



18 October 2013

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

Dear Mr Reeves

RE: Response to the Draft Economic Benchmarking Regulatory Information Notice

Ausgrid, Endeavour Energy and Essential Energy ('the NSW DNSPs') welcome the opportunity to provide written submissions on the draft economic benchmarking Regulatory Information Notice (RIN) issued by the AER to each DNSP on 18 September 2013. We note that the draft RIN follows previous consultation on the information requirements for economic benchmarking, where we have raised significant concerns with providing historical data in the form required by the AER.

The NSW DNSPs support the objective of providing the AER with robust information that promotes informative benchmarking. Our experience with industry reform in NSW has shown that benchmarking can be a valuable assessment tool to identify potential efficiencies. Importantly, our experience has shown us that benchmarking is only meaningful when the data is of high quality.

With our experience in mind, we have reviewed the AER's information requirements for the draft economic benchmarking RIN. Our attached submission notes that the application of total factor productivity (TFP) and other economic benchmarking tools would likely result in regulatory error, leading to outcomes that are detrimental to the long term interests of customers. We provide reasons why the data would not provide accurate or meaningful insights into relative performance of DNSPs over time, noting that historical data is not of sufficient quality to be used for analysis.

For this reason, our primary contention is that the RIN should not be issued to NSW DNSPs in its current form. Rather, the RIN could require DNSPs to start developing systems to prepare, maintain and keep information for future periods only, such that the AER can use better quality information at a later stage.

We acknowledge that the AER may still issue the RIN despite our concerns. In the spirit of collaboration and cooperation, we have suggested alternative solutions to better enable us to meet compliance with the notice. We consider that the following amendments should be made before the final RIN is issued:

- Timing A response date of 14 February 2014 is neither reasonable nor achievable, and we request that the AER extend the response date for submission of the economic benchmarking RIN until after the submission of the NSW DNSPs' regulatory proposals on 31 May 2014. As a minimum, we request that the AER extend the response date to 31 May 2014 to align with the submission of our determination "category" RINs and our regulatory proposal lodgements as this would better enable the NSW DNSPs to provide a timely and complete response that includes an assurance report. This is important given that, unlike the majority of distribution businesses in other jurisdictions, the NSW DNSPs would be preparing transitional and substantive regulatory proposals concurrently with the preparation of the economic benchmarking RIN, and that our resources will therefore be very limited during this period.
- Unreliable data We consider the AER should not require our businesses to provide information which we know to be unreliable and inaccurate. This is important in the context of the legal nature of a RIN, which has high penalties for provision of false and misleading information. To assist the AER in understanding what forms of information may be of poor quality, we have attached detailed comments in Section 3 of our submission, and provided a colour coding system in Appendices A to C to identify the availability and confidence in data for each business.







- Intended purpose of data We request that the AER's final RIN provide more detail on how it
 intends to use each tab of the data requirements. This will also assist our understanding of
 how the information will be used, and can help us to notify the AER on when a 'best estimate'
 will result in a misleading conclusion. It will also provide NSW DNSPs with an early
 opportunity to understand the models that will be applied to our determinations.
- Statutory declaration We consider that the final RIN should not require a DNSP officer to sign a pro-forma statutory declaration. Rather, each DNSP should have the ability to develop its own statutory declaration such that the officer can be in a position to truthfully verify the quality of information that has been provided. This is important given the sanctions an officer faces for providing misleading information, and the nature of the AER's request which requires a DNSP to provide information that has not been collected or recorded in its systems.
- Assurance requirements We acknowledge that the AER has responded to our concerns by removing the audit requirements for estimates, and only requiring assurance under ASAE 3000 Our concern is that an assurance review will still likely find shortcomings in our estimating processes due to the inability of our systems to provide historical information required by the AER.

We look forward to further bilateral consultations on our proposed changes to the draft RIN prior to the AER issuing a final notice. If you would like to discuss our submission further, please contact Mr Zubin Meher-Homji, Manager Group Regulatory Strategy at Networks NSW on (02) 9269 2395 or via email at zmeher-homii@ausgrid.com.au or alternatively Mr Mike Martinson, Group Manager Networks NSW 9249 3120 Regulation at on (02)or via email michael.martinson@endeavourenergy.com.au.

Yours sincerely

Virice Graham

Chief Executive Officer

Ausgrid, Endeavour Energy and Essential Energy

Attachment: Joint written submission on draft economic benchmarking RIN issued to NSW DNSPs Appendix A: Ausgrid colour coding to notify reliability with which information can be provided Appendix B: Endeavour colour coding to notify reliability with which information can be provided

Appendix C: Essential colour coding to notify reliability with which information can be provided







Joint written submission on draft economic benchmarking RIN issued to NSW DNSPs

On 18 September 2013, the AER issued a draft RIN to Ausgrid, Endeavour Energy and Essential Energy to collect information for the purposes of economic benchmarking. Under section 28J of the Schedule of the National Electricity Law (NEL) we are provided with an opportunity to be heard before a regulatory information notice is served. The AER has provided until the 18 October 2013 for the NSW DNSPs to provide a response.

We are providing a joint written submission by the three NSW DNSPs given that the draft RIN issued to each business is identical and the issues we face are common. Our submission sets out common issues and positions of Ausgrid, Endeavour Energy and Essential Energy, and notes particular concerns relating to the capacity for each business to provide the information in the form required by the AER. Our response is structured as follows:

- Section 1 sets out our reasons why we consider the RIN should not be issued by the AER in its current form.
- Section 2 identifies amendments we consider the AER should make to the draft RIN if it still
 considers it necessary to serve the notice.
- Section 3 provides detailed comments on the spreadsheet in Appendix A of the draft notice.
 We identify common and business specific issues with reporting the data. Our comments in section 3 relate to separate appendices for each business which use a colour coding system to indicate our level of confidence with each data cell in the AER's spreadsheet.

We note that the Energy Networks Association (ENA) has also provided detailed comments on the draft RINs issued to all network service providers. We support and refer the AER to these comments, in particular those relating to the audit requirements.

1. Primary contention is that RIN should not be issued in its current form

The NSW DNSP's primary contention is that the draft RIN for economic benchmarking should not be issued by the AER. We consider that the application of economic benchmarking to guide regulatory decision making would result in error, leading to outcomes that are detrimental to the long term interests of customers. Our view is based on the following reasons:

- We are not convinced that economic benchmarking tools such as TFP can be used to infer relative efficiency of DNSPs over time. We consider that the models cannot adequately normalise for differences between DNSPs, and do not provide meaningful assessment of the apparent differences in productivity levels. For example, TFP will show that a firm that replaces ageing assets has declining levels of capital productivity, as the model would show higher prices for capital while maintaining existing service levels. In our view this would be driven by the age of the asset base which is likely to vary between DNSPs.
- We consider that economic benchmarking models such as TFP do not provide the AER with guidance on how to target its review of expenditure forecasts, as the information provided is at too high a level to identify potential areas of efficiency. The models and data collected will not provide any guidance on the underlying drivers of apparent productivity, and therefore does not provide useful analysis on which areas to review in a DNSP's capex and opex forecasts.
- Finally, the DNSPs in Australia have repeatedly noted that their finance and asset systems
 have not recorded much of the data in the form required by the AER, and that the information
 used to populate models would be highly unreliable. This has been independently confirmed
 by the Australian Energy Market Commission (AEMC), who conducted a 2 year review of TFP
 and concluded that available historical data was of poor quality and reliability.







In this context, we note the provision of material contained in the draft RIN is unlikely to provide any material benefit in informing the AER's regulatory determinations, and if applied will result in detriment to customers from poor regulatory decisions. At the same time, the ongoing cost of completing economic benchmarking RINs is likely to be expensive, with the costs ultimately borne by customers for no apparent benefit. For this reason, we do not consider that the information gathered will be cost-effective for our customers, and that the RIN should not be served on this basis.

In our view if the AER is to make any meaningful use of economic benchmarking in the future, it needs to ensure that the data quality is sound, and reported consistently by DNSPs over time. For this to occur we consider that the AER's RIN could instead ask DNSPs to start developing systems to prepare, maintain and keep information to report data for future periods.

2. Amendments if the AER still issues RIN

We understand that the AER is still likely to issue a draft RIN despite our primary contention. For this reason, we have set out amendments we consider necessary to ensure the RIN can be delivered in a compliant form and within reasonable timeframes.

Amend timing of response

In responding to our concerns on the limited time to undertake external review, the AER has set a date of May 2014 to submit assurance findings. Our concern is that the AER has added a layer of complexity and ambiguity by stating that we need to formally respond to the notice by 14 February 2014, including an officer's verification as to the accuracy of the data.

We would not be in a position to submit an officer's verification as to the truth and accuracy of the data, when there is a risk that the assurance opinion contradicts this view at a later stage. We also note that having two dates in the notice creates ambiguity on our obligations to respond to the notice.

A response date of 14 February 2014 is neither reasonable nor achievable and we could not be able to reasonably comply with the timeframe of 14 February 2014 on the basis that we are concurrently preparing our transitional and substantive proposals and our resources are limited at this point in time. We consider that the final date of response should be after the submission of our proposal, or at a minimum changed to 31 May 2014 to better enable us to provide a timely and complete response to the AER.

We would also like to formally note our risks of achieving a 31 May 2014 economic RIN submission date as a result of limited resources to undertake the assurance requirements, and our limited resources to undertake the task. Given the relatively small pool of technical auditors, it will be challenging (and potentially costly) for each DNSP to find a suitably qualified agency for that purpose.

Exclude data which we have identified as unreliable

In previous consultations with the AER we have noted that certain historical information has not been recorded in our systems in the form required by the AER. The AER's explanatory statement has acknowledged the concerns of DNSPs, but has still compelled us to provide a 'best estimate' even where we consider the information to be unreliable and misleading.

Our view of the NEL is that a DNSP is only obligated to <u>provide</u> information that is available, that is, data which has been historically collected in our systems. In cases, where that information cannot be provided in the form required by the AER from our systems, we would have a reasonable basis under section 28(5) of the NEL to not comply with that element of the notice. We have strong doubts that a RIN can require a business to <u>prepare</u> information by way of estimates that cannot be reasonably derived from information currently held in its systems.

¹ Please refer to the NSW Joint Submission of 17 September in response to the AER's request for comments on indicative benchmarking templates.







Our understanding of the term 'prepare' with respect to "preparing information" relates to a power the AER has to compel a DNSP to collect information in the form required by the AER for future periods (for example, by developing new systems) rather than to manipulate historical data in potentially inaccurate ways. We suggest that the AER should give more careful consideration to whether it has appropriately informed itself of the distinction under section 28D of the NEL between the ability of a RIN to require existing information to be provided and the ability to require information to be prepared, maintained and kept on a going forward basis.

In any case, we consider a 'best estimate' should only be provided when a DNSP is confident that the data is of a reasonable quality for the purpose required by the AER. We consider that the AER should not require the NSW DNSPs to provide information that we know to be unreliable. This is based on the following reasons:

- The RIN is a legal instrument with very harsh penalties for the provision of false and misleading information. In this context, it is inappropriate to provide information to the AER that we know to be misleading, and it would be a reasonable basis to not comply with the RIN where that information was likely to be false and misleading.
- The provision of inaccurate and unreliable estimates leads to concerns on how that information will be used as part of regulatory determinations. Indeed we consider that the use of such data would lead to regulatory error, and not meet the intended purpose of the Notice.
- Providing misleading data, and releasing it into the public domain is not in the interests of consumers or other stakeholders, and potentially undermines the DNSP-customer relationship at a time when we are significantly improving our engagement processes.

In Section 3 of this response, each NSW DNSP has provided detailed comments on the quality of information we could provide the AER in response to the data template. Our view is that information which has been coded as not applicable to relevant DNSP (black), 'impossible to provide' (red) or 'not confident in the reliability of data' (orange) should be excluded from the AER's final RIN. Alternatively, the draft RIN notice should note that a DNSP has a 'reasonable basis' to not provide information in cases where it can demonstrate that the data is unreliable or misleading.

More transparency on purpose of requiring data

In our submission on the AER's forecast expenditure assessment guidelines, we noted that we will be the first DNSPs to be subject to tools such as economic benchmarking. We concurred with the AER's view that this may place us in a position of disadvantage relative to other DNSPs.

Our reasoning was that the application of untried and untested models to our determinations will not provide sufficient opportunity for responding to data and statistical errors, and this increases the likelihood of regulatory error. In light of this procedural disadvantage, we are particularly concerned with two elements of the draft RIN:

- As noted above, the AER has required all DNSPs in Australia to submit estimates in cases where data cannot be accurately and reliably provided. In our view this would lead to a greater likelihood of regulatory error in the application of economic benchmarking models. For example, models such as TFP are based on the interaction of multi-variables. If a data series is inaccurate, it can significantly alter the findings of the model and lead to misleading conclusions. In this context, we consider it is even more important that the AER re-consider its approach to require DNSPs to provide data that is unreliable or misleading in nature.
- We are concerned that the AER is requesting information in the absence of transparently publishing models for economic benchmarking. For this reason, the context for certain information requirements, such as the value of pre-defined asset classes, is unclear in many cases. We suggest that the AER provide more details on how each tab of the data request will be applied. This will also help us understand the level of information we should be providing and potentially allow us to provide alternative data sources that better meets the AER's purpose. It would also assist the AER in prioritising critical information to reduce the burden and costs of complying with the notice.







Remove pro-forma statutory declaration

We consider that the pro-forma statutory declaration does not enable us to adequately identify information that is likely to be unreliable, inaccurate or misleading. We consider that each DNSP should have the ability to develop its own statutory declaration such that the officer can be in a position to truthfully verify the quality of information that has been provided.

We refer the AER to the submissions of the ENA on this issue. We consider that there are strong reasons to consider that if an officer is unable to make the verification in the statement, it will be a reasonable basis for a person served a relevant notice not to provide the information sought.

In addition, given that we have not been provided with the benchmarking models or have confidence in the backcast data, it is not possible for a Director to sign-off that the information can be relied upon by the AER 'to assess benchmark operating and capital expenditure that would be incurred by an efficient Distribution Network Service Provider relevant to building block determinations'. Indeed we are of the opposite view in that we consider that the use of the data as part of benchmarking would lead to regulatory error.

Assurance requirements

We note that the AER has required us to provide a 'negative' assurance on estimated data. Our concern is that an assurance opinion will still likely find shortcomings in our estimating processes due to the inability of our systems to provide historical information required by the AER. We note that the ENA has provided further comments on the assurance requirements and we support the issues and positions raised.

The AER has used the term 'audit report'. However we note that the type of assurance required on estimated information is called "ASAE 3000 Assurance engagements other than audits or reviews of historical financial information." We consider this term should be removed in the final RIN.

3. Detailed comments on each tab

In Table 1 on the following page, we provide detailed comments by the NSW DNSPs on each tab of the spreadsheet in Appendix A of the AER's draft notice. Our comments largely address our ability to provide historical data in the form required by the AER, and seek clarity on the purpose or definitions in the spreadsheet. At a high level we have three major concerns with the template:

- Reduced time period for historical information Our view is that the AER should only require the NSW DNSPs to provide data information for a period of 5 years. Data beyond this period related to a period when we were under a different regulatory regime, with alternative methods of deriving revenue and defining services, is likely to be of limited value. In any case, our review indicates that data quality for 2003-04 would be very poor as it relates to the last year of the 1999-2004 determination, or more than two regulatory periods ago, during a vastly different regulatory reporting framework that was in place prior to the AER assuming economic regulatory responsibilities for the NSW DNSPs for the 2009-14 determination.
- Remove additional information on standard control and alternative control services We understand that the information on standard control and alternative control services in Tabs 2, 3 and 4 of the spreadsheets will not be used for benchmarking purposes. We also understand that the AER has included the tabs as a means of reconciling the calculation of network services, rather than for the purpose of applying the data to benchmarking models. We consider that this should be the role of the auditor, rather than the AER, and that the removal of these columns would significantly reduce the costs and burden of responding to the RIN. In any case, we consider that the terms 'standard control services' and 'alternative control services' only came into effect at the time of our 2009-10 proposal, and this would lead to ambiguity for reporting purposes.
- Remove the column relating to a DNSP stating the public benefit of submitting confidential information – The requirement for a DNSP to complete this column is inconsistent with the statutory framework for disclosure of confidential information and the AER's draft guidelines







for confidentiality. As stated in the guidelines it should be optional for DNSPs to complete this column in submitting a confidentiality template to the AER.

To further assist the AER we have provided additional information for Ausgrid (Appendix A), Endeavour Energy (Appendix B) and Essential Energy (Appendix C) which provides a colour coding system to indicate our confidence level in providing the data cells in the AER's spreadsheets. This is based on an initial analysis of the information requirements. Figure 1 provides a breakdown of our colour coding system. Our view is that cells marked black, red or orange should not be required by the AER under the RIN.

Figure 1: Colour coding system to indicate confidence level

Colour Code	Availability of data from NSP's primary system	Additional work around/estimation techniques	Likelihood to pass an assurance	Management comfort that information are fit for purpose
Green	Available and verifiable	Simple – no additional work or minor work around (e.g. source data from a secondary system)	Likely	Comfortable
Yellow	Available but with some gaps	Moderate – estimate based on statistically significant sample size	Possible but uncertain	Comfortable, with disclaimers
Orange	Little or no data available	Complex – estimate based on formula, standard parameters or other source	Highly likely	Not comfortable
Red	Little or no data available	Impossible – rough estimate (e.g. rule of thumb from experience) or not possible	No	Not comfortable
Black	Not applicable to relevant NSP	Not applicable to relevant NSP	Not applicable to relevant NSP	Not applicable to relevant NSP







Table 1: NSW Detailed comments on each tab

RIN template	Issues with template
Tab 2 - Revenue	
2.4 Parameter and the last	We will also the ACD on this mostly. These
2.1 Revenue grouping by chargeable quantity	We refer to our previous comments provided to the AER on this matter. These groupings differ from what we have previously reported, and would likely require estimations in some cases. This is under the assumption that 'network services' is intended to cover distribution use of system (DUOS) only (that is, not the transmission charges we collect to pass onto the responsible TNSP in NSW or other non-DUOS charges).
	The definition of 'network services' and 'other revenue' in particular requires clarification. If 'network services' is intended to cover revenue from the shared use of our network, we are unsure of where transmission use of system (TUOS) revenue and contributions to jurisdictional schemes such as the Climate Change Fund should be reported. Based on the definition we do not believe any items would belong in the 'Revenue from other sources' category for the 'network services' table as this revenue does not relate to the shared use of our network. Aligning the definition of 'network services' to DUOS would simplify the table. A definition is required for 'fixed customers charges'.
	Furthermore, fee and quote-based services would also not belong in this 'other category'. We can report this revenue separately but do not believe it belongs under the 'network services' section based on the definition. Clarification of where this revenue should be reported is required.
	The definition suggests that Type 5-7 metering related revenue should be excluded from the 'network service' revenue section. We believe this is only appropriate from the commencement of the next regulatory control period when these metering services are reclassified as Alternate Control Services. We do not expect that we can allocate or estimate this data historically in an accurate or reliable manner and would not be comfortable providing this information if it may mislead the AER. We request that the AER clarify how we should estimate this data and the purpose of doing so. Although our recommendation would be to not split this 'revenue' prior to the reclassification of these services takes effect.
	We note that the AER have clarified that controlled load should be allocated to the "off-peak" category. Whilst we can allocate the data in this manner we suggest that controlled load be a standalone category. It is misleading to include this under the "off-peak" category as controlled load can be at any time rather than exclusively during off-peak hours.
	We also note that the information requested excludes the unregulated service categories. We are interested in understanding how the AER will account for regulatory changes over time and between jurisdictions.
	DNSP specific comments: As previously submitted, Endeavour Energy's earliest available data is from the







	2005/06 year for revenue purposes. We do not expect we can estimate revenue
	prior to this year in a reliable manner but will attempt to if required by the AER.
2.2 Revenue grouping by customer type or class	It will be unlikely that we can provide unmetered revenues as there was not a specific tariff for these customers over the requested period.
2.3 Revenue (penalties) allowed (deducted) through incentive schemes	We can provide this data.
3. Opex	
3.1 Opex categories	DNSP Specific comments
	The earliest available actual data for Endeavour Energy is from 2005/06 onwards, earlier years will be estimated. For the 2005/06-2009/10 years will we be reconciling the data to IPART and previous AER regulatory accounts/RINs. This may result in some accuracy issues.
3.2 Opex consistency	In the case of our CAM changes, it is our view that backcasting opex based on current/future CAMs is problematic and will be based on estimates. We understand the need to account for differences over time, but only immaterial changes have occurred in our CAMs. We therefore believe that 3.1.2 should not require completion unless material differences necessitate it.
	Rather, we are interested in understanding how the AER intend to account for regulatory changes and not just cost allocation changes over time and between jurisdictions. It is our view this may limit the comparability of data. As above, we suggest only material differences are accounted for.
	DNSP Specific comments For Endeavour Energy, actual data is only available from 2005/06 onwards. Also Endeavour cannot allocate opex to the following categories as we either have no basis on which to estimate this data or it does not relate to our business:
	Opex for amounts payable for easement levy or similar direct charges on DNSP
	Opex for high voltage customers
4. RAB	Opex for transmission connection point planning
4.1 Regulatory Asset Base Values	As noted in our comments in the 'Revenue' section, based on the definition of 'network services' we are unsure where 'meters' is to be reported on. Could the AER clarify if meters should be included in the network services or standard control services table or both?
	We would advise the AER to use existing RAB categories for this worksheet. As previously noted, the regulatory asset base is a regulatory concept. All of this







	information would therefore have to be estimated based on an allocation between the regulatory asset categories and those required by the template. This is a complex exercise which may not produce a reasonable proxy of an NSPs financial asset register. It is likely that allocations and interpretation of definitions will differ between NSPs limiting the comparability of this data. To further split data between standard and alternate control services we would
	rely on previous regulatory accounts and RINs. DNSP Specific comments
	The earliest available data for Endeavour Energy will be 2005/06 for this purpose. The worksheet assumes that we use a RAB for alternative control services which we have not done so since 2009. All of this information will be estimated.
4.2 RAB Roll forward to end of period	The explanatory statement accompanying the draft benchmarking RIN provided instruction as to how a roll forward operates. Whilst we understand how a roll forward model operates, we require clarification of how this can be achieved for the categories in the template.
	As noted above, this entire worksheet will be based on estimations. Opening values, depreciation, disposals and additions will need to be apportioned from the regulatory asset classes across the categories requested in this template. This will be a complex exercise that will vary between NSPs. It is our expectation that these estimations will not be reliable or accurate
4.3 Asset lives	As above, where a category does not directly map to an existing regulatory asset category an apportionment or estimation will be required. It is likely that all of this data will be estimated.
5. Operational data	
5.1 Energy delivery	We assume these figures will need to reconcile with our WAPC figures. DNSP Specific comments For Endeavour Energy, the earliest available data we can provide is from the 2005/06 year for energy delivered and they do not expect they can estimate revenue prior to this year in a reliable manner but will attempt to if required by the AER. Clarification of how this should be done would be desirable. Further, for "Energy – received from TNSP and other DNSPs by time of receipt" and "Energy – received into DNSP system from embedded generated by time of receipt" the earliest data available is 2006/07 and 2007/08 respectively.
5.2 Customer numbers	DNSP Specific comments For Endeavour Energy, the earliest available data that can be provided is from 2005/06. We will attempt to allocated customer numbers by location on the network. This data is not available or useful for BAU purposes or planning. Any estimation is unlikely to be reliable or fit for benchmarking purposes.







5.3 System demand	Data can be estimated or provided except for 'coincident weather adjusted peak demand' forecast
6. Physical assets	POR SERVICE MARKET SERVICE STATES
6.1 Network Capacities Variables	DNSP Specific comments For Endeavour, this information is available but with some gaps. Standard capacity for various conductors within each underground and overhead voltage class are available but we may not have km for each conductor type. This will have to be a high level estimate which may be inaccurate. This will become more complex and unreliable for historical data. In particular, for 11kV we would need to make significant assumptions that are unlikely to be auditable or accurate. For Low Voltage we have previously advised the AER that we do not have data on our LV
6.2 Transformer Capacities Variables	network and cannot provide data for lines operating at this voltage. High Voltage Customer data over history is not available. It is our view that it is not appropriate for us to report on the capacity owned by organisations external to us. We can calculate utility transformer capacities for each class in the table. A definition is required for 'cold spare capacity'.
6.3 Public lighting	Any forecasts will be estimated and likely to be unreliable. DNSP Specific comments For Endeavour Energy, the earliest available data is 2005/06, after which actual data can be provided. Although we assume "public lighting poles" includes both wood poles (dedicated and network poles) and steel columns.
7. Quality of services	
7.1 Reliability	We can provide this data from previously published reports. However, the definition of MED requires clarification. Further, changes in this definition over time may result in estimation and the reduced accuracy of the data.
7.2 Energy not supplied	This information is not currently tracked and estimates would be required based on a range of assumptions and reliability data. We expect that we will not be able to provide this data historically as any estimate is likely to be false and misleading.
7.3 System losses	DNSP Specific comments For Endeavour Energy, the earliest available data we can provide is from the 2007/08 year. We expect that we will be able to estimate years prior to this.
7.4 Capacity utilisation	We can estimate this data.
8. Operating environment	
8.1 Density factors	We presume this table will involve a series of calculations utilising base data
8.2 Terrain factors	Outside of identifying bushfire zones and rural areas we cannot provide the data requested. Bushfire areas are not legislated but change year on year based on advice received from councils. It would be a complex exercise to estimate this data







	historically and most likely unreliable.	
	We acknowledge that a wide range of factors influence vegetation management costs but there is no benefit in tracking this level of data. We suggest that vegetation management is excluded from any opex productivity measures and if necessary higher level, aggregate measures are used where an NSP is insourcing its vegetation management activities.	
	DNSP Specific comments Ausgrid, Essential and Endeavour outsource their vegetation management on a commercial basis. It would therefore be inappropriate and unlikely that we could ascertain this granular level of detail from our contractors. Provided these agreements are commercial, arm's length transactions we do not understand the need for the AER to gather this data or assess the efficiency of these 3 rd parties.	
8.3 Service area factors	We can provide this data	
8.4 Weather stations	We can provide this data	