

22 August 2014

Mr Andrew Reeves
Chair
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

Dear Mr Reeves

NSW DNSPs' comments on 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 Annual Benchmarking Report.

We believe that benchmarking does provide a valuable insight and input to progressive efficiency improvement. Benchmarking between organisations for the same period will inevitably suffer from variations in input definitions (e.g. accounting practices). Benchmarking of individual businesses over time also provides a view of the rate of improvement of each organisation. Both perspectives are valuable.

The NSW DNSPs are aware of the risk that the use of simple benchmarks can lead to false and misleading conclusions. The Productivity Commission considers that '*...benchmarking is not is not yet sufficiently reliable and robust to directly set regulated revenue allowances. A particular concern is that it is difficult to distinguish between inefficiency and errors arising from model misspecification, poor data, different regulatory settings and varying operating environments*'.¹ As such, we consider benchmarking can provide a partial indicator of efficiency (at efficiency (at best) that should only be used to guide the AER to areas which may require a more more detailed, technical assessment.

We have concerns with both the representation of data in some cases (and the models used to derive this data) and the draft report's conclusions have been based on limited investigation and analysis of relevant facts. These concerns and other comments on the draft report are set out in Attachment 1.

Given that this is the AER's first annual benchmarking report, we see opportunity to collaborate in the further development of the metrics, including the development of efficiency frontiers for the partial productivity indicators.

As we have only had limited time to respond to the draft Annual Benchmarking Report, we have not been able to analyse the data in detail and as such we are not in a position to comment on the accuracy of all data in the report. We will continue our review of the report and will advise the AER of any further errors identified as soon as practical.

¹ Australian Government Productivity Commission 2013, *Electricity Network Regulatory Frameworks*, Inquiry Report, 9 April 2013, p29

If you would like to discuss this response further please contact Mr 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 and Essential Energy

Attachment 1 – Comments on Draft Annual Benchmarking Report

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Issues regarding the use of Benchmarking

The NSW DNSPs refer the AER to the supporting information provided with their respective regulatory proposals. These documents describe our position on benchmarking in detail². At a high level, our analysis indicates that:

... benchmarking has inherent limitations such as inability to conduct 'like for like' analysis across peer firms, data inconsistency and inaccuracy, and failure to meet statistical principles. We think that valid benchmarking may have a role in guiding the regulator to areas requiring further granular analysis. It should not be used to reject a DNSP's proposal, or as a basis to substitute the forecast given the inherent limitations as a tool.

As such, the NSW DNSPs consider benchmarking a partial indicator of efficiency that should only be used to guide the AER to areas which may require a more detailed, technical assessment. We see opportunity to collaborate in the further development of the metrics, including the development of efficiency frontiers for the partial productivity indicators.

The AER's Draft Benchmarking Report (the "draft report") does not outline the specific role of benchmarking or the weighting that will be assigned to it when assessing a DNSPs regulatory proposal. However, the NSW DNSPs consider that an over-reliance is already being placed upon benchmarking analysis as evidenced by the conclusions contained within the draft report. For instance:

The results of our benchmarking analysis indicate that the most efficient distributors are those located in South Australia and Victoria.

The NSW DNSPs believe that such conclusions are premature and are unfounded without further analysis and consideration. We consider that homogeneity of data is a key requirement for meaningful benchmarking and the operational and environmental differences between DNSPs represents a substantive impediment to this. Section 1.1.3 of the draft report recognises this issue, but does not explain how the differences have been managed to reduce error/variability to a reasonable level:

To measure the efficiency of distributors it is necessary to consider the environment within which they operate. However, it may not be possible to account for every environmental factor when conducting benchmarking analysis quantitatively. As such, qualitative consideration of the effect of operating environment conditions is required when interpreting benchmarking results.....

.....We have accounted for a number of operating environment differences in our benchmarking analysis.

The NSW DNSPs request that more detailed consideration be given to these differences and seek to collaborate with the AER for further explanation of how they can be appropriately accounted for be provided. For example, we consider the geography and environment covered by a network in area terms can also be an important factor in managing and operating a network. Population density

² Specifically: *Addressing the benchmarking factor for capex and opex*, attached to the Ausgrid, Endeavour Energy and Essential Energy's regulatory proposals.

statistics may provide a further useful indicator alongside of customer density in the differences between networks.

Comparisons of network capacity, maximum demand and energy delivered should be treated with caution. Figures 8 and 9 highlight nothing more than the nature of each DNSP's customer base. Large spot loads can distort results because utilisation of assets will appear more favourable, whereas networks with predominately residential, small rural and small business customers will be disadvantaged. Further, in Essential Energy's network, customers are more dispersed across a large geographical area than any other distributor, meaning more transformers are required for fewer customers. Compared to other distributors, Essential Energy's customer base is less diverse across a sparse population.

The AER notes the following in the draft report:

To account for differences in the scope of distribution services we have chosen to benchmark only the core 'poles and wires' component of distribution services. We have excluded the costs and assets associated with other services that distributors provide including metering and public lighting.

The NSW DNSPs consider that examining 'poles and wires' does not ensure like-for-like comparisons are made. The NSW DNSPs believe there are significant differences in the 'poles and wires' component of DNSPs. This may be further compounded if there are differences in the manner in which each DNSP has reported this data in the RIN(s). The AER also notes:

While the presence of unquantified operating environment differences should be taken into account, it does not preclude us or other parties from forming a quantified view about the relative efficiency of distributors. It may be that the net impact of some environmental factors will be immaterial to the consideration of efficiency. Further, the gap in relative efficiency may prove to be so great that environmental factors alone could not account for the difference in relative efficiency.

The NSW DNSPs consider that the AER should further explore the issues outlined above to understand the net impact of factors or the extent to which they account for "efficiency gaps" rather than relying on assumptions. Without this analysis it would be inappropriate to form conclusions on the relative efficiency of the DNSPs. We consider that it would be an equally valid assumption to view the measures presented by the AER as indicators of differences rather than efficiency. Additional analysis is required to understand the results prior to forming a view one way or the other.

The NSW DNSPs consider that in some instances the differences will preclude parties from forming a relative view of efficiency. In such instances we would expect the AER to focus on benchmarking individual DNSPs over time rather than across distributors. Measures which focus on an individual DNSP over time may be more appropriate as the AER further develops its data set and DNSPs improve their reporting mechanisms. Once a more consistent and refined data set and benchmarking techniques have been developed more relative measures of efficiency may be relied upon.

The NSW DNSPs are also concerned with the AER's definition of "asset cost." We consider the definition will result in outcomes that are largely driven by a DNSP's existing asset base, i.e. previous decisions. This may not provide a true measure of the efficiency of a DNSP at a particular point in time and dilute short to medium term expenditure trends.

Errors of fact

The NSW DNSPs have reviewed the data provided and have identified the following errors.

- In the 'DNSP Charts' Worksheet of the modelling data we note the following errors:
 - "SAIDI excl MED and excluded outages" graph plots incorrect data ("SAIFI" data);
 - "SAIFI excl MED and excluded outages" graph plots incorrect data ("SAIDI" data);
 - "SAIFI compared to total cost per customer" graph plots same data as "SAIDI compared to total cost per customer"; and
 - Reliability graph data does not match the data in the "Reliability" worksheet (for example "SAIDI excluding MED and excluded outages" column contains "SAIDI including MED and excluded outages").
- Table 1 – Network capacity is described as an average capacity; however, the data in the table is the sum of five years and therefore is not an average as stated.
- Figure 10 – This figure does not appear to be utilised in any of the analysis presented, therefore we question why it appears. If it stays, it would be more useful if an indication of total circuit length was overlaid on the graph. A proportion of underground to overhead is useful but does not provide any context for the kilometres involved. For completeness, the description above Figure 10 should mention that by their very nature, overhead networks are more susceptible to supply interruptions.
- Section 2.1 Partial Performance Indicators – The AER makes the following two statements that we consider are incorrect and misleading:

"...the most significant output of distributors is customer numbers."

"...the comparison of inputs per customer is an intuitive measure that reflects the relative efficiency of distributors."

Conclusions such as these are inherently biased against rural networks. Customer numbers are not a material driver of Essential Energy's expenditure, and since assets drive its costs, Essential Energy requires more assets per customer due to the nature of its network. Therefore, one of Essential Energy's most significant outputs is circuit length. As an example, Essential Energy's most significant operating expenditure item is vegetation management which has absolutely no relationship to customer numbers, but a very strong link to the kilometres of line.

The conclusion drawn in this section that inputs per customer reflect efficiency of distributors is false and misleading for the reasons described above. Rather than reflecting relative efficiency, inputs per customer are a simple indicator of the operating environment and geographical coverage of a network.

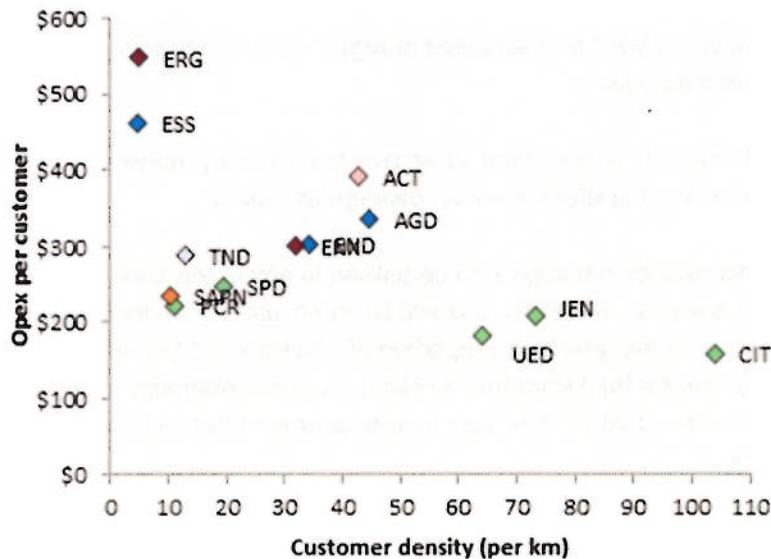
- Figures 12, 16 and 18 – Inappropriate conclusions are drawn based on the insufficient evidence presented in the draft report, but without any analysis provided of the circumstances of each network. The figures do not demonstrate relative performance or efficiency of a distributor; rather, they highlight the differences in operating environments between distributors.
- Section 2.2, 2nd last paragraph page 30 – Figure 20 presents the MTFP output for each distributor. The AER states that Essential Energy appears to be one of the three least productive

distributors; however, Figure 20 demonstrates that as at 2013, Essential Energy was not among the bottom three distributors.

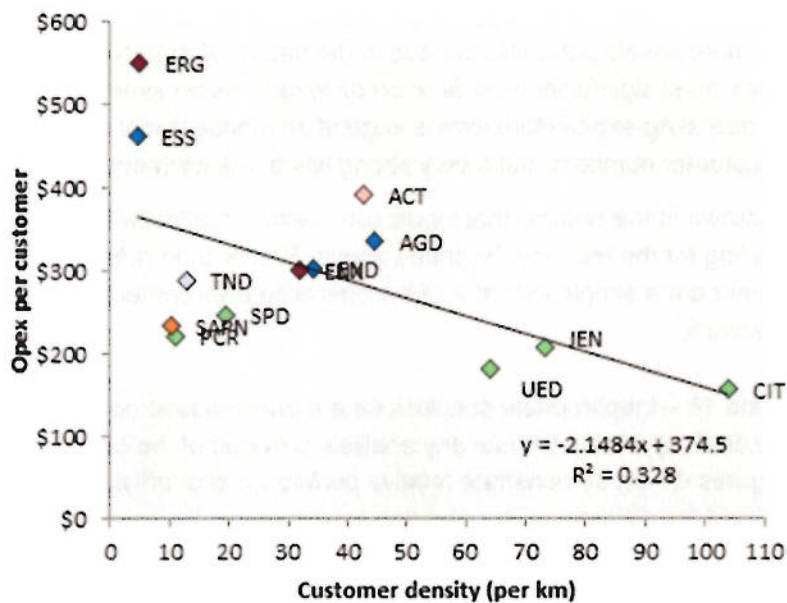
- Figures 14 & 15 appear to be the same graphs with different x-axis titles.

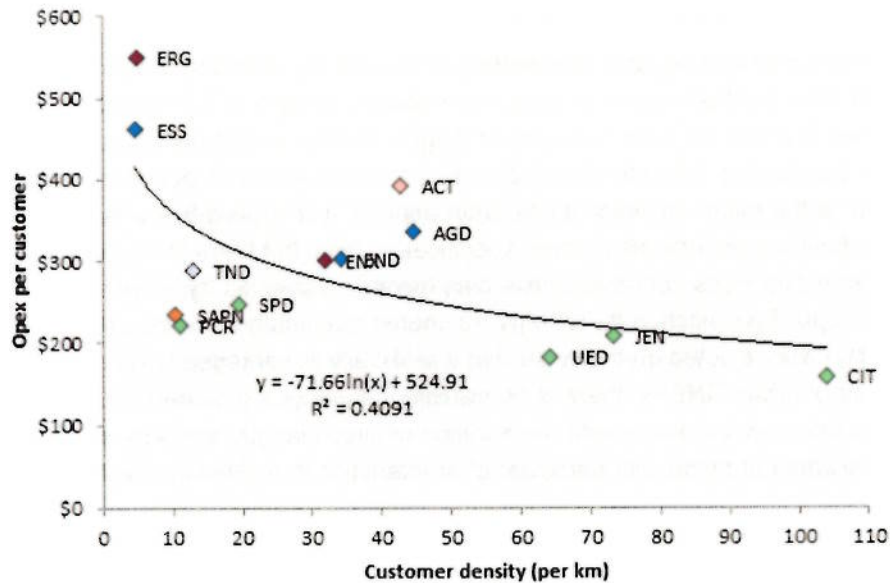
Presentation of partial productivity outcomes in the report

The AER has included a number of partial productivity outcomes in the draft report. The graphs are presented as follows:



The NSW DNSPs believe that the graphs should be presented with a 'line of best fit'. This would add greater transparency and value to the graph and help reduce the likelihood of stakeholders incorrectly interpreting the results. Similarly, the regression coefficients and the R² value should also be displayed on the graph. For example, we have reproduced the graph above with these features:





A line of best fit provides stakeholders with an indication of the extent to which variations in the organisational (normalising) factor explain variations in the partial productivity measure. We note that the variations differ markedly depending on whether a linear or non-linear line of best fit is used, and that the R^2 results are weak, suggesting limited explanatory value of the analysis.

These partial productivity measures currently provide a peer benchmark. However, given the limitations of examining relative efficiency outlined earlier the NSW DNSPs consider these partial productivity measures should also be presented on an individual DNSP basis to review performance over time.

We believe that benchmarking does provide a valuable insight and input to progressive efficiency improvement. Benchmarking between organisations for the same period will inevitably suffer from variations in input definitions (e.g. accounting practices). Benchmarking of individual businesses over time also provides a view of the rate of improvement of each organisation. Both perspectives are valuable.

Multilateral total factor productivity (MTFP)

Model Specification

Concerns with MTFP model specification have been raised previously during the consultation period for the AER's Expenditure Forecast Assessment Guidelines. Specifically, the selection of inputs and outputs for an MTFP model to measure efficiency across the diverse group of Australian DNSPs will always favour some and induce bias against others. Key arguments in the response to the model specification are summarised below:

1. **The process of selecting the appropriate model specification is subjective.** There is no standard definition of inputs and outputs for an electricity distribution network. It seems a reasonably significant amount of effort was placed on the justification of the model inputs and outputs in the lead up to the Expenditure Forecast Assessment Guideline - most of which was theoretically based. It appears that the previous theory has been discarded, and the results

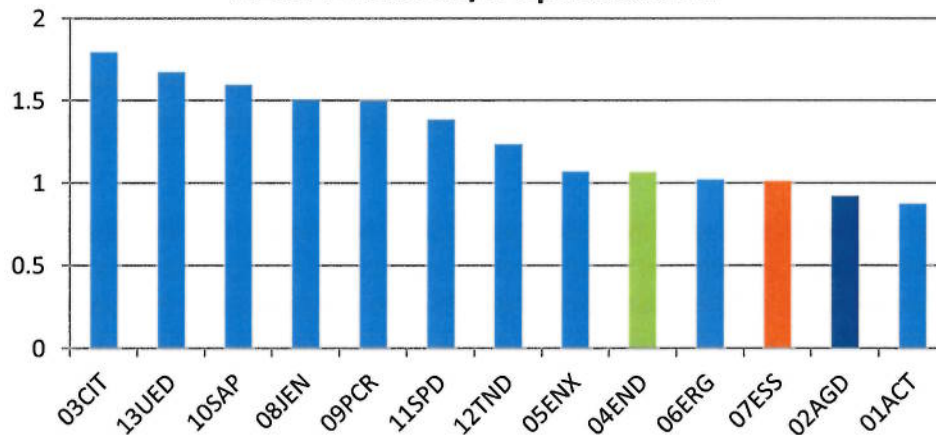
themselves appear to be driving the justification for inclusion or exclusion of model variables, rather than any supporting evidence.

2. **The method of testing and discarding or accepting different model specifications is biased.** The test that seems to have been applied to each of the model specifications reviewed is where the rural businesses (Ergon and Essential) are placed against unidentified 'urban' businesses. The fact that such a test is crude at best is of concern, but of more concern is the nature in which it has been applied. It is implied that a favourable result for certain businesses indicates model specification bias, but there is no evidence that the selected model does not have similar bias towards a specific "type" of business. For example, while Output Specification #2 (energy, ratcheted maximum demand, customer numbers, reliability) was rejected on the basis that it artificially advantaged large rural DNSPs at the expense of urban DNSPs, there is no meaningful analysis provided into whether the chosen outputs (those listed above with the addition of circuit length) similarly advantaged urban or rural networks or those with particular characteristics in a given jurisdiction.
3. **The acknowledgement of bias in the discarded models seems to have been given no consideration in the conclusion that the selected model is an appropriate industry cost function for all DNSPs.** Given that particular model specifications skew the efficiency results to a particular type of business that is favoured by the model construct, it is more than likely that the selected model has similar bias. The signals from the process of selecting and testing different model specifications have been interpreted as meaning that some models favour 'rural' businesses and some favour 'urban' businesses. It does not logically follow that if a particular model specification places the rural and urban businesses in relative positions that fit a perception of where they should be that this model is valid.

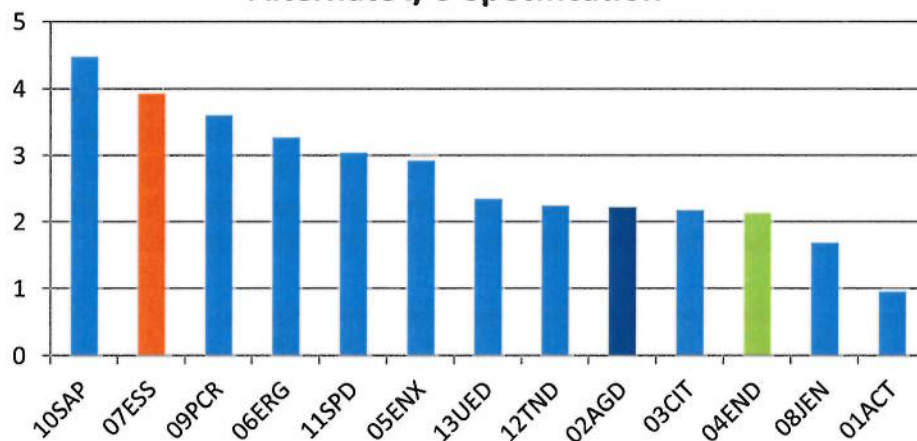
The reason that the models produce such different and inconsistent results is the heterogeneity of the data sample. The differences between the businesses (and not just customer density) cannot be normalised away with a single model specification. There is evidence in the literature that multiple frontiers exist in efficiency models of businesses operating in diverse conditions. Realistically, there would be two or three groups within the 13 DNSPs in the NEM that should either have separate model specifications or be judged against separate frontiers, but of course there is not a large enough sample in Australia to do this. This does not mean that a one size fits all approach (which clearly doesn't separate frontiers) should be accepted given the significance of the outcomes.

The charts below illustrate the sensitivity model specification has to changes in the input/output mixes. The first chart represents the AER's preferred model specification. The second chart represents an alternate outcome if a different combination of the defined input/output mix is used. Note the change in absolute MTFP as measured on the Y-axis and the movement of Essential Energy from third last to second best.

MTFP (2013) AER Preferred I/O Specification



MTFP (2013) Alternate I/O Specification



The NSW DNSPs believe there should be further consideration of the input and output specifications and additional 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 and we see opportunity to collaborate in the further development of these metrics.

Given the complexity of these measures we consider caution should be applied in both the selection and interpretation of these measures. As outlined earlier, the NSW DNSPs are concerned that these complex MTFP results will be relied upon to form views of efficiency before the results (and underlying factors) are fully interrogated and understood. For instance, the AER states

Other specifications tested, unlike this specification, appeared to disadvantage either urban or rural distributors

This presumes that the location of DNSPs is the operational factor that explains the specification outcome. Whilst this may be the case there may be other factors driving particular results. Without

fully understanding the differences between the specifications there is a risk that they are tailored to preconceived views of efficiency.

In Economic Insights Memorandum under Input Specification #1 it is stated:

“Input Specification #1 was listed as the preferred specification in Economic Insights (2013b) and AER (2013). It uses overhead MVA kms to proxy the annual input quantity of overhead lines capital input.”

Looking at the first factor used "MVA" (see table below) we can see that the data may need to be verified, with a large proportion of the distributors reporting no change to the MVA for the last seven years. In some cases different distributors have reported identical values for every voltage. In general most figures look more like theoretically calculated values rather than actual data. There is also a significant variation between the highest and lowest MVA with approximately 400 per cent variation across all voltage ranges. In the case of SWER, the reported variation between the highest and lowest MVA is 2300 per cent.

Even if the data is correct it still raises the question of whether MVA can actually be used as a part factor as a proxy to capital input when measuring MTFP. Most of the apparent best performing distributors appear to have reported no change to their stated MVA. This implies that their circuits were already built with enough capacity to absorb customer growth without further expenditure.

It should also be clearly identified that in NSW, the reliability licence conditions required that all distributors provided an N-1 capability in the urban distribution network and in the subtransmission network. To achieve this N-1, a significant amount of work was required to increase the MVA rating of the overhead network. It seems unreasonable for the AER to suggest that compliance with a regulatory licence requirement can be interpreted as a reduction in productivity.

Business	Year	Inputs	DPA0301	DPA0302	DPA0303	DPA0304	DPA0305	DPA0306	DPA0307											
			LV	11 kV	SWER	22 kV	33 kV	66 kV	132 kV	MVA	MVA	MVA	MVA	MVA	MVA					
01ACT	2006		0.27	6.10	0.00	13.60	0.00	57.20	335.00	NO CHANGE TO ANY STATED MVA										
01ACT	2013		0.27	6.10	0.00	13.60	0.00	57.20	335.00											
02AGD	2006		0.19	3.69	0.36	2.43	29.69	71.93	233.00	NO CHANGE TO ANY STATED MVA										
02AGD	2013		0.19	3.69	0.36	2.43	29.69	71.93	233.00											
03CIT	2006		0.20	4.00	0.00	8.00	0.00	50.00	0.00	NO CHANGE TO ANY STATED MVA										
03CIT	2013		0.20	4.00	0.00	8.00	0.00	50.00	0.00											
04END	2006		0.14	4.08	1.03	7.88	29.04	42.55	208.27	1 -2 % increase all lines other than 16% for 22kV.										
04END	2013		0.15	4.13	1.06	9.18	29.51	43.55	212.76	1%	1%	3%	16%	2%	2%	2%				
05ENX	2006		0.13	0.88	0.09	0.00	20.63	0.00	149.71											
05ENX	2013		0.13	0.94	0.09	0.00	25.40	0.00	156.64	2%	7%	0%		23%	5%					
06ERG	2006		0.08	1.55	0.60	3.01	7.79	17.75	39.29											
06ERG	2013		0.08	1.72	0.60	3.16	8.76	33.77	97.92	4%	11%	1%	5%	12%	90%	149%				
07ESS	2006		0.05	1.32	0.26	1.58	4.67	15.67	93.14											
07ESS	2013		0.08	2.06	0.36	2.50	6.68	22.39	123.65	44%	57%	42%	58%	43%	43%	33%				
08JEN	2006		0.14	5.26	0.36	9.13	0.00	94.81	0.00											
08JEN	2013		0.14	5.31	0.00	8.80	0.00	97.38	0.00	1%	1%	0%	-4%	0%	3%	0%				
09PCR	2006		0.20	4.00	0.07	8.00	0.00	50.00	0.00	Small change reported on SWER										
09PCR	2013		0.20	4.00	0.08	8.00	0.00	50.00	0.00	0%	0%	14%	0%	0%	0%	0%				
10SAP	2006		0.17	4.08	0.20	0.00	10.06	57.90	0.00											
10SAP	2013		0.17	4.08	0.20	0.00	10.06	57.90	0.00	NO CHANGE TO ANY STATED MVA										
11SPD	2006		0.06	1.60	0.35	3.31	0.00	33.33	0.00											
11SPD	2013		0.06	1.60	0.35	3.31	0.00	33.33	0.00	NO CHANGE TO ANY STATED MVA										
12TND	2006		0.17	6.85	1.84	13.57	26.51	0.00	0.00											
12TND	2013		0.17	6.86	1.84	13.57	26.51	0.00	0.00	NO CHANGE TO ANY STATED MVA										
13UED	2006		0.17	5.20	0.10	11.60	0.00	73.60	0.00											
13UED	2013		0.18	5.50	0.10	11.70	0.00	94.00	0.00	6%	6%	0%	1%	0%	28%	0%				
			0.06-0.27	1.6-6.86	0.08-1.84	2.43-13.6	6.86-29.69	22.39-94	97.9-335											
			482%	429%	2300%	560%	445%	420%	342%											

The output specification selected for the report includes combined output shares of 58 per cent for energy and customer numbers. This is clearly biased against rural networks such as Essential Energy given the minor impact that these factors have on the costs of operating and managing a rural network. The real indicator of the costs incurred in operating and maintaining a rural network is line length, however its output share is only 23 per cent. It is unlikely that Essential Energy will ever benchmark well under this biased output specification due to the sparsely populated network where more assets are required to service less customers spread across a large geographical area.

The MTFP specification ignores many output measures of value to customers where the NSW DNSPs have invested significantly in recent years. One example is the stark absence of any output measure to value security of supply investments. NSW has undertaken significant investments in recent years to address security risks; these should not be confused with reliability risks and therefore cannot be captured by reference to a reliability output measure. Security of supply investment addresses, amongst other things, the risks of high consequence low probability events that could have catastrophic impacts on the NSW economy and the safety of NSW residents. In the absence of an appropriate output to measure such investments the AER's benchmarking approach inherently assumes that expenditure to avoid events with significant customer impact is inefficient.

If there is no appropriate means to account for such investments in the benchmarking process, consideration should be given to removing security of supply investments from the benchmarking analysis for all DNSPs.

Assumptions

Several of the assumptions used in the modelling are open to question. Specifically:

1. **The assumption that exogenous influences are negligible.** The AER has collected information from the businesses on 18 different environmental variables to adjust the MTFP results, yet in the draft benchmarking approach no such adjustment has been made. The claim is that the influence is negligible. Given that a weakness of MTFP is its inability to account for differences in the conditions of the measured businesses, and the concerns with the bias in the model specification, some attempt should be made to account for the influence of different environmental variables.
2. **The selection of output weights highlights the variability between businesses.** The output weights used are the industry average weights. This implies a fixed, consistent "recipe" for costs across the industry. When individual DNSP weights for each variable are reviewed, the differences between businesses is significant - another indication of the diversity of conditions between the businesses. The application of industry average weights to all businesses, therefore, imposes a very different cost structure on many DNSPs than what would actually exist for them.
3. **The halving of VCR is not valid.** The AER has specifically asked for feedback on the halving of the Value of Customer Reliability (VCR) in its assumptions. Whatever the reason for halving the VCR for future application, this was not the case over the period of analysis in which the VCR is being applied (2006 - 2013). Given the reliability measure is in the context of past performance, the value that applied for VCR at that time should be used.

Data

There are still several data issues across the businesses. Major issues include:

1. **The data has not been treated for consistency.** The complexity of electricity distribution businesses has increased recently. These complexities vary by jurisdiction and individual business. Recent costs such as Solar Feed-in Tariffs and one-off costs such as reform and restructuring costs have been included in the total costs fed into the MTFP model. These are significant costs that were not present in the businesses in 2006 and therefore (through their inclusion in 2013) appear in the AER modelling to be a decline in productivity.
2. **The data is not consistently reported.** Some of the engineering data in particular has a different basis of preparation and calculation across businesses. Some of this data is significantly material to the MTFP results. More effort to clean and align the data is required before its use in an application such as MTFP.

Modelling Period

The MTFP analysis concludes that Victorian and South Australian distributors are the most productive, despite productivity declining across the whole sector from 2006 to 2013. The report then fails to mention that both NSW and the ACT have average annual changes in productivity that are better than those experienced in South Australia over the 2006 to 2013 period.

NSW DNSPs also question the selective use of a period commencing in 2006 prior to the introduction of stringent and mandatory jurisdictional licence conditions in NSW. Given the outputs and weightings selected by Economic Insights and the lack of a relationship between these outputs and the additional costs incurred through the licence conditions implementation, one would expect the productivity of NSW distributors to decline substantially. The report makes no attempt to examine the reasons for selecting 2006 to 2013, nor the resulting MTFP which are then not surprisingly biased against NSW DNSPs. In fact, as an illustration of the subjectivity of the time period, picking a period starting from any year from 2008 but ending in 2013 shows NSW above Victoria in all five periods (08-13, 09-13, 10-13 and so on) in terms of average annual productivity results, and in the top two performers across the NEM in 4 out of 5 of these periods.

As stated at footnote 1 of the draft Annual Benchmarking Report, clause 6.27(a) of the National Electricity Rules describes the purpose of the Annual Benchmarking Report is to explain '...the relative efficiency of each Distribution Network Service Provider in providing direct control services over a 12 month period'. The AER has chosen to analyse a period longer than the 12 month period stipulated in the Rules. If the AER chooses a period other than 12 months, then the AER should provide justification for the period selected and analysis of the impact of its decisions on the benchmarking outcomes because each DNSP will be affected differently. At a minimum, the AER should include specific analysis focusing on a 12 month period as required by the Rules.

Significant savings have been achieved by the NSW DNSPs under the Networks NSW reforms, and these savings will be reflected in next year's Annual Benchmarking Report for the 2013/14 financial year.

Inadequate analysis

The AER's draft benchmarking report lacks rigorous analysis of the environmental factors affecting Australian DNSPs and as such the conclusions drawn by the AER are potentially inaccurate and misleading. The NSW DNSPs consider that these peer comparisons require more robust and

developed benchmarking techniques. It would be more appropriate to examine the performance of individual DNSPs over time at this stage.

If the AER plans to publish these conclusions we request at least one of the following:

1. Adequate time to review and respond to the substance of the report before it is made public. The AER has only allowed 2 weeks to check its data for errors, which is inadequate. The errors we have observed are listed, but as we find other errors we will inform the AER as soon as practical.
2. Supplement the report with detailed analysis explaining the data. To do this the AER should review the documentation submitted with our RINs and Regulatory Proposals.

There are a range of circumstances that help to explain the cost and productivity data. Some examples of circumstances that the AER should investigate include the following as they pertain to Ausgrid:

- Supplies the Sydney CBD which is the biggest and oldest business centre in Australia, which means there are a range of issues faced by Ausgrid that are not faced by other DNSPs.
- In addition to the Sydney CBD, supplies a large rural area, which drives costs due to travel time and number of assets per customer.
- Has some of the oldest assets in Australia.
- Is in the middle of a large phase of asset replacement which the AER has been unable to measure an appropriate output, yet the new assets provide output. This is a very different part of the life cycle that other businesses outside of NSW have not yet faced.

These are only the high level factors that should be considered, but each indicator calculated by the AER creates a cause to look deeper into the costs and cost drivers. As we have previously noted this type of cost benchmarking is only a crude measure, but can be a useful indicator to find areas for further investigation. The AER's report has not investigated the explanation for the data and as such the conclusions it has made about the relative efficiency of DNSPs across the NEM are not warranted.

