31 March 2023

Ausgrid

Dr Kris Funston Australian Energy Regulator GPO Box 3131 Canberra ACT 2601

Dear Dr Funston

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We welcome the opportunity to respond to the Australian Energy Regulator's (**AER**) Preliminary Decision on its Regulatory Information Order (**RIO**).

We support the aims of the AER's Network Information Requirements Review. It provides a timely opportunity to drive improvements in the quality of the electricity network data that the AER collects and shares. Our submission makes the following key recommendations:

- The 'start' date for reporting against the RIO should be delayed to FY25;
- The AER should consider undertaking an industry wide consultation on key inputs used for benchmarking, with a focus on how circuit and transformer capacity is reported;
- To promote customer engagement, the AER should consider publishing a plain English guidance note that explains how RIO data is used for benchmarking purposes;
- Unit cost benchmarking under the AER's replacement expenditure model (Repex Model)
  can be improved if RIO data on switches, fuses and circuit breaking is more stratified; and
- To minimise duplication, requests for information relating to export services should be streamlined so they come from a single point of contact within the AER, rather than multiple teams.

Our submission comprises:

- Appendix A: a summary of our submission;
- Appendix B: case study on reporting differences in key benchmarking inputs;
- Appendix C: case study on the opportunities to improve data stratification; and
- Appendix D: our 'stakeholder comments' in the 9 preliminary RIO templates.

We look forward to continued engagement with the AER on its Network Information

Requirements Review. If you would like to discuss any aspect of our submission please contact

Regulatory Strategy Manager, via

Regulatory Strategy Manager, via or on

Regards,

Alex McPherson
Head of Regulation

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•	Support AER's position
	Ausgrid recommendation

## **Appendix A – Summary of our submission**

Issue	Position	Ausgrid's submission				
Regulatory information instrument						
Start date	•	We are concerned about the AER's planned start date for reporting information in the new RIO templates. If the AER issues the RIO in September 2023, then we do not consider it workable for reporting to commence for the FY24 regulatory year. It would increase the risk of error and may lead to electricity distributors having to report a broader range of data as 'estimated' in FY24, potentially leading to issues in analysing information over a timeseries if the same data is reported on a different estimated basis in later years or reported as 'actual' from FY25 onwards.				
		Should the AER issue its RIO partway through FY24 (as planned), then the earliest that reporting against the new templates could commence would be FY25. This later start date would benefit the AER and customers by allowing electricity distributors to set up the systems to accurately report against the new requirements.				
Four-year review cycle	•	We support the AER's proposed four-year review cycle of RIOs.				
Network specific reporting requirements	•	There are network specific reporting requirements which the AER will have to consider. For example, the metrics that apply under the Customer Service Incentive Scheme (CSIS) and Export Services Incentive Scheme (ESIS) will differ between electricity distributors. To accommodate this, we recommend that the RIO includes CSIS and ESIS template that can be adjusted by electricity distributors to align to their network specific metrics. This level of flexibility currently exists for the reporting of bespoke ancillary network service (ANS) activities and TasNetworks' unique feeder categories. Our strong preference is for similar flexibility to be developed for the CSIS and ESIS as opposed to issuit standalone Regulatory Information Notices (RINs), as the AER currently plans.				
Data requirements	Data requirements					
Clarity of reporting instructions for key	•	The proposed RIO instructions for key benchmarking inputs could be more prescriptive so that electricity distributors report this information on a common basis. Presently, electricity distributors' performance under the AER's capital				

inputs that impact benchmarking		multilateral partial factor productivity (MPFP) and multilateral total factor productivity (MTFP) benchmarking metrics is influenced by differences in reporting, as opposed to their efficiency.		
		We elaborate on our position via a select number of case studies in <b>Appendix B</b> . These case studies are indicative of a broader issue impacting the AER's benchmarking results that, in our view, requires an industry wide consultation process.		
Detailed use cases for benchmarking	•	The AER's Explanatory Statement accompanying its preliminary RIO notes that there is a need for detailed use cases to be developed by the AER. We agree with this position and recommend that the AER publishes a Guidance Note outlining how it uses the data from RIN/RIO reporting to inform its benchmarking analysis.		
		The AER has published similar documents in the past on complex subject matter, such as its 2020 Guidance Note entitled <i>Repex model outline for electricity distribution determinations</i> . Our recommendation is for a similar Guidance Note to be published which clearly outlines how the AER uses RIN/RIO information to inform its econometric benchmarking analysis and index models (MTFP and MPFP). From a customer's perspective, this will promote greater transparency in how the AER uses the information it collects, to inform expenditure determinations.		
Stratification of repex model data	•	Our comments in the Operational Inputs (data category 02) template draw attention to issues with the level of data stratification of repex model inputs. Appendix C to this submission provides a case study on how an insufficient of stratification in RIN/RIO data used for the repex model can present issues.		
Exemptions to assurance requirements	•	We support the AER's exemptions to audit or review requirements as outlined in clause 6.4 of the <i>Preliminary Annu Information Order</i> . These include the exemptions given to the workbooks outlined in clause 6.4.4.		
Clarity on how calculations will be made in AER performance reports e.g. capacity utilisation	•	We note that 'calculations' have been removed from the reporting templates. One of these calculations is the scope for each electricity distributors to calculate their 'capacity utilisation' by the removal of DQS04 in the current Economic Benchmarking RIN. We support the removal of 'calculations' from annual reporting but recommend that the AER provides clear guidance on how these calculations will be reported in material such as the AER's <i>Network Performance Report</i> .		
Export services				

We have received multiple information requests about export services from different teams within the AER (see table below).

The receipt of several information requests from different teams within the AER duplicates effort and risks the development of multiple, competing datasets on export services. Our recommendation is that all future information requests on export services are streamlined so that they come exclusively from the AER's RIN/RIO team.

Streamlining of export services data requests



Timing	Team	Request/response	
February 2022	Capex	Scoping request for available data provided and Ausgrid provided caveats about the data limitations.	
May 2022	Capex	Ausgrid export services data provided covering FY20 to FY22.	
October 2022	Capex	Ausgrid export services data provided covering FY20 to FY22.	
November 2022	Network Performance Report	Export services 'straw man' information request template published for consultation covering FY20 to FY22	
December 2022	RINs/RIOs	AER published RIO templates for consultation, which include data requests on export services.	
March 2023	Network Performance Report	A new information request template for export services will be issued next week that apparently will differ to the November 2022 strawman and the RIC templates	

### **Appendix B: Benchmarking inputs – Case Studies**

We recommend that the AER undertakes an industry-wide review to better understand how each electricity distributor in the NEM is providing information on circuit and zone substation transformer capacity. These are inputs that impact the AER's capital MPFP and MTFP benchmarking metrics.

After an industry wide consultation, the AER may then wish to consider rewording clause 3.4.1 of the RIO instructions to provide greater specificity in how 'typical' or 'weighted average' circuit capacities are calculated. This could include, for example, a standardised 'de-rating' factor so that the information each electricity distributor is providing for benchmarking purposes is reported on a common basis. Greater specificity in how zone substation transformer capacity is reported should also be explored (clause 3.4.9 of the RIO instructions).

Data input	Issue	Materiality
Circuit capacity Cl. 3.4.1 of the proposed RIO Instructions	Differences in how electricity distributors report circuit capacity are likely to be influencing benchmarking results. Note that under the AER's capital MPFP and MTFP benchmarking an electricity distributor will appear <a href="mailto:more efficient">more efficient</a> if it reports <a href="mailto:lower circuit capacity">lower circuit capacity</a> .  Differences in reporting are possible under the current RIN and proposed RIO instructions due to the scope offered to interpret key terms. In particular, clause 3.4.1 of these instructions states that an 'electricity distributor must report estimated <a href="mailto:typical">typical</a> or <a href="mailto:weighted average">weighted average</a> capacities', without any guidance on how 'typical' or 'weighted average' capacities should be calculated.  We are aware that some electricity distributors are applying different assumptions when reporting circuit capacity, such as the inclusion of derating factors. Endeavour Energy describes how its derates its circuit capacity in its basis of preparation, stating: '11kV and 22kV underground MVA circuit capacity is based on actual data and ratings, with a derating factor of 0.871 applied for these conductors in line with common conductor configurations and common de-rating factors as indicated in company standard MDI0011'.1	We estimate that a 10% reduction in our overhead circuit capacity (due to a reporting change or application of different assumptions) would improve our capital MPFP benchmarking performance by about 2%.  Applying a 10% reduction to the circuit capacity of overhead subtransmission, underground distribution, and underground sub-transmission would lead to additional improvements in our capital MPFP scores of between 0.5% and 2.5%.

<sup>&</sup>lt;sup>1</sup> Endeavour Energy, Economic Benchmarking: Basis of Preparation, 30 October 2020, p. 45 (link here)

# Zone substation transformer capacity

Cl. 3.4.9 of the proposed RIO Instructions

Transformer capacity is an input into capital MPFP and MTFP, with a lower reported capacity leading to a better benchmarking performance.

Clause 3.4.9 of the proposed RIO instructions states that '[f]or zone substations where the thermal capacity of exit feeders is a constraint, the electricity distributor must report thermal capacity of exit feeders instead of transformer capacity'. This requirement provides scope for interpretation which may lead to electricity distributors reporting lower transformer capacity (better benchmarking performance) based on differences in reporting methods.

There is scope, for example, for electricity distributors to apply different de-rating factors. Endeavour Energy, who provides a detailed basis of preparation, outlines its approach as follows: 'Due to distribution feeder cable proximities within substations, a derating factor of 0.772 was applied when calculating feeder exit capacity constraints. The derating factor was chosen as the average derating for three or four cables in parallel'.<sup>2</sup> In comparison, Ausgrid does not presently apply any de-rating factor for the thermal capacity of exit feeders, meaning that our zone substation transformer capacity is higher (poorer benchmarking performance).

We estimate that a 10% reduction in our transformer capacity (due to a reporting change or application of different assumptions) could improve our capital MPFP benchmarking score by upwards of 4.5%.

<sup>&</sup>lt;sup>2</sup> Endeavour Energy, *Economic Benchmarking: Basis of Preparation*, 30 October 2021, p. 44 (link here)

### Appendix C – Data stratification for repex model

We have concerns with the level of stratification applied to RIN/RIO data collected for the AER's replacement expenditure model (**Repex Model**). The case studies below provide examples of how this can impact Repex Model outcomes. Our aim in putting together these case studies is to provide greater context to our 'stakeholder comments' in *Data Category 02: Operational Outputs* which recommend changes to how the AER stratifies Repex Model data.

### Case study: <=11 kV switches

Ausgrid has both 'ground' and 'overhead' switches that are currently reported within a single row (<=11kV switches) in the Category Analysis RIN. Under the preliminary RIO, this is set to continue in *Data Category 02: Operational Outputs*.

As ground switches are more expensive, an electricity distributor (like Ausgrid) with a greater mix of them will look inefficient under a weighted average approach to calculating our unit costs. This can be potentially misleading given that asset type decisions can often be driven by network characteristics or other exogenous factors. In the case of <=11kV switches, higher customer densities can constrain the use of overhead switches, particularly in CBD and urban terrains where network undergrounding means that ground switches can only be used.

We approached Nuttall Consulting about the results of the Repex Model prior to lodging our 2019-24 regulatory proposal in January 2019. In relation to <=11kV switches, Nuttall Consulting stated:

I have concerns similar to Ausgrid that how a DNSP compares to the median is likely to be as much a factor of how its switch types compare as to its relative efficiencies. In this regard, I consider that it is likely that DNSPs such as Ausgrid with much higher portions of underground and chamber substations, are likely to benchmark poorly.<sup>3</sup>

#### Case study: <=11 kV fuses

The current stratification of <=11kV fuses has the same issues as switches. The current RIN and proposed RIO templates consider this asset category to capture a broad range of assets types, covering lower cost overhead fuses and higher cost indoor units.

Nuttall Consulting has previously commented on this issue:

For similar reasons to those discussed above on 11kV switches, I agree with Ausgrid that this asset category, as described, may not be treated appropriately through the AER's methodology and further consideration should be given to the unit costs in Ausgrid's circumstances.<sup>4</sup>

#### Recommendation

We have made recommendations to improve the stratification of data collected via the RIO for the AER's Repex Model. These recommendations are outlined in our 'stakeholder comments' to *Data Category 02: Operational Outputs* in relation to the following asset classes: (1) <=11kV switches (2) <=11kV fuses (3) <=11kV circuit breakers.

Nuttall Consulting, Supplementary Repex Review 2019, p.9 (link here)

<sup>4</sup> Nuttall Consulting, Supplementary Repex Review 2019, p.10 (link here)