benchmarking during the Better Regulation consultation process, the NSW/ACT 2014-19 distribution determinations and in response to the 2014 draft ABR. This material includes numerous expert reports reviewing the AER's dataset, methodologies and application of benchmarking in detail. We refer the AER to this substantive body of material provided to date which provides meaningful advice as to how the AER can refine its approach over time, and note relevant expert reports below by way of example.

The NSW DNSPs also note that the AER's benchmarking approach more generally is currently subject to merits review by the Australian Competition Tribunal as part of the NSW/ACT appeal of the 2014-19 distribution determinations. The NSW DNSPs expect that any future benchmarking reports will reflect any direction or feedback by the Australian Competition Tribunal. For the avoidance of doubt, nothing in this letter should be taken to detract in any way from the submissions that the NSW DNSPs have made in the course of the proceedings before the Australian Competition Tribunal.

Appropriate consultation

Given the limited time provided for responding to the draft ABR there is insufficient time to review the extensive data provided for errors, anomalies, areas for further investigation or to propose alternate approaches. As such, we recommend that the AER conduct detailed data checking to ensure the report is at least based on error free data.

More importantly, we also recommend that the AER audit the data provided to understand whether there is a consistent application of the AER's guidelines and instructions. Whilst DNSPs provide audited data there are numerous, legitimate approaches to classifying and accounting for categories of costs and complying with the AER's instructions. The AER should seek to understand whether the application of each DNSP's respective CAM, various capitalisation policies and estimation methods result in material differences in the data. These issues need to be addressed over time to ensure that any benchmarking conducted relies on data that has been prepared on a consistent basis.

Given the complexities involved in benchmarking network businesses in Australia, the NSW DNSPs are of the view that the AER should adopt an approach that recognises that benchmarking has

² Pg.10 mentions that circuit length is used in the productivity metrics as it approximates system capacity; however. this is not the case for a rural operator.

 ³ Pg.19 draws a conclusion that Ergon and Essential spent twice the opex per customer of SA Power Networks and Powercor.
However, there is no additional explanation in relation to Ergon and Essential having less than half the customer density of SA Power Networks and Powercor.
⁴ Pg.23 states that Figure 12 indicates an increase in MTFP performance in 2014 for CitiPower and Powercor, yet the

 ⁴ Pg.23 states that Figure 12 indicates an increase in MTFP performance in 2014 for CitiPower and Powercor, yet the accompanying figure shows a decrease in their MTFP.
⁵ Pg.26 A.1 Overall input measures – Figure 16 shows opex by distributor with the accompanying statement "... there is

⁵ Pg.26 A.1 Overall input measures – Figure 16 shows opex by distributor with the accompanying statement "... there is considerable difference in opex between the distributors with Ausgrid spending the most ... and CitiPower the least..."



typically been developed and refined by regulators in overseas jurisdictions on an ongoing incremental basis. In particular the AER should view its draft report as an opportunity to continue the process of due diligence on the benchmarking that it is undertaking. This requires an approach that encourages constructive criticism of the methodology and data the AER has included in its draft ABR.

In light of this we would recommend that each year the AER publish its draft annual benchmarking report, along with a detailed methodology of its calculations and highlight any areas where it considers further investigation is required (for example measures that have produced particularly divergent results). We would welcome the opportunity to participate in recurrent, regular workshops to help develop the AER's dataset and benchmarking methodology and to better understand the results. The AER could complement this with further written consultation to allow all stakeholders to respond to the issues raised in the workshops.

Compliance with the Rules

The NSW DNSPs note that, in its current form, the 2015 draft ABR does not comply with rule 6.27 of the Rules, which requires the AER to publish a report which describes the relative efficiency of DNSPs over a **12 month period**. Rather than focusing on period 2014-2015, the figures presented in the AER's draft report are generally based on average periods from 2010-14 or 2006-14.

For reasons which have been set out in detail in the NSW DNSPs' submissions to the Australian Competition Tribunal, the use of an averaging period has the potential to conceal the current performance of a business, particularly in circumstances where, during the relevant period, some businesses have improved their operating performance, while other businesses have increased their costs for compliance or other reasons.

We recommend that the report primarily focus on the most recent 12 month period as intended by the Rules. This information can be complemented by presenting average results side by side to provide a full view of a DNSP's current and historic performance.

Content of the ABR

In its final position paper for the 2012 Economic Regulation of Network Service Providers Rule change, the AEMC stated that the ABR is one of a number of provisions designed to improve the ability of consumers to participate in the regulatory determination process.⁶

The NSW DNSPs are therefore concerned that, without any explanation, the draft report does not contain, and includes no reference to, the AER's primary econometric model relied upon as part of its most recent distribution determinations.

The ABR should reflect the models and approaches that the AER intends to rely upon as part of its distribution determinations. Otherwise, the report does not serve its full purpose in informing stakeholders of the AER's intended approach and it inhibits the extent to which stakeholders can participate in the regulatory process.

The complete absence of any mention of econometric benchmarking techniques in the ABR can only serve to confuse stakeholders and the public. For example:

- Has the SFA model relied upon by the AER in recent regulatory determinations been abandoned?
- Does the AER propose to rely upon econometric benchmarking techniques of any kind in future determinations? If so, why has the AER chosen not to expose those techniques to consultation and comment through the ABR process?

The NSW DNSPs and other stakeholders should be provided answers to these questions.

⁶ AEMC, Rule Determination: National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012, 29 November 2012, pp 25-26



Further, the AER acknowledges in the ABR that the presence of operating environment factors (OEFs) must be considered in comparing the results of individual firms.⁷ In light of that acknowledgement, it is puzzling that, in circumstances where the AER has not reported any quantification of the impact of OEFs, the AER has reported the results of its benchmarking and drawn conclusions such as:

...in general, the Victorian distributors and SA Power Networks appear the most efficient in the use of assets because they have the lowest asset cost per customer regardless of customer density.⁸

We would have expected that, if the AER plans to account for OEFs in future distribution determinations, there would have been a much more fulsome discussion of OEFs in the ABR. If the AER plans to continue to account for OEFs in the manner adopted in its recent determinations (which both networks and consumer groups consider to be arbitrary), this should be clearly stated so that the AER's methodology is subject to the consultation and critique of the ABR process. If the AER plans to adopt some different technique, or no technique, to account for OEFs, that should clearly be explained.

We request that conclusions such as that set out above be removed from the document in the absence of any attempt to quantify the impact of OEFs.

We also consider that such conclusions are misleading and not supported by the limited measures included in the report. This use of PPIs is contrary to previous comments by the AER and AEMC as to their reliability:

...we consider that PPIs do not, on their own, adequately measure relative efficiency. In order to measure relative efficiency it is necessary to consider the multiple inputs and outputs of networks, their scale and the environment within which they operate. As stated in the ACCC/AER working paper series on benchmarking opex and capex in electricity networks:

While PPIs provide some insights, they can give misleading information regarding the overall economic performance of energy utilities producing multiple outputs and multiple inputs. ...

...PPIs assume a linear relationship between the input and output measures and also assume that any change in the input measure can be described by a change in the output measure. However, in most circumstances the change in an input usage will be dependent on a number of inputs, outputs and other factors that may not be described in the model.... Because of this, they may present problems in providing a meaningful comparison of businesses in different operating environments⁹

In the 2014 ABR the AER also noted that it did not include trend lines as that would assume a certain relationship between inputs and outputs that is unknown and could therefore be misleading.¹⁰

Whilst the AER acknowledges it cannot determine the appropriate trend line, it implicitly does so by interpreting the results without also adding caveats to conclusions.

Huegin, in their January 2015 report "*Response to draft determination on behalf of NNSW and ActewAGL - Technical response to the application of benchmarking by the AER*", addressed the potential for PPIs to mislead and noted that, contrary to the AER's conclusion, "When broken down into the primary cost categories, and using common denominators for partial productivity indicators,

⁷ AER, Draft – Annual Benchmarking Report: Electricity Distribution Network Service Providers, September 2015, p 25; see also p 17

⁸ AER, Draft – Annual Benchmarking Report: Electricity Distribution Network Service Providers, September 2015, p 21

⁹AER, Endeavour Energy Draft Determination – Attachment 7: Operating Expenditure, November 2014, pp 49-50

¹⁰ AER, Annual Benchmarking Report: Electricity Distribution Network Service Providers, November 2014, p 47



there is nothing to suggest that the NSW and ACT businesses are systemically overspending compared to the frontier businesses" (at p. 57).

The draft report also indicates that the AER intends to utilise productivity index number techniques, based upon productivity index number analysis developed by Economic Insights. The NSW DNSPs have previously raised concerns in relation to the use of productivity indexes. For example, Pacific Economics Group's January 2015 report "Statistical Benchmarking for NSW Distributors", considered productivity indexes in detail and explained that (at pp. 21-22):

Productivity indexes are more accurate than unit cost indexes as benchmarking tools because they control for differences between utilities in input prices as well as operating scale. They nonetheless have major limitations as benchmarking tools. Like unit cost indexes, they do not control for differences in the opportunity of utilities to realize scale economies. Neither do they control for differences between companies in the values of *Z* variables. It follows that the selection of a similar peer group is of great importance to the accuracy of a benchmarking study based on productivity indexes. Once again, it is desirable for there to be numerous similarly situated peers.

We have also previously raised concerns with the MTFP and MPFP measures relied upon by the AER. Specifically, the selection of inputs and outputs for an MTFP model to measure efficiency across the diverse group of Australian DNSPs will favour some providers and induce bias against others.

Huegin has noted the significant disadvantages of MTFP, including that MTFP does not take into account environmental variables, making it difficult to distinguish between inefficiency and the result of different operating environments; MTFP does not take into account economies of scale, making it difficult to distinguish between inefficiency and the result of scale differences; MTFP scores can change significantly depending on the choice of inputs and outputs; and that MTFP does not produce any statistical results which makes it difficult to determine if the results are valid.¹¹

Indeed, similar to the EI SFA models, MTFP and MPFP measures can produce materially different results through minor adjustments to the inputs measured or the weighting of these inputs. This suggests a level of subjectivity in the model specification that must be addressed through using multiple models, or treated with an appropriate level of caution. Any model that relies on total opex or capex that has not been normalised for differences (e.g. CAM, capitalisation, presence of sub-transmission assets, etc.) cannot produce results that are comparable or meaningful.

We recommend more robust consideration be given to the selection of the input and output specifications and transparency as to the statistical and qualitative criteria used to select the preferred specification. We consider that assumptions used to select a specification should be explained in further detail.

We therefore consider that in its current form, the measures in the draft report should be presented without evaluative judgements as to the relative efficiency of DNSPs as they do not support such conclusions and may mislead stakeholders. Instead, the report could simply qualify the accuracy and reliability of the measures presented and present the alternative view of the results and allow stakeholders to form their own views as to relative efficiency. If the AER wishes to include a view as to the relative efficiency of DNSPs then more time and effort must be spent on ensuring the data is more accurate and comparable across DNSPs.

Furthermore, any results should be further analysed and interrogated to understand whether the results are driven by the relative efficiency of DNSPs, the operational and environmental differences between DNSPs or a combination of both.

¹¹ Huegin, Response to draft determination on behalf of NNSW and ActewAGL - Technical response to the application of benchmarking by the AER, January 2015, p. 12.



Finally I would like to express our significant and ongoing concern with the AER's unwillingness to engage with the industry, our experts or the Productivity Commission on developing meaningful benchmarking techniques in the long term interests of our customers. I would respectfully ask that in the future the AER does not claim or suggest that our distribution network businesses were consulted on this draft benchmarking report as required under the Rules. That is clearly not the case.

If you would like to discuss this response further please contact Mike Martinson, Group Manager Regulation at Networks NSW on (02) 9249 3120 or via email at michael.martinson@endeavourenergy.com.au.

Yours sincerely

Vince Graham Chief Executive Officer Ausgrid, Endeavour Energy, Essential Energy