AGL Energy Limited
ABN: 74 115 061 375
Level 24, 200 George St
Sydney NSW 2000
Locked Bag 1837
St Leonards NSW 2065
t: 02 9921 2999
f: 02 9921 2552
agl.com.au

Dr Kris Funston

Executive General Manager, Network Regulation

Australian Energy Regulator

Submitted by email to: AERinquiry@aer.gov.au

2 September 2021

Dear Kris

AER Draft DER Integration expenditure guidance note, July 2021

AGL Energy (**AGL**) welcomes the opportunity to respond to the Australian Energy Regulator's (**AER**) Draft DER integration expenditure guidance note (**Guidance note**).

Strategic direction

While the Guidance note is an important starting point in aligning network businesses' approach to distributed energy resources (**DER**) integration expenditure, we consider that the AER's network expenditure assessment framework should also be revised directly though the Expenditure Forecast Assessment Guideline (**the EFA Guideline**).

As the energy industry's transition accelerates with the uptake in DER and the scaling of business models such as orchestration, it will be critical that the AER's network expenditure assessment framework supports the policy direction articulated by the Energy Security Board (**ESB**) in its Post-2025 Market Design, towards encouraging and enabling consumers to be rewarded for their flexible demand and generation.[1]

Unlocking network value for consumers

To minimize the cost of this transition whilst maximizing value to customers, distribution networks will need to invest in DER integration strategies that support the establishment of these new value streams for consumers for DER services, including the competitive procurement of network services.

As we observed in our formal submission to the ESB's Post 2025 Market Design Options Paper[2], there is strong potential for whole-of-system cost savings to be realised through the integration of DER and the associated value streams that can be provided by the orchestration of DER assets. By establishing effective competitive arrangements for the procurement of system security and network services, DER has potential to substitute expensive network build, deliver value to owners and broader consumers, and provide alternative ways of meeting system security requirements.

[1] See Energy Security Board, Post-2025 Market Design Final advice to Energy Ministers Part A (27 July 2021), Available at https://esb-post2025-market-design.aemc.gov.au/32572/1629944958-post-2025-market-design-final-advice-to-energy-ministers-part-a.pdf.
[2] See further AGL submission to the Energy Security Board's Post 2025 Market Design Options Paper (10 June 2021), Available at https://thehub.agl.com.au/articles/2021/06/agls-submission-on-the-energy-security-boards-post-2025-market-design-options-paper.

Over the longer term, consumers and communities will increasingly expect greater autonomy, with different options for participation and aggregation in the market, and network connection. Putting in place the right arrangements on how distribution networks support and enable consumers to access these new value streams now will enable existing and new market participants to provide innovative products and services to consumers while maintaining system reliability and security.

Complementing other DER market reforms

Having regard to this policy context, we consider a more holistic approach is required to ensure a coherent framework that effectively addresses DER integration considerations alongside traditional energy supply expenditure, given the interdependency between distributed energy and more transitional energy supply arrangements. This is particularly important given the broad range of complementary distribution network reforms currently underway, including network tariffs innovation and the introduction of two-way pricing, two-way markets, dynamic operating envelopes and connection agreements as well as technical standards, network interface and data sharing protocols.

Given the broad range of potential consumer impacts associated with network businesses' varying approaches to DER integration, we consider greater regulatory oversight is required in the form of an AER Guideline to facilitate more consistent outcomes.

As we previously observed in response to the AER's Consultation Paper[3], AGL does not consider that the EFA Guideline as it stands is fit for purpose to assess DER integration expenditure. The latest revision was in November 2013 and the EFA Guideline did not contemplate DER integration. Our view is also consistent with the Australian Energy Market Commission's (**AEMC**) Rule determination on access, pricing and incentive arrangements for DER,[4] that requires the AER to update its Expenditure Forecast Assessment Guidelines.

While we appreciate the AER's view that the Guidance note could support subsequent reform the EFA Guideline in the future, we would recommend revising the Guideline as a matter of priority so that it is capable of guiding the next regulatory reset period for distribution networks' expenditure proposals in order to mitigate the risk of inconsistent approaches and adverse impacts to consumers.

We have carefully considered the questions raised in the AER's Explanatory Statement and elaborate our views in the **Attachment**. Should you have any questions in relation to this submission, please contact Kurt Winter, Regulatory Strategy Manager, on [redacted] or [redacted].

Yours sincerely

[redacted]

Elizabeth Molyneux

GM Policy and Markets Regulation

[3] See further, Submission to AER on assessing distributed energy integration expenditure (20 January 2020), Available at https://thehub.agl.com.au/articles/2020/01/submission-to-aer-on-assessing-distributed-energy-integration-expenditure.
[4] See AEMC, Access, pricing and incentive arrangements for distributed energy resources, Rule determination (12 August 2021), Available at https://www.aemc.gov.au/sites/default/files/2021-08/Final%20determination%20-%20Access%2C%20pricing%20and%20incentive%20arrangements%20for%20DER.pdf.

ATTACHMENT

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

AGL supports the proposed guidance on networks' DER integration strategies, including transparency with respect to expenditure items, input assumptions based on transparent, reputable, and independent sources, and the inclusion of options analysis.

To promote greater comparability between network expenditure proposals and mitigate the risk of gaming, we would recommend the development of a consistent base case scenario for all networks. Initially, this could be developed by reference to the basic level service offering for all exporting customers, contemplated in the AEMC's Rule determination on access, pricing and incentive arrangements for DER.[5]

In terms of input assumptions, reference should also be made to localised information that may prove more informative than the transmission sources identified. The Distribution Annual Planning Report Template may provide a useful starting point on the kinds of information that should be drawn upon. As well as supporting the AER's assessment of appropriate export charges, these input assumptions will also support the broader market in developing cost effective non-network alternative solutions through the RIT-D framework.

In terms of forecasting sources, as well as drawing upon sources such as publications of the Australian Energy Market Operator (**AEMO**), the AER should also draw upon:

- Alternative authoritative forecasts including industry publications; and
- Stated policy ambitions on market growth from Commonwealth and State governments.

2. **Should the format of the business case be prescriptive? If so, how?**

While we support a principles-based approach to the business case that can adapt to the variable fundamental of each distribution networks (including topology, customer segmentation and maturity of DER penetration), there is also a need to develop a consistent base case scenario for all networks to promote greater comparability and mitigate the risk of gaming.

AGL also considers that any non-distribution network benefits (eg wholesale market or customer value) be based on standard values appropriate for that network, so that these benefits are applied from a consistent base. We also consider this is needed to improve consistency for customers in different geographical locations.

3. **Are there particular input assumptions that should be consistent for all DNSPs?**

As noted above, reference should also be made to localised information that may prove more informative than the transmission sources identified.

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

AGL agrees with the recommendation put forward by CSIRO/CutlerMerz that the base case should represent a 'BAU' scenario and that the use of static export limits as the base case scenario should demonstrate that the particular export limit is not arbitrary.

[5] See above n 4.

Having regard to the need to develop consistency between networks and the interim obligation to provide a basic level service offering for all exporting customers, the AER should also draw guidance from jurisdictional policymakers and undertake broader industry consultation on the appropriate settings underpinning the base case scenario.

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

We consider that network DER integration strategies that seek to increase hosting capacity may entail different DER adoption forecasts to those applied in a base case scenario. However, this will depend on a range of other factors including how the distribution network intends to allocate capacity between existing and new customer connections.

We agree with the AER's proposed guidance that where DER adoption forecasts do not match those in the investment case, networks should provide evidence of analysis to support their assumptions. This analysis should detail whether the assumed difference in DER adoption forecasts is due to customers purchasing DER, existing DER owners being provided additional capacity to export electricity, or both. This level of detail will enable great comparability between network expenditure proposals.

6. **Do you agree with the proposed criteria for undertaking hosting capacity assessments?**

We support the AER proposed criteria for undertaking hosting capacity assessments, including alignment with current and forecasted level of DER penetration on the network, correlation with investment in network visibility, and that networks with access to AMI data should make use of this data in their assessment.

Nevertheless, we consider that further work is required to develop the proposed VaDER methodology to ensure it supports efficient network investment decisions while also aligning with the policy direction towards enabling consumers to be rewarded for their flexible demand and generation and supporting a competitive market for DER services. In this regard, the VaDER methodology should consider maximising benefits rather than focusing on cost comparisons between base case and credible option of the increasing hosting capacity.

In assessing whether distribution networks have demonstrated that net customer benefits under the investment case (to increase hosting capacity) exceed those under the base case under the proposed VaDER methodology, it will be important to consider:

- Overall system benefits and costs, including anticipated wholesale market benefits
- Customer benefits and costs (particularly during peak events).

We anticipate these values to be highly temporal, varying at different times of day depending on the available capacity.

While it will be important for network investments for support the market optimisation of these value streams, distribution networks should not be empowered through the VaDER methodology with *de facto* market powers to determine how different approaches to optimisation should be integrated. As we stated in our previous submission to the Consultation Paper,[6] such an approach risks creating detriment to DER asset

[6] See above n 3.

owners and to non-DER asset owners by empowering the network to optimise the value of DER assets for the benefit of networks alone (and without regard to the impact to customer and wholesale market value).

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

To expand the potential for the market to provide non-network solutions at the LV network level, we would encourage consideration of ways to mainstream the provision of relevant constraint and value information to support competitive market participation. We discussed the kinds of relevant information that should be published in our recent submission to the AER's Ring-fencing Guideline Review.[7]

We would also recommend appropriate regulatory oversight be established to validate the accuracy of networks' published estimated DER hosting capacity through data sampling and regulated reporting obligations.

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

AGL supports the recommendation made by CSIRO/CutlerMerz that the total electricity system approach is the most appropriate system boundary for considering DER costs and benefits, that is extending the boundary to behind the meter.

We believe the system boundary applied should reflect both the National Electricity Objective, in the long-term interest of consumers, as well as the policy direction articulated in the ESB's Post-2025 Market Design, towards enabling consumers to be rewarded for their flexible demand and generation. Having regard to the potential impact of network expenditure determinations on DER assets owners' ability to realise value from their own investments, it is critical that the benefits and costs to DER customers are quantified and effectively scrutinised by the AER.

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

AGL supports the development of a balanced methodology between shorthand and long-hand approaches, provided all networks are required to apply a consistent methodology in their proposals to facilitate comparability.

We appreciate the AER's observation that while shorthand methods may be inaccurate, long-hand methods may prove overly complex.

We support continued work proposed by the AER to improve and further 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 that this is possible.

[7] See further AGL feedback on the AER forum on Electricity Distribution Ring-fencing Guideline (23 March 2021), Available at https://www.aer.gov.au/system/files/AGL%20-%20Feedback%20to%20AER%20forum%20on%20Electricity%20distribution%20ring-fencing%20guideline%20-%2023%20March%202021.pdf.

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?**

We would recommend that the electricity market model or analysis tool applied be independently assessed by the AER, in consultation with market participants, including the underlying assumptions used to build the model.

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

No comments.

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

AGL supports the proposed principles for quantifying wholesale market benefits, including transparency and economic/ technical rationale.

13. **Do you agree with the proposed methods for quantifying network benefits?**

AGL supports the proposed methods for quantifying network benefits that defines three core benefits, including increase in variable energy generation, flexible energy generation, and flexible capacity, with a range of underpinning benefits.

14. **Do you agree with the proposed methods for quantifying environmental benefits?**

AGL supports the AER's proposed methods in quantifying environmental benefits, whereby:

- They only be quantified if there is an identifiable tax, levy or other payment associated with environmental or health costs which producers are required to pay or where jurisdictional legislation directs DNSPs to consider the impact of these externalities and has provided a value that is to be used;
- These benefits may be included if they impose a direct cost or confer a financial benefit on all resources (including both DER and non-DER); and
- Where there is a jurisdictional requirement to do so, renewable energy targets and/or a potential carbon price for generators should be incorporated into the DNSP's calculation of wholesale market benefits.

15. **Do you agree with the proposed method for quantifying changes in DER investment?**

AGL supports the AER's proposed approach that the treatment of DER investment costs only changes the calculation of benefits if the network varies its forecast of DER adoption between the base case and the investment case.