

# Submission on the *Draft Electricity Distribution* Network Service Providers – 2015 Annual Benchmarking Report

# **Australian Energy Regulator**

# 9 October 2015

This submission, which is available for publication, is made by:

Ergon Energy Corporation Limited Level 8, 420 Flinders Street PO Box 1090 Townsville Qld 4810

Enquiries or further communications should be directed to:

Jenny Doyle Group Manager Regulatory Affairs Ergon Energy Corporation Limited Email: jenny.doyle@ergon.com.au Ph: (07) 3851 6416 Mobile: 0427 156 897

# **CONTENTS**

1.	INTRODUCTION	4
2.	COMMENTS ON DRAFT REPORT AND ANALYSIS	5
2.1.	Econometric Approach and Specifications	5
2.2.	Econometric Modelling	6
2.3.	Compliance with the Rules	9
2.4.	Economic Benchmarking Data Set1	0
2.4.1	General Concerns1	0
2.4.2	Anomalies and Errors1	1
2.4.2	1. Reliability PPIs (SAIDI)1	1
2.4.2	2. Regulatory Asset Base1	3
2.4.2	3. Depreciation1	4
2.4.2	4. Operating Expenditure1	5
2.4.2	5. Use of June CPI indices to calculate "Real values" 1	5
2.4.3	Historical Restatements1	5
2.4.3	1. Regulatory Asset Base1	6
2.4.3	2. Circuit Length1	7
3.	OUTCOMES FOR ERGON ENERGY1	8

# 1. INTRODUCTION

Ergon Energy Corporation Limited (Ergon Energy) welcomes the opportunity to provide comment to the Australian Energy Regulator (AER) on its *Draft Electricity Distribution Network Service Providers – 2015 Annual Benchmarking Report* (Draft Benchmarking Report). This submission is provided by Ergon Energy, in its capacity as a Distribution Network Service Provider (DNSP) in Queensland.

It is noted that the AER's Draft Benchmarking Report has been developed using benchmarking of data consulted on and collected using only Economic Benchmarking regulatory information notices (RINs) issued to DNSPs following the development and release of the Expenditure Forecast Assessment Guideline (29 November 2013) under the Better Regulation program. Through separate correspondence with the AER on 29 September 2015, it is understood that the AER again does not intend to use the Category Analysis RIN data as part of the 2015 Annual Benchmarking Report.

In response to the AER's invitation to provide comments on the Draft Benchmarking Report, including the memorandum from the AER's consultant, Economic Insights (EI), on the development of the multilateral total factor productivity (MTFP) analysis presented in the report, Ergon Energy has focused on key areas of concern and matters of fact. However, it is considered that insufficient time has been provided to conduct any detailed and meaningful error checking or analysis.

Where it was deemed relevant, Ergon Energy has provided updated or amended 2014-15 and/or historical year Economic Benchmarking RIN data (e.g. due to change in methodology or errors realised in subsequent reporting). In resubmitting the information to the AER, Ergon Energy has ensured:

- revised information is submitted using the same template used to provide the original response;
- "amendment reason" box on tab 1.0 business details and instructions, has been completed, including identification of data which has been amended;
- revised information has been provided as a 'consolidated' version only;
- revised information has been provided as a public version.

Ergon Energy has not made any claims for confidential information in this regard. Accordingly, consent is given to the AER to disclose the public version of the revised response as required.

Overall, Ergon Energy considers benchmarking a valuable tool in general that can provide a readily understandable insight into the relative performance of businesses. However, we also consider that Australian DNSPs are not well suited to econometric benchmarking techniques given the limited and heterogeneous nature of the dataset. As such, it will take time to develop a dataset and approach that is of sufficient quality that it may reliably inform stakeholders of the relative efficiency of DNSPs. As these measures are refined we consider it is more prudent to benchmark individual businesses over time and to be aware of the risks involved in relying upon more simplistic comparative benchmarks to form views as to relative efficiency.

In reviewing the Draft Benchmarking Report, Ergon Energy's primary concerns (discussed herein) include:

- feedback and commentary provided to date by Ergon Energy and other DNSPs has largely been ignored in preparation of the 2015 Draft Benchmarking Report;
- it is not evident that there has been any evolution or refinement of the AER's approach since the prior year (2014) Annual Benchmarking Report;
- the Draft Benchmarking Report is not considered to be compliant with the requirements of the National Electricity Rules (NER);
- the information released for consultation does not include, and the report does not consider, the primary benchmarking models the AER has relied upon in recent regulatory determinations, including Ergon Energy's Preliminary Decision; and
- the AER has formed views in the Draft Benchmarking Report as to the relative efficiency of DNSPs on the basis of simplistic, limited benchmarking tools with insufficient analysis and no proper consideration of the operating environment factors (OEFs) which impact the results.

Ergon Energy also notes that the AER's benchmarking approach more generally is currently subject to merits review by the Australian Competition Tribunal (ACT) as part of the NSW/ACT appeal of the 2014-19 Distribution Determinations. The outcomes of this review may have implications for the AER's benchmarking approach and therefore this (and future) Annual Benchmarking Report(s).

This said, Ergon Energy continues to support a consultative approach aimed at improving the understanding of the AER's expenditure assessment methods. This is particularly important at this time as we await the release of the Final Determination for Ergon Energy by the end of October 2015, and the outcomes of the abovementioned merits review.

In continuation of the interactive approach being adopted by the AER, and in the essence of procedural fairness, Ergon Energy requests a review of and right for response on, any proposed revisions to the Draft Benchmarking Report and underlying data used as well as economic modelling techniques, before publishing as a final Report.

# 2. COMMENTS ON DRAFT REPORT AND ANALYSIS

Ergon Energy makes the following comments with respect to the AER's Draft Benchmarking Report, including the memorandum from the AER's consultant, EI, on the development of the MTFP analysis presented in the report.

## 2.1. Econometric Approach and Specifications

Ergon Energy and its consultants consider insufficient time has been provided to review the extensive data provided for errors, anomalies, areas for further investigation or to propose alternate approaches in a meaningful manner. As such, we are not in a position to provide detailed comments and recommend that the AER conduct detailed data checking to ensure the report is at the very least free of error. Where Ergon Energy has identified Anomalies and Errors, these are discussed in section 2.4.2 of this response.

More importantly, we recommend the AER utilise a more consultative approach in developing its benchmarking approach given its importance and complexity. Ergon Energy, along with the other

NSW DNSPs, has provided extensive commentary on the AER's approach to benchmarking during the *Better Regulation* consultation process, the NSW/ACT 2014-19 Distribution Determination process, Ergon Energy's Distribution Determination process and in response to the 2014 Draft Annual Benchmarking Report. This material includes numerous expert reports reviewing the AER's dataset, methodologies and application of benchmarking in detail.

It is not evident that extensive feedback has been considered in the AER's benchmarking approach and 2015 Draft Benchmarking Report. It is noted that the 2015 Draft Annual Benchmarking Report is analogous to the previous Report (2014) in that the same benchmarking techniques and model specifications have been used, namely:

- the same three benchmarking techniques used (Partial Productivity Indicators (PPIs); Multilateral Total Factor Productivity (MTFP); and Multilateral Partial Factor Productivity (MPFP)) for both Capital (Capital PFP) and Operating (Operating PFP) are all index based techniques that simply plot ratios of inputs and outputs;
- econometric analysis, such as that used in recent determinations through a Stochastic Frontier Analysis (SFA) Cobb-Douglas (CD) model, has once again been omitted as a technique and therefore continues to be employed solely for determining the efficiency of base year Opex and for predicting a replacement Opex forecast where necessary during a determination process. Data Envelopment Analysis (DEA) remains omitted from both the Annual Benchmarking Report and regulatory determinations; and,
- the same output and input specification as the prior year, is used for both the MTFP and MPFP indices. For the Capital MPFP index, the Opex input variable is excluded and for the Operating MPFP, all input variables besides Opex are excluded.

The AER is also using a similar approach to the previous benchmarking report in that the partial performance indicators are largely used to support the results of the multilateral total and partial factor productivity scores.

Accordingly, Ergon Energy is concerned that the material matters identified by the DNSPs and their consultants to date have not been appropriately addressed and there has not been any notable development or evolution in the AER's benchmarking approach between determinations or benchmarking reports.

In the absence of further consultation prior to the publication of the 2015 Annual Benchmarking Report, Ergon Energy requests the AER refer to this substantive body of material provided to date by Ergon Energy and the other NSW DNSPs.

# 2.2. Econometric Modelling

In its final position paper for the 2012 Economic Regulation of Network Service Providers Rule change, the Australian Energy Market Commission (AEMC) stated that the Annual Benchmarking Report was one of a number of provisions designed to improve the ability of consumers to participate in the regulatory determination process.

Ergon Energy is therefore concerned that the 2015 Draft Annual Benchmarking Report does not contain the AER's primary econometric model relied upon as part of its most recent distribution determinations. To be of real value to the AER, consumers and other stakeholders, the Annual Benchmarking Report should contain findings from the models and approaches that the AER

intend to materially rely upon as part of its distribution determinations. Additionally, the information presented should be an accurate representation of the relative efficiencies of DNSPs and any conclusions made should be based on full analysis of the relevant facts.

Ergon Energy has concerns that both the representation of data in some cases (and the models used to derive this data) and the 2015 Draft Annual Benchmarking Report's conclusions have been based on limited investigation and analysis of the results and relevant facts, in particular the absence of any consideration of operating environment factors (OEFs). In respect of the latter, the AER note in the 2015 Draft Annual Benchmarking Report <sup>1</sup>:

Accordingly, when interpreting the benchmarking results, stakeholders should bear in mind that in some cases, the impact of OEFs may increase or decrease a distributor's relative efficiency by a material amount.

The significance of this impact is also highlighted by the AER in a footnote to the draft report<sup>2</sup>:

In recent determinations, the magnitude of OEF adjustments have varied between 10% and 26%.

However, no such caution is applied by the AER itself in the report. Rather, based on the limited measures presented, the AER have made statements on the relative efficiency of DNSPs with little qualification.

Similar to the Opex PPIs, there is some variability in the performance of the distributors for asset cost depending on the output measure used (see Figure 23 in Appendix A to the draft report<sup>3</sup>). However, in general, according to the draft report, the Victorian DNSPs 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.

Ergon Energy considers that such conclusions are not accurate and not supported by the limited types of measures included in the report. The Report relies extensively on PPIs in forming views as to relative efficiency, contrary to previous comments by the AER and AEMC as to the reliability of PPIs:

"We also use PPIs and consider that they provide an insight into the efficiency of the networks. However 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. For example, when considered in isolation, a labour productivity measure would tend to overstate the growth of overall productivity in a utility experiencing a substantial degree of capital deepening (i.e., capital substituting for labour in the production). Similarly,

<sup>&</sup>lt;sup>1</sup> Page 17 of the 2015 Draft Annual Benchmarking Report <sup>2</sup> Page 17 of the 2015 Draft Annual Benchmarking Report

<sup>&</sup>lt;sup>3</sup> Figure 23, page 30 Appendix A: Additional PPIs of the 2015 Draft Annual Benchmarking Report

inadequately accounting for the multiple outputs produced by a utility would also make performance comparison over time or across utilities less useful for the regulator.

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. In particular, PPIs used in isolation cannot easily take into account differences in the market or operating environment that impact upon a business but are beyond the control of management. For example, a utility may have a relatively high or low unit cost simply because it faces input prices or serves customers that are different from those for utilities operating in other regions. Because of this, they may present problems in providing a meaningful comparison of businesses in different operating environments"

In releasing its 2014 Annual Benchmarking Report the AER also noted:

"We received submissions from stakeholders that we should include trend lines in our PPI figures. There are a number of functions that can be used to develop trend lines. These assume certain relationships between PPI inputs and outputs. We consider that including these could be misleading as any trend line will assume a certain relationship between inputs and outputs, which we have not verified. Further trend lines may not necessarily reflect the relationship between inputs and outputs, as they may be affected by outlying results and inefficient performers."

Whilst the AER acknowledges it cannot determine the appropriate trend line, it implicitly does so by interpreting the results. Forming conclusions through observing which DNSPs appear efficient or inefficient on a particular PPI measure cannot be done without assuming a certain trend line i.e. relationship between variables exists.

Ergon Energy 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 always favour some and induce bias against others. Ergon Energy refers the AER to our response to the draft 2014 Annual Benchmarking Report<sup>4</sup> for the more detailed position presented, however it can be reiterated in summary as:

- The process of selecting the appropriate model specification is subjective;
- The method of testing and discarding or accepting different model specifications is biased; and,
- 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.

Ergon Energy recommends more robust consideration be given to the selection of the input and output specifications, and greater transparency as to the statistical and qualitative criteria used to select the preferred specification. It is considered that the assumptions used to select a specification should be explained in further detail.

<sup>&</sup>lt;sup>4</sup> Ergon Energy's submission on the Draft Electricity Distribution Network Service Providers – 2014 Annual Benchmarking Report dated 22 August 2014

In its current form, Ergon Energy considers the measures in the AER's 2015 Draft Annual Benchmarking 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 Draft Report could simply qualify the accuracy and reliability of the measures presented and allow stakeholders to form their own views as to relative efficiency.

If the AER wishes to include a view as to relative efficiency of DNSPs then more sophisticated methods should be developed and included in the report, and the report should remain focussed on a one year view as required by the NER (refer comments below). 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.

# 2.3. Compliance with the Rules

Ergon Energy notes that as per the prior year, the 2015 Draft Annual Benchmarking Report is considered non-compliant with the AER's obligations under clause 6.27 of the NER. Specifically, the NER requires the AER to publish a report which describes the relative efficiency of DNSPs over a 12 month period. Contrary to this requirement, the figures presented in the 2015 Draft Annual Benchmarking Report mostly cover the 2010-14 or 2006-14 period.

Ergon Energy's position on the use of an average is well documented in previous submissions made to the AER, but is again summarised as follows:

- the selection of an averaging period is subjective and the selection of a different period can produce different results;
- the "frontier" firms have significant increases in Opex over the averaging period used meaning a target is being set at a level that even the "frontier" businesses cannot achieve now; and,
- there is clear evidence that a number of "frontier" firms were not compliant with their obligations over the averaging period establishing a false frontier.

For example, in relation to the costs of vegetation management and bushfire costs in Victoria across the 2006-2014 period, material available to the AER indicates that:

- in 2005, the Victorian DNSPs were found by the Essential Services Commission (ESC) to have failed to comply with their regulatory obligations under the *Electrical Safety Code (Cth)* between 2001 to 2005 (inclusive) and were given a step change in funding to encourage compliance, with both Capex and Opex allowances being increased;
- in 2009, the AER's analysis of Victorian DNSPs showed they had significantly underspent on Opex in the 2006 to 2008 period and underspent in 2009;
- an analysis of the Victorian DNSPs reveals that those DNSPs underspent their Opex allowance by an average of 10% across the 2006 – 2010 regulatory control period<sup>5</sup>;

<sup>&</sup>lt;sup>5</sup> 2006-2013 Economic Benchmarking Regulatory Information Notices; Essential Services Commission, *Final Decision*, October 2005.

- the Victorian 2013 Regulatory Impact Statement noted that the rationale for the new bushfire mitigation regulations for 2013 were Victorian Bushfires Royal Commission (VBRC) recommendations relating to 'identified inadequacies' in respect of inspection and maintenance arrangements for electricity assets and that this 'prescriptive' approach 'was necessary to provide a high level of assurance that the inadequacies in past performance' would be addressed.<sup>6</sup> The 2013 Regulatory Impact Statement also noted that: "According to the VBRC, inadequate inspection practices had a substantial role in leading to the ignition of the fires that led to [the Black Saturday] losses"<sup>7</sup>;
- the Victorian 2014 Regulatory Impact Statement stated that the 2010 line clearance code was 'in effect, less stringent than its predecessor', that changes in enforcement practices by the ESV rather than changes in the regulations themselves "were perceived as the major drivers of increases in activity and costs" and the actual incremental cost of adopting the 2010 regulations/Code, could be in the order of 8%, a figure much lower than the estimates provided by Victorian distribution businesses<sup>8</sup>;
- further, in 2014, the consultant advising Energy Safe Victoria (ESV) found that the large increases in spending by the Victorian DNSPs, identified by those DNSPs as being necessary to achieve compliance with the regulatory changes made between the 2005 and 2010, could not be attributed to the changes in the regulatory regime, as has been asserted by the AER and Economic Insights (EI) in their respective assessments.

Furthermore, the AEMC clearly articulated its intention in the NER for the Benchmarking Report to cover a 12 month period. A DNSPs position can change significantly over time and the most recent results of a business should not be skewed by expenditure outcomes in previous years. This can produce misleading results as to what a particular businesses current position is relative to its peers.

Ergon Energy notes that whilst a time series can be of value, the AER's Annual Benchmarking Report should primarily focus on the most recent 12 month period as prescribed by the NER.

# 2.4. Economic Benchmarking Data Set

#### 2.4.1. General Concerns

Ergon Energy again reiterates concerns raised in prior submissions that benchmarking expenditure assessments (regardless of the technique/s chosen) across DNSPs in Australia, using high level ratios can be misleading, unless the underlying drivers, inherent costs and cost allocation practices of the quite different DNSP businesses are taken into account.

The comparison of expenditure through economic benchmarking techniques is further complicated by the cyclic nature of regulatory determinations, which requires reliance on data from other networks that may either be out of date or not yet available. The long-term nature of network assets, lengthy investment cycles, frequent updates to accounting and reporting structures in the context of relatively short regulatory control periods and minimal historical data can distort

<sup>&</sup>lt;sup>6</sup> Jaguar Consulting for Energy Safe Victoria, *Regulatory Impact Statement: Electricity Safety (Bushfire Mitigation) Regulations 2013*, February 2013, p. 2

<sup>&</sup>lt;sup>7</sup> Ergon Energy, *Response to AER information request Ergon 002*, 17 December 2014, Attachment 3

<sup>&</sup>lt;sup>8</sup> Jaguar Consulting for Energy Safe Victoria, *Regulatory Impact Statement Electrical Safety (Electric Line Clearance) Regulations*, 19 September 2014, p.31.

benchmarking results, in addition to complicating the evaluation of what productivity improvements may be possible without undermining the security and reliability of the network.

The greatest challenge in attempting to benchmark is to derive a data set that fairly and evenhandedly allows comparisons between DNSPs that are not operating in the same environment.

Ergon Energy continues to question the true comparability of underlying data and lack of standardisation across the industry statistics presented in the Draft Benchmarking Report. Furthermore, in responding to RINs, whilst Ergon Energy and other DNSPs would have used best endeavours to determine estimated values in response to RINs, the inherent limitations of such estimated data vis-a-vis actual data remains to be recognised. This is particularly important given the ambiguous nature of drafting of some of the RIN requirements; and, given Basis of Preparations may not allow for a fully comparative approach to estimates to be assumed.

Ergon Energy suggests that further work remains in aligning data across DNSPs to a (more) standardised, comparable data set. Even then, it should be recognised that differences can arise in a variety of areas including accounting, capitalisation and cost allocation.

#### 2.4.2. Anomalies and Errors

As already noted, Ergon Energy considers insufficient time has been provided to review the extensive data provided for errors, anomalies, areas for further investigation or to propose alternate approaches in a meaningful manner. Accordingly, Ergon Energy is not in a position to provide detailed comments and recommends the AER conduct its own detailed data checking to ensure the report is at the very least free of error.

Where Ergon Energy has identified anomalies and errors in the underlying data set used by the AER to develop its Draft Annual Benchmarking Report, these are discussed below.

Generally, it was noted that not all sheets (2-8) have been updated for 2013-14 data in the "00AER consolidated master sheet" file. Rather, hardcoding of data has been done in the "SD-…" sheets by EI.

#### 2.4.2.1. Reliability PPIs (SAIDI)

Ergon Energy notes that in discussions of reliability PPIs (page 32) of the Draft Benchmarking Report the AER has made comment that,

"In this report, the reliability metrics exclude the effect of large, abnormal outage events (known as major event days, or MEDs). MEDs can be unforeseeable, uncontrollable and may affect measured performance."

Furthermore, the AER's presentation of "Total cost per customer (\$2014) against unplanned minutes off supply per customer (excluding MEDs, average 2010–2014)" in Figure 26 and Total spend per km of route line length (\$2014) against unplanned minutes off supply per customer (excluding MEDs, average 2010–2014) in Figure 237, draw upon averages of performance data that is exclusive only of MEDs.

Despite the AER's analysis file "EBT DNSP PPI 2010 - 2014" itself denoting a heading on the Reliability data tab suggesting use of "SAIDI exclusive of MEDs excluding excluded outages", for

all years data is drawn from variable DQS0105 in the Economic Benchmarking RIN, Table 7.1.2 Exclusive of MEDs.

Despite inherent limitations of comparisons as noted in this submission, the AER should preferably be presenting Reliability performance data that excludes <u>all</u> allowable exclusions of the AER's Service Target Performance Incentive Scheme (STPIS), not just MEDs. As with other regulatory compliance frameworks for reliability of supply, STPIS recognises and allows for exclusion of events (beyond MEDs) that are generally accepted to be beyond the control of the DNSP. These may be (for example) interruption events resulting from a failure of the shared transmission network, generation shortfalls or in discharging a jurisdictional obligation are allowable exclusions.

In Ergon Energy's view, the number of interruptions per customer (excluding MEDs excluding excluded outages) provides a better comparison of DNSPs reliability performance and cost of service and length of network because it focuses on events that are recognised as being within the DNSPs' control. Accordingly, the AER's Reliability PPI analysis should rely on variable DQS0106 in the Economic Benchmarking RIN Table 7.1.2.

A comparison of the variable "SAIDI excluding MED" to that proposed by Ergon Energy (SAIDI excluding MED and excluded outages) is set out in the table. A five year average of each is also shown for comparison.

	SAIDI excluding MEDs	SAIDI excluding MEDs and excluded outages
	DQS0105	DQS0106
2010	359.84	352.25
2011	377.65	324.96
2012	313.16	295.80
2013	273.94	264.11
2014	229.54	228.06
Five year average	310.83	293.03

#### Table 1: Ergon Energy - SAIDI excluding MEDs (including / excluding other excluded outages)

In any case, Ergon Energy notes that network reliability measures can also be adversely impacted by events (days) where daily SAIDI/SAIFI reach close to MED thresholds, but are not sufficient to qualify as a MED. Such extreme weather event days have had a significant adverse impact on Ergon Energy's network reliability measures across all feeder categories over the years, especially the outage duration (SAIDI).

As can be seen above, Ergon Energy has shown significant improvements in our annual number of interruptions per customer (excluding MEDs excluding excluded outages) from 2010 to 2014 resulting from our targeted reliability improvement capital investment program and operational response practices and procedures.

Also not revealed when reviewing averages, is Ergon Energy's continuous improvement through better data acquisition, control and supervisory systems enhancing our knowledge of our network in recent years. Despite the operating environment challenges faced by DNSPs, these results emphasis Ergon Energy's efforts and commitment to pursuing an economically sustainable and financially responsible transition path to being a more prudent and efficient DNSP.

#### 2.4.2.2. Regulatory Asset Base

Ergon Energy has identified errors in the economic benchmarking data set used by EI for Regulatory Asset Base (RAB) metrics. Specifically:

- It is not ideal that data in "SD 4. Assets (RAB)" sheet of the "00AER consolidated master sheet file", is hard coded. Furthermore the sheet "4. Assets (RAB)" has not been updated for 2013-14 Data.
- overhead 33kV and above: In the sheet, "DNSP stacked data", Disposals calculations incorrectly add Economic Benchmarking RIN variables DRAB0506 (disposals for overhead network assets 33kV) and DRAB0807 (closing value for easements). The AER should instead be adding the variable DRAB0806 (disposals for easements). This formula error affects all regulatory years from 2006 2014 across Columns L-T (row 85) of the sheet. The Closing value is unaffected by this error.

Overhea	ad 33kV and Above – Dis	posals
	DNSP stacked data	Ergon Energy
	Columns L-T (row 85)	(corrected formula)
2006	44,183.90	-1,715.32
2007	46,004.11	-1,614.10
2008	35,773.26	-15,500.56
2009	56,994.26	-4,144.01
2010	77,913.27	-2,814.19
2011	87,200.95	0.00
2012	47,612.28	-44,104.52
2013	99,561.36	0.00
2014	107,864.06	0.00

#### Table 2: Overhead 33kV and above category (disposals)

underground 33kV and Above: In the "DNSP stacked data" sheet of the "AUC" file, data for 2013-14 year, for the "underground 33kV and Above" category (column AO) is hard coded, and does not match data submitted by Ergon Energy in its Economic Benchmarking RIN for 2014-15<sup>9</sup> for variables DRAB0601 – DRAB0607. This will has flow on impacts to calculations in 06ERG BB, and AUC sheets within the AUC file. Further impacts have not been fully investigated in the time provided.

<sup>&</sup>lt;sup>9</sup> Ergon Energy's 2013-14 Economic Benchmarking RIN Submission, 31 October 2014.

#### Table 3: Underground 33kV and above (2014 only)

Underground 33kV and Above (2014 only)		
	DNSP stacked data (Column AO)	Ergon Energy (submitted data)
Opening value	40,123.64	54,329.17
Inflation addition	1,003.09	1,591.85
Straight line depreciation	-2,115.05	-2,975.86
Regulatory depreciation	-1,111.96	-1,384.01
Actual additions (recognised in RAB)	1,071.18	5,076.49
Disposals	-393.30	0.00
Closing value	39,689.56	58,021.64

Data for *Meters* as submitted by Ergon Energy in its RAB information does not appear in the "DNSP stacked data" worksheet of the "AUC" file. It does not appear to be added in the "*Other*" category and is not its own category. For completeness, it is noted *Meters* are included in Ergon Energy's total RAB values for the current regulatory control period (2014-15). This has flow on impacts to calculations in 06ERG BB, and AUC sheets within the AUC file. Further impacts have not been fully investigated in the time provided.

As these variables impact the total RAB amount, these errors will have a flow-on impact to a number of other graphs / metrics presented in the AER's report. Further impacts have not been fully investigated in the time provided.

In any case, Ergon Energy has provided a revised workbook with restated historical RAB values for all years, which have been derived as part of the 2014-15 RIN reporting. Ergon Energy recommend the AER consider adopting this revised data in its' Annual Benchmarking Report analysis. Refer to **section 2.4.3 Historical Restatements** below.

## 2.4.2.3. Depreciation

Ergon Energy has identified errors in the calculations performed in the Depreciation data set used for analysis. Specifically:

For *Depreciation* in the file "EBT DNSP PPI 2010-2014", the CPI indices used to calculate the real depreciation for 2014 are referencing March 2014 instead of June 2014,. Of note, calculations for real capital expenditure, operating expenditure and RAB use the June 2014 CPI indices. This formula error only affects the 2014 regulatory year.

Using of the incorrect CPI will impact any figures used in the Draft Benchmarking Report that reference Deprecation, Asset Cost or Total Cost. As a result, a number of graphs / metrics presented in the AER's report will be affected, including, but not limited to table 2 (page 16), figure 9 (page 20), figure 10 (page 21), figure 20 (page 28), figure 23 (page 30), figure 24 (page 31), figure 25 (page 31), figure 26 (page 32) and figure 27 (page 33).

The values presented by the AER and the correct values are set out in the table below.

#### Table 4: Depreciation (2014 only)

Depreciation (2014)		
	EBT DNSP PPI 2010-2014 data	Ergon Energy (corrected formula)
CPI (Dec)	106.4	106.6
Calendar year data (Real June same year)	105.4	105.9
Financial year data (Real December previous year	104.0	104.8
Convert to real (Calendar year DNSP)	1.009	1.007
Convert to real (Financial year DNSP)	1.023	1.017
Real 2014 depreciation	-\$334,668	-\$332,737

#### 2.4.2.4. Operating Expenditure

Ergon Energy has identified an error in table 2 (p16) in the draft report. The figure appearing for Ergon Energy's Opex is the nominal amount not the real 2014 value. This error appears to only affect this table in the draft annual benchmarking report. The data files associated with the draft annual benchmarking report.

The values presented by the AER and the corrected values are set out in the tables below.

#### Table 5: Operating Expenditure (2014)

	AER Graph	Ergon Energy (corrected value)
Average annual Opex for network inputs for 2010-2014	317.25	339.93

## 2.4.2.5. Use of June CPI indices to calculate "Real values"

Ergon Energy notes the use of June-June CPI indices for converting the annual data to real dollars in its data file "EBT DNSP PPI 2010-2014". However, of note, in line with the AER's Preliminary Determination for Ergon Energy, and in accordance with the AER's approved Roll Forward Model, Ergon Energy uses March-March CPI indices for the purposes of applying the inflationary adjustment in its RAB.

Ergon Energy suggests further discussion is warranted in this regard. There is concern that inconsistent use of CPI indices when converting to real values in its annual benchmarking report will not allow comparisons to be made between the Annual Benchmarking Report and the AER's regulatory determinations.

## 2.4.3. Historical Restatements

Given the timing of delivery of the 2014-15 Economic Benchmarking RIN submission (early November) and the expected publishing of the AER's Final 2015 Annual Benchmarking Report (towards end-October), this is the first and only opportunity foreseen to provide an update on any historical data impacted revisions made due to error correction and / or changes of methodologies undertaken during the year.

Accordingly, where it was deemed relevant, Ergon Energy has provided updated or amended 2014-15 and/or historical year Economic Benchmarking RIN data as attachments to this submission. In resubmitting the information to the AER, Ergon Energy has ensured:

- revised information is submitted using the same template used to provide the original response;
- "amendment reason" box on tab 1.0 business details and instructions, has been completed, including identification of data which has been amended;
- revised information has been provided as a 'consolidated' version only;
- revised information has been provided as a public version.

Ergon Energy has not made any claims for confidential information in this regard. Accordingly, consent is given to the AER to disclose the public version of the revised response as required.

#### 2.4.3.1. Regulatory Asset Base

In preparation of annual reporting for the 2014-15 regulatory year and specifically, for the Economic Benchmarking RIN, Ergon Energy has aligned RAB values for the 2010-11 to 2014-15 regulatory years with values set by the AER in its 2015-20 Preliminary Determination (using the RFM). In doing so, it has necessarily restated the RAB values previously reported for 2010-11 to 2013-14 inclusive.

Further information will be provided to the AER as part of its 2014-15 RIN submission, and in the Basis of Preparation relating to the audited submission of 2014-15 RAB data, however we refer the AER to re-submitted (unaudited) historical RAB data provided as an **attachment** to this response.

Ergon Energy suggests the AER consider adopting these figures in its Annual Benchmarking Report analysis, as the most up to date information available.

Topic / Issue	BM RIN Reference	Reasons for Update
Ergon Energy has aligned the RAB values for 2010-11 to 2014- <b>15</b> with the equivalent values in the AER's 2015- 20 Preliminary Determination RFM. In doing so, it has restated the RAB values previously reported for 2010-11 to 2013-14 inclusive.	Template 3.3, Table 3.3.2 - Variables DRAB0901 TO DRAB0907. Note for the 2006-13 submission this was Template 4, Table 4.2 - Variables DRAB0901 TO DRAB0907.	<ul> <li>It will be noted in the 2014-15 Basis of Preparation relating to the Regulatory Asset Base (RAB), that Ergon Energy has adopted a similar approach to determining the 2014-15 RAB values for Network Services as it did for 2013-14 (incorporating the corrections relating to 'Metering Services' as noted in the 2013-14 resubmission commentary and Basis of Preparation).</li> <li>However, the RAB values provided Standard Control Services and Alternative Control Services (i.e. public lighting) in 2014-15 have been aligned with the 2014-15 RAB values in the AER's 2015-20 Preliminary Determination Roll Forward Model (RFM), issued in April 2015. That is, all capital expenditure, disposals, asset lives, inflation addition, straight line depreciation and regulatory depreciation values by asset class for 2014-15 are in alignment with the equivalent values set out in the AER's Preliminary Determination RFM for 2014-15.</li> <li>In addition, Ergon Energy has restated the prior year RAB values for 2010-11 to 2013-14 inclusive, to also align with the equivalent values in the AER's Preliminary Determination RFM.</li> </ul>

#### Table 6: RAB (historical restatements)

Topic / Issue	BM RIN Reference	Reasons for Update
		<ul> <li>Ergon Energy's approach set out in the bullet points above ensures there is no misalignment of the values provided in the BM RIN and those adopted by the AER in its Preliminary Determination for the purposes of setting the opening RAB for 1 July 2015.</li> </ul>
		<ul> <li>Whilst the 2014-15 closing RAB value includes 2014-15 additions and disposals (which are expressed as estimates in accordance with the capex and disposal values for 2014-15 in the AER's Preliminary Determination RFM), Ergon Energy has reported this value as an actual in the BM RIN template. The use of estimated 2014-15 additions and disposals (as per the AER's Preliminary Determination RFM) instead of actual 2014-15 additions and disposals results in a 1% impact on the closing 2014-15 RAB, which in accordance with AASB1031 is considered immaterial. There is no evidence that any valid alternatives exist that would clearly arrive at a materially different position from the estimated values.</li> </ul>
		<ul> <li>The restated values for 2010-11 to 2012-13 are contained in the attached file: EE 05061213EBRIN 001RF R3.xls</li> </ul>
		<ul> <li>The restated values for 2013-14 are contained in the attached file: EECL_1314_EBRIN_CON_R3.xls</li> </ul>
		<ul> <li>NOTE: all restated values contained in the above listed attachments are <u>unaudited</u>.</li> </ul>

## 2.4.3.2. Circuit Length

Whilst no revised historical data is available at the time of submitting this response, Ergon Energy has found a discrepancy in its treatment of the vertical sag component for calculation of circuit length in Template 3.5 Physical assets, Table 3.5.1.1 Circuit Lengths (overhead) in the Economic Benchmarking RIN. Corrections are being made to the 2014-15 year data for submission (audited) and this has revealed an impact of an approximately 5% reduction in total overhead circuit km. It is expected that prior years values would experience a similar reduction in overall values however, whilst data for 2014 is available to be recast, for earlier years some estimation will be required. This is currently being investigated. In the time provided, Ergon Energy has not reviewed the full extent of possible impacts of this error, on the AER's benchmarking outcomes.

Furthermore, Ergon Energy had made adjustments to lengths reported in Economic Benchmarking RIN Templates 3.5 Physical assets and Template 3.7 Operational environment in the 2014-15 reporting period to ensure (correct) exclusion of isolated assets. The immateriality of the adjustment (<0.2%) suggests that this will not have a significant impact on the AER's benchmarking outcomes, and has not undertaken recasting of historical data at this time. But again, it is noted that Ergon Energy has not reviewed the full extent of possible impacts on the AER's benchmarking outcomes.

# 3. OUTCOMES FOR ERGON ENERGY

It should be noted, that Ergon Energy will never be a "high" performer under the current MTFP and PFP model specifications due to the inherent physical challenges of operating a rural network over a large area. Whatever changes Ergon Energy makes to its Opex, and regardless of any benefit of circuit length in the output, Ergon Energy's low customer numbers, high SAIDI and higher total capacity of network required to transport electricity over long distances will continue to bias the outturn benchmarking results under the AER's approach.

These physical barriers to "high" MTFP performance must be considered in any conclusion made from analysis such as that in the AER's draft Annual Benchmarking Report. Specifically:

- Ergon Energy's MTFP and PFP performance should not be compared to urban networks without significant adjustment for environmental factors;
- In relation to the above, consideration of the increased Opex associated with service area size and sparsity, and the considerable extra input of transformer capacity required on a radial network to reach customers must be included;
- Volatility in year on year SAIDI performance that is inherent in a network such as Ergon Energy will cause fluctuations of the MTFP and PFP scores that are not associated with changes in productivity or efficiency; and
- Anomalous signals of inefficiency will occur through the transfer between inputs. For example, in reality, Ergon Energy may reap economic benefits from installing new circuits underground or undergrounding existing network in areas where the environment affects network performance. However the change in the share and capacity of underground will be measured as a decrease in productivity in the AER's model.