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11 April 2024

ERC0346 – Draft Determination - Unlocking Consumer Energy Resources (CER) benefits through flexible trading

AGL welcomes the opportunity to provide a submission to the Australian Energy Market Commission's (**AEMC**) "Unlocking CER benefits through flexible trading" draft determination published in February 2024.

Proudly Australian since 1837, AGL delivers around 4.3 million gas, electricity, and telecommunications services to our residential, small, and large business, and wholesale customers across Australia. We operate Australia's largest electricity generation portfolio and have the largest renewables and storage portfolio of any ASX-listed company, having invested $4.8 billion in renewable and firming generation over the past 20 years and added more than 2,350 MW of new generation capacity to the grid since 2003.

AGL's feedback on the draft determination is informed by our experience in building and delivering CER products and services, as well as ongoing involvement in CER policy and regulatory design. We are a market leader in the development of innovative products and services that enable consumers to utilise their CER assets to optimise their energy load profile and better manage their energy costs. Our current CER product and services include our leading-edge Virtual Power Plant (**VPP**), Peak Energy Rewards demand response program, retail Night Saver offer for electric vehicle (**EV**) owners and EV subscription service. Additionally, through our South Australian Hot Water Orchestration Trial, we control hot water load to maximise benefits for customers from the optimisation of hot water demand and make use of SA Power Network's 'solar sponge' time-of-use tariff that incentivises daytime usage of electricity to enable higher renewable energy generation.

AGL supports the objective of this rule change to improve trading of CER to further unlock value for consumers. Better integration of flexible CER into the power system will deliver a more reliable and secure energy system that will benefit all consumers. It is evident through the course of this rule change process that there will need to be significant adjustments to the regulatory framework as technologies evolve and customers change the way they use and source energy.

We support key elements of the draft determination, in relation to large customers and the introduction of new metering types. We support the recognition that it is important for consumer protections and accountability that residential premises have a single FRMP.

However, we are concerned that the upfront implementation and operational costs for aspects of the small customer changes, particularly the creation and integration of secondary metering with market settlement systems, will significantly outweigh the potential benefits identified. The AEMC notes in the draft determination that 'broadly, Energeia's analysis found that this rule change would deliver benefits to households, small and large businesses (including councils) at a relatively low cost to the system and broader consumer base'. However, the Energeia analysis also identifies in relation to small customers that there is a net cost relative to current retail VPP approach, and only a small marginal benefit relative to the

status quo for providing network services. The small net benefit found in Energeia's analysis rely on cost assumptions that we do not believe reflect the implementation costs. The preliminary high level implementation design by AEMO illustrates a significantly higher level of implementation complexity and cost than assumed in the Energeia analysis[1]. We encourage the AEMC to engage further with participants and Energeia to update the costs estimates. We will provide examples of several implementation costs following this submission.

We support the recognition of new in device meters and believe they could be directly utilised under existing frameworks to support CER integration for small customers while avoiding the significant costs of integrating with AEMO settlement systems. This may also help drive innovation in integrated metering and CER technologies. In relation to capturing network benefits the most critical enabler is better more cost reflective and customer centric network tariffs.

We broadly support the introduction of the new standalone voluntary framework for large customers. This proposed framework will solidify operations already occurring today and provide the necessary clarity on how the metering arrangements should apply to large customers. However, we note that whilst the costs of AEMO changes may be significantly lower than residential customer changes, we consider these costs should also be carefully considered in the design and implementation should only proceed if the cost remain below expected benefits.

We further support the proposal for additional metering types for public lighting and street furniture, however we hold some concerns as to how this may impact the management of external connections and the global settlement calculations undertaken for street furniture.

We would welcome the opportunity to discuss these matters further with you. Should you have any questions in relation to this submission, please contact Kyle Auret, Senior Manager, on kauret@agl.com.au.

Yours sincerely,

Ralph Griffiths
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[1] See: https://aemo.com.au/-/media/files/initiatives/unlocking-cer-benefits-through-flexible-trading/unlocking-cer-benefits-through-flexible-trading---draft-high-level-implementation-design.pdf?la=en

Attachment – AGL's Response to Specific Proposals

Small customers are investing in CER to save money, be less reliant on the grid and more energy efficient

Through research led by Energy Consumers Australia, we know that the three main reasons why Australians are investing in CER like solar PV and battery storage are to save money, to be less dependent on mains electricity and to make more efficient use of energy.[2] On top of this, only 31 per cent of Australians think that the energy market currently works in their favour, dropping to 27 per cent when thinking about the future market.[3] With customer appetite for rooftop solar PV increasing, uptake of EVs starting to accelerate, and electrification taking a foothold, CER policy is at a critical juncture.

Rooftop solar is now three times as common in Australia as backyard pools and is capable of meeting 48% of underlying energy demand across the NEM in the middle of a sunny day.[4] This is the first wave of customer investment in their own energy transition. It is therefore important to keep customers at the centre of regulatory design by accounting for why customers are investing in CER.

AGL supports the AEMC's decision not to pursue the introduction of the ability for a second financially responsible market participant (**FMRP**) to enter a small customers premises. We maintain that any reform that moves toward or provides a pathway for weakening of consumer protections should not be encouraged. The AEMC notes that there was only one stakeholder who advocated for AEMO's flexible trader model to be explored for one customer.[5] Since the initiation of this rule change a majority of stakeholders have advocated against allowing a second FRMP to be allowed to serve a small customer. We do not believe that any proposal that seeks to do this would pass the necessary consumer protections test for when the AEMC is making a rule. Similarly, any consideration for a regulatory sandbox through a trial waiver from the Australian Energy Regulator, or a trial rule from the AEMC would logically have similar conclusions on the lack of materially improved outcomes for consumers when weighed against the risks.

AGL offers a VPP under the current market arrangements whereby CER is used to manage wholesale price exposure and does so without certified device level metrology. This approach is a common feature for DER assets that sit behind the meter, as an AEMO settlement grade meter is not necessary for the purposes of verification and billing offset of a customer's supply charges. We also continue to develop capabilities within the EV market operations as this sector grows. A key learning from previous trials, such as the AGL/ARENA EV trial, is that clear TOU price signals are a powerful tool to shift consumption behaviours. In the case of TOU network tariffs, this is the most effective approach to achieve network benefits.

In almost all circumstances, a retailer, or third-party provider, can put in place a commercial arrangement with a residential customer through the use of the existing meter and ancillary technology behind the meter. There is no need to create an additional channel through AEMO settlement systems or formal billing arrangements under the NERL. The AEMC's proposal to create a second settlement point for flexible devices is therefore not supported by AGL, as it would add costs and complexity without clear benefits for customers or the market.

AGL suggests that the AEMC should focus on removing the barriers to billing and product innovation, enabling more data from existing smart meters, and approving Type 8 meters that are not market visible.

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[2] https://ecss.energyconsumersaustralia.com.au/behaviour-survey-oct-2023/purchase-intentions-2023/
[3] https://ecss.energyconsumersaustralia.com.au/sentiment-survey-dec-2023/confidence-household-sentiment-dec-2023/
[4] https://aemo.com.au/consultations/current-and-closed-consultations/draft-2024-isp-consultation
[5] Submission to the Directions Paper: PIAC, pp. 3-4

With the envisioned CER already unlocked through alternative pathways to the proposed draft rule, the AEMC's cost benefit analysis (CBA) requires greater scrutiny. Whilst Energeia's CBA shows a net benefit as a result of the draft rule, the benefit is marginal and therefore subject to uncertainty if the underlying assumption does not prove correct. We consider the AEMC's assumptions on the costs of metering and the benefits of flexible trading are questionable due to inaccuracies and uncertainties in the CBA. In our view the proposed rule can only be progressed when the CBA is able to show a material reduction in current costs or additional customer value of CER that is materially higher than the status quo.

Metering costs

The AEMC and Energeia have assumed that the in-device meters will have a very small cost when compared to current approved meters. That may be true - before they are integrated into NEM settlements. In the context of the current metering regulations and AEMO data requirements we do not consider the costs will be too dissimilar to current approved meters. This is due to the following reasons:

1) The meter will still need to comply with the National Measurement (NM) Institute pattern approval and verification regulations. These exist for very good reasons to do with customer equity, fair trading and fraud prevention. The cost of NM Institute pattern approval and verification will be the same as it is today and the meter will need to broadly comply with the same requirements as apply today.
2) The meters still need to be settled on the market therefore they will have to transmit the required 5 min data back to AEMO with the accuracy and timeliness required for settlement. We note that this new meter type may enable alternative methods for the provision of this data from the manufacturer of the device, however AEMO will still require strict requirements to fulfil the role of a Meter Data Provider (MDP). In the absence of this, the data will need to go through a NEM-certified MDP as they have the systems and expertise to do this. On balance it is therefore likely that the existing industry MDP costs will apply.
3) A meter with "lower minimum specifications" won't be significantly cheaper for the physical hardware device than a meter that meets the specifications we have today. This is because the electronics are virtually identical. We note the removal of display is likely to have only a small saving in costs, but would benefit street furniture applications.
4) A metering system complying with any specifications, lower or not, still needs to be tested and managed to ensure it complies with those specifications. The cost to manage the regime is still the same.
5) Some EV chargers are available with National Measurement compliant pattern approved meters built in, however these cost more than the version without this metering.

We do support the recognition of new meter types and note that the additional costs associated with points 2-4 above are avoided by using in-device meters directly rather than integrating them into NEM settlements.

AEMO implementation costs

On 5 April 2024, AEMO provided a preliminary overview of the high-level implementation design to implement the draft rule. AEMO noted they will publish the design paper for consultation on 10 April 2024. We note this is the first time AEMO has mapped out the required changes. This forum highlighted that the costs of AEMO development and system changes are likely to be significantly higher than the cost estimated in the draft determination ($5.2 million per year).

At this early stage of the assessment, AEMO has identified the impact of the proposed change will likely affect all retail procedures, both Business to Market (B2M) and Business to Business (B2B). The impact of changing so many procedures and systems will require extensive time to undertake regression analysis to ensure that each change does not create a problem with another change or an existing process. These

changes are not to be undertaken lightly, as they could lead to unexpected outcomes and substantially negatively impact end customers.

We intend to provide our response to the AEMO design paper when it is made available for consultation.

Retailer system change costs

Whilst the addition of a secondary meter is optional for the FRMP, internal system changes will still need to occur regardless due to the implications of changes made to AEMO systems. At this early stage of AEMO's high-level design paper, the full extent of internal changes needed cannot be comprehensively forecast. Following the publication of the AEMO design paper, we will provide the AEMC will the forecast cost AGL may face.

Network costs and visibility benefits

We note that Energeia found that there will be negligible costs for distribution networks to implement the draft rule given these businesses already manage multiple data streams for multi-element meters. We disagree as we expect the costs will be material given there will need to be new systems created and ongoing monitoring of the NMIs that are created. Further discussions with each network business is needed to ascertain the costs for each distribution zone.

The Energeia report also considers the benefits for network support services and improved visibility resulting in improvements in network security and stability. We note these benefits have significant overlap with the ongoing assessment of the 'Integrating price-responsive resources in the NEM' rule change. It is far more likely that these benefits will arise through this rule change and therefore limited weight should be placed on these benefits in the CBA for this rule change.

Large customers

The draft determination proposes to create a standalone framework for large customers to engage multiple energy service providers and establish secondary settlement points: As noted in the paper this largely draws from the existing arrangements that occur through alternative regulatory pathways such as the AER's exempt network framework.

We support the AEMC's proposal to create this separate framework. However, we remain cautious as to the costs of implementing AEMO system and procedural changes. In the case of large customers, there may be discrete and less onerous system changes required to meet the proposed rule. Whether this is possible remains unclear until an AEMO assessment of the required changes and opportunities for adjustments for material cost savings.

Furthermore, the AEMC should consider further improvements to reduce barriers to these types of commercial arrangements and provide further guidance on information exchange requirements between the FRMPs.

These include:

- The AEMC should provide further guidance on the definition of large customer, particularly when the separation of meters results if the large customer consumption threshold is no longer met when the customer load is separated across multiple meters.
- The AEMC should consider additional measures within the framework to facilitate the exchange of information when there are different FRMPs managing the primary and secondary meters. Whilst the customer can facilitate this information exchange through the contractual agreements, an

improvement to the framework is to expressly set out a standard expected of each FRMP to meet important information exchanges such as timeliness and accuracy. This is particularly important for the allocation and reconciliation of network charges and the access and validation of metering data,

- The AEMC should consider the impact of secondary settlement points on network services, wholesale demand response, and flexible exports: The proposal assumes that secondary settlement points can provide network services and FCAS, but not wholesale demand response. There are questions about how the DNSPs will quantify and access the network services, how the metering data will reflect the FCAS response, and how the secondary settlement points will interact with the DNSPs' control and curtailment of DER.

Integrated metering of street lighting and street furniture

We note the draft rule includes the proposal to aggregate multiple street lights, and/or street furniture, under one NMI. Under global settlement, we note that aggregation should only occur within a Transmission Node Identifier (TNI) not across multiple TNIs.

We are happy to support aggregation of street lighting equipment, as the DNSPs generally manage these assets within their asset management systems and have historically been grouped. While we support load aggregation of street furniture, we do not support connection aggregation of this equipment under one NMI. Managing these devices is highly complex and substantial benefits have been achieved since they were recently allocated individual NMIs as part of the introduction of Global Settlements. This NMI allocation substantially improved the location information and enabled manageable by multiple parties, whereas street lights are only managed by DNSPs.

Implementation

As noted above, AEMO are shortly due to publish the high-level implementation design paper. Following the publication of this document we will provide a view as to when these changes can be reasonably implemented and when the rule should commence.

We note the NEM Reform program has already called out medium-high risks related to delivery congestion in 2025-26, along with sub-optimal delivery outcomes and resource risk. The implementation timelines for this initiative should consider the broader program roadmap and not be approached as an isolated initiative.