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Dr Kris Funston
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Via electronic lodgement: AERinquiry@aer.gov.au

Dear Kris

RE: Draft DER integration expenditure guidance note

We welcome the opportunity to make this submission on the AER's draft Distributed Energy Resources (DER) integration expenditure guidance note.¹ We welcome greater guidance on how the AER will approach its assessment of DER expenditure, noting that this type of expenditure will increasingly become business as usual. The provision of additional guidance should facilitate greater consistency across the sector which will, in turn, increase the ability of our customers (and any other interested parties) to engage on these issues.

We, do, however, recognise that several aspects of the AER's final note may need to change following the release of the Australian Energy Market Commission's (AEMC) final determination for electricity and retail rules to integrate DER.

As penetration levels increase and customer expectations regarding DER evolve, Distribution Network Service Providers (DNSPs) will increasingly propose expenditure aimed at increasing DER hosting capacity and supporting a broadening range of DER services. To ensure this is done efficiently, having price signals that are more aligned with customers' expectations regarding DER (recognising these are often set by government policy) will be important.

While we broadly welcome the AER's draft guidance, and have responded to the specific questions raised in the draft guidance note in the attached Appendix A, we note that:

- Independent and reputable data can come from multiple sources and the guidance note should not unduly preclude the use of alternative data.
- The AER should aim for a more flexible and less prescriptive approach, one that can evolve as more information becomes available.
- The total electricity system is the appropriate system boundary for considering DER costs and benefits but there are several implementation issues that will require further consideration.

¹ This draft guidance note follows the publication of the Value of DER methodology study undertaken by the CSIRO and CutlerMerz, which we responded to.

We look forward to working with the AER on this issue given its importance to the consumer-driven transition that is currently underway. If you have any questions regarding this submission, please contact Ian McNicol by email on [REDACTED]

Yours sincerely



Charlotte Eddy
Manager Economic Regulation
AusNet

Question 1: Do you agree with the proposed guidance relating to how DNSPs should prepare a DER integration strategy?

We agree that any Distribution Energy Resources (DER) expenditure should align with a broader and longer term DER integration strategy that is proposed as part of the (5 year) regulatory process. We also agree that including with that strategy information of the type outlined below is reasonable:

- DER penetration forecasts for the electricity distribution network over the medium to long term (at least 10 years) and the future implications of these forecasts on the network.
- A breakdown of the various elements of DER integration expenditure, in terms of augmentation, information and communications technology (ICT) capital and operating expenditure.
- Identification of any related expenditures proposed under the Demand Management Innovation Allowance.
- Identification of any jurisdictional obligations outside the National Electricity Rules (NER) and their impact on expenditure forecasts (for example, the impact of a mandated export level for all DER customers).
- Inclusion of details of a DNSP's plans (if any) to implement dynamic operating envelopes.
- Evidence of how tariff reform will be used to accommodate the forecasts of DER made above and reduce the need for network investment.

We can also see value in splitting out DER expenditure in reset Regulatory Information Notices (RINs) over the medium term (recognising that DER expenditure will increasingly become business as usual).

However, we note that Government policy on DER may change rapidly over a ten-year period, as will the level of innovation. Actual DER outcomes may, therefore, differ from any forecasts that are outlined in a DER integration strategy.

Question 2: Should the format of the business case be prescriptive? If so, how?

We agree with the AER that the format of a business case should not be prescriptive. Retaining flexibility and the ability to innovate is important.

A business case should contain sufficient information to allow an informed decision to be made on the reasonableness of a proposal. As such, we agree that, at minimum, information on the base case scenario and the benefits derived from the project should be provided in a business case. However, we are concerned with the AER's proposal regarding how a base case scenario should be developed. See our response to Question 4 (below) for more information.

Question 3: Are there particular input assumptions that should be consistent for all DNSPs?

We agree with the general principle that input assumptions should be credible. However, networks should be provided the option of selecting inputs from where they consider best. While the AER's proposal does allow a DNSP to depart from its approved list of data sources, we encourage this to be approached in a flexible way during the assessment process.

With respect to the period over which net present value (NPV) analysis is undertaken, we note that 20 years is broadly consistent with the life of some solar assets. However, there are other assets, namely poles, conductors and transformers that have a much longer nominal life (around 45 years) that will also need to be reflected in any NPV analysis for DER proposals. We would, therefore, be keen to better understand how the AER intends to reconcile these differences prior to the finalisation of its approach.

Question 4: In what ways could DNSPs justify their assumed export limit in the base case scenario?

The AER does not agree with DNSP's having a base case where export limits are reduced to a low or zero level rather than allow tripping to occur. It considers that its approach (which would allow tripping to occur) is compatible with the RIT-D base case guidance.

We disagree with the AER's position. Our base case, which involves reducing export limits to a low or zero level rather than allow tripping to occur (which results in a negative customer experience), is done to ensure consistency with the RIT-D base case guidance. Tripping is not a technically acceptable option nor is it credible due to the Victorian Electricity Distribution Code. A base case involving tripping would require us to accept:

- operation at a higher network voltage for all customers not only solar customers.
- an increase in voltage bandwidth, which will increase costs to manage low voltage issues; and
- more customer complaints, which would not be consistent with our customers' expectations.

We would appreciate the AER explaining in more detail its position on this matter given the differing views.

Question 5: Are there particular examples where DER adoption forecasts may vary between the base case scenario and the investment case?

We consider that DER adoption forecasts should remain consistent between the base case scenario and the investment case.

Question 6: Do you agree with the proposed criteria for undertaking hosting capacity assessments?

While we broadly agree with each of the AER's proposed criteria, DER is a fast-evolving area, DNSPs have different starting points, and a significant number of trials are currently underway. It may, therefore, be premature for the AER to limit its criteria to the three that it has proposed. We see value in the AER developing an approach that would permit greater flexibility, including allowing additional criteria to be added by a DNSP (or other stakeholder) provided it can explain its rationale.

More detailed comments on each of the proposed criteria are outlined below:

- **DER penetration.** We agree with the overarching principle that the level of hosting capacity analysis undertaken by DNSPs should be commensurate to current and forecast levels of DER penetration on the distribution network, as well as the amount of hosting capacity to be unlocked by the proposed investment.
- **Investment in network visibility.** We agree that DNSPs that have made investments to better understand the nature of their low voltage networks (in terms of voltage and thermal constraints) should demonstrate an understanding of DER hosting capacity. However, we also note that knowledge, priorities and understanding evolves over time. With respect to demonstrating value for money, we agree that a business case with credible options is an appropriate mechanism by which that can be demonstrated.
- **Access to AMI data.** We agree that using AMI data in the assessment of DER hosting capacity proposals is reasonable.

Question 7: Are there other examples of approaches that DNSPs could adopt to assess network hosting capacity?

See our response to Question 6 (above).

Question 8: Do you agree that the total electricity system is the appropriate system boundary for considering DER costs and benefits?

We agree that the total electricity system is the appropriate system boundary for considering DER costs and benefits.

However, in practice, there are likely to be material issues with attempting to appropriately quantify the costs of changes in DER investment. For example, it will be difficult to estimate and appropriately attribute a share of costs and benefits to the provision of DER services when the decisions to invest in DER are driven by a range of factors other than providing DER services. We also note that customers may invest in DER for reasons other than lowering their electricity costs. This could include the value that they place on consuming self-generated renewable electricity.

Recognising these challenges, we see merit in the AER establishing a framework that recognises that many of the drivers of DER investment are not related to the capacity of the network.

Question 9: Do you agree that the methodology used to quantify wholesale market benefits should balance shorthand and longhand approaches?

Both the short-hand and longhand approaches to quantifying wholesale market benefits are broadly sensible. However, as recognised by the AER, there are shortcomings with both. We, therefore, welcome the AER's proposal to develop an approach that strikes an appropriate balance between the two approaches.

While we reserve judgement on the appropriateness of any model that is developed, we welcome the AER exploring options to:

- improve and develop shorthand methods so that the risks of overstating benefits are mitigated; or
- simplify longhand methods, by replicating the workings of electricity market models using simple and readily available software (to the extent this is possible); and
- ensure jurisdictional differences and locational pricing are appropriately reflect in its modelling.

Question 10: Do you know of other examples of electricity market models or analysis tools that could be used by DNSPs to quantify wholesale market benefits?

There remains a sound rationale for the use of the Victorian feed-in-tariff (FiT) to quantify wholesale market benefits in Victoria, not least that it is calculated using essentially the same methodology as the shorthand Running Cost Method that was set out in the recent VaDER Methodology Study Consultation Draft Report.

We also note that:

- There is no 'gold standard' or widely accepted value of DER. While we appreciate the AER is looking to narrow the field of acceptable approaches, its disregard for the FiT at this stage, where there are known limitations to the approaches it is still considering, is premature.
- The FiT is an independently-derived metric of value that is re-assessed regularly.
- While the FiT may have some shortcomings, it provides an effective price signal that allows efficient decisions to be made.
- Frontier Economics concluded that the FiT represents a reasonable proxy for the value of solar export. As such, it can deliver outcomes that will meet our customers' evolving needs and expectations.

Importantly, unlike some alternative approaches, the FiT is relatively transparent and allows interested parties to engage and challenge its underlying assumptions.

We look forward to seeing how the AER ensures customers and businesses have sufficient transparency in the approach that is ultimately applied. See our response to Question 11 (below) for more information.

Question 11: Do you have views on the AER's initial analysis and whether this approach could be applied in practice?

We agree that it is not appropriate to prescribe a particular model or methodology prior to the consultation on the Customer Export Curtailment Value (CECV) methodology. We, therefore, look forward to the consultation that the AER will undertake on this issue. However, we also note the important role that engagement should play in determining the level of DER expenditure that a DNSP should undertake (as reflected in the DER proposal that formed part of our recent EDPR submission). We trust that both these issues will be appropriately considered.

We also share the AER's concerns around the transparency and, in particular, the appropriateness of the inputs into the electricity market models that are being considered. If those models are used, there is a risk that they will limit the scope for:

- customers to engage with this element of a DER proposal, even where a generic description of both what the model looks to do and how that is done; and
- the AER to assess the reasonableness of the approach that has been used within that model, given that information is often proprietary.

For our views on the FiT, please refer to Question 10 (above).

Question 12: Do you agree with the proposed principles for quantifying wholesale market benefits? Are there other principles that we should consider?

We agree that transparency and economic/technical rationale should form the basis of the final approach to quantifying wholesale market benefits under the CECV methodology.

Question 13: Do you agree with the proposed methods for quantifying network benefits?

Question 14: Do you agree with the proposed methods for quantifying environmental benefits?

The methods proposed by the AER appear reasonable (for both Question 13 and 14).

Question 15: Do you agree with the proposed method for quantifying changes in DER investment?

Customers will consider a range of issues before investing in DER but are unlikely to consider the level of investment that a DNSP is considering when making their decision. This means that for many network investments, DER investment will be unchanged.

While the AER suggests that quantifying changes in DER investment will only be required where DER adoption forecasts vary between the base case scenario and the investment case, unless the AER can find a mechanism to isolate the factors that drive DER investment, there may be limited value in pursuing this element of its approach.