New energy technology, policy & strategy

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Genevieve Schulz

Australian Energy Market Commission

ERC0346

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Submission in response to the *Unlocking CER Benefits Through Flexible Trading* draft determination

Dear Genevieve

Thank you for the opportunity to comment on the *Unlocking CER Benefits Through Flexible Trading Rule Change* draft determination.

In summary, enX

1. **Supports** targeted exemptions to bring down metering costs for single phase AC public EV chargers (and other street furniture).
2. **Supports** large customers being able to choose multiple energy service providers for their premises.
3. **Is concerned** about proposed changes for small customers to enable 'flexible' CER to be separately metered and settled in the energy market. This change:
    - Is unlikely to generate benefits in excess of costs, and
    - Could adversely impact competition in new energy services.

We broadly accept and support the Commission's justification for the first two reforms (1 & 2 above). As such, this submission focusses on the third reform and the reasons we consider it, overall, detrimental to the consumer interests.

About enX

enX is a national consultancy focussed exclusively on the grid and market integration of CER. We have been deeply involved in Australian energy market reform from NECF and Power of Choice, representing ARENA on various AEMC technical working groups, through to providing technical leadership of the Energy Security Board's CER workstream. We are fundamentally pro consumer choice. We are not aligned to any market participant or technology provider.

Consumer energy resources are a 'heavy lifter' in Australia's decarbonisation journey, and we want to unlock their full potential.

Summary of the proposed change for small customers

The Commission has made draft rules to enable, on an opt-in basis:

- the establishment of secondary settlement points for small customers without the need for a second physical connection to a distribution network
- settlement for these secondary connection points can be based on device in-built measurement capability (new Type 8 or 9 meter)
- the secondary settlement point can *only* be represented in the market by the customer's existing electricity retailer (i.e. it is not separately contestable)
- the secondary metering can only be managed by that retailer's nominated metering coordinator (MC).

Promoting competition for consumer benefit

The Commission is not progressing AEMO's proposal which would have allowed for the secondary settlement point to be contestable independently of the primary meter. enX has observed considerable confusion about this point in industry and parties often conflate the benefit of allowing secondary metering with the ability to have it separately contestable.

Customer and industry advocates often cite the beneficial use-case of an EV home charger being separately metered, with the charging cost flowing to a third party such as an automaker (i.e. "buy an EV, get free charging"). Our understanding is that this not possible under the proposed arrangements without bilateral contracting between the third party and the retailer, which is already permissible under the National Electricity Rules (NER) and Australian Competition Law (ACL). Given this (and similar) is the primary use case of interest to industry and consumer groups, it is important that the AEMC make clear that that is not specifically enabled by the proposed change. **In summary, this change does not increase competition, for consumer benefit, in any material sense.**

Uptake assumptions

The Energeia report estimates that 14 percent of all flexible CER would need to participate in the proposed arrangement for a net benefit to be realised. We feel there is little reason to assume that 14 percent participation rate is achievable, or desirable. This is simply a break even point. There is no analysis to justify an assumption that break-even would ever be achieved.

There are however, strong reasons to assume consumer uptake will be much lower than 14 percent:

- Firstly, much of the value of CER for customers is in behind-the-meter (BTM) integration, principally, using solar to power flexible and semi flexible resources (e.g. EV chargers, water heaters, washing machines). It is this BTM integration that enables load shaping and shifting that reduces peak demand and gives rise to the bulk of CER economic benefits. This is why consumers with solar are fleeing direct load control schemes across the NEM and moving their hot water on their main household circuit.

The reform business case is betting on the value proposition for BTM integration reversing.

- Secondly, retailers do not stand to benefit from this change. It is assumed that customers will demand these arrangements of retailers – they will want to, for example, charge their EV from the spot market while the rest of the house sits on a flat or ToU tariff. However, a retailer can offer such a product now in the same way they offer off-market discounts for VPP participation or for 'pay on time'. They could, in theory, apply spot rate credits to the EV charger based on device-level metering and net this off the customer bill, off market. This is because the retailer's spot exposure is unchanged by this reform. Most likely however, the retailer will create bespoke products with price profiles that match their contract market position and customer risk appetite. Again, this can best be done most flexibility off-market.

The problem of solar self-consumption is inadvertently highlighted by the AEMC in Figure 4.1 (p.30). In that schema, the solar is able to either charge the battery *or* supply to so-called 'inflexible loads'. It cannot do both. It is hard to imagine why a consumer would put themselves in such a lose-lose position.

Overall, it appears unlikely that the 14 percent uptake break-even point for this reform could be achieved over any timeframe. It therefore follows that **the cost-benefit analysis result is likely to be negative.**

Cost assumptions

Given the benefits for this reform are so marginal, more effort should be put into defining small costs. These include:

- AEMO system changes
- The creation and maintenance of supporting guidelines by the AER
- ongoing regulatory oversight
- the cost of the additional Type 4 meter, or building settlement grade metering into new devices
- additional data transmission and warehousing costs
- opportunity costs associated with delaying concurrent reforms
- costs of communicating greater complexity to industry and consumers and implementing extended consumer protections.

Overall, we consider these costs could easily negate any potential benefit targeted by the reforms.

Benefits assumptions

Given that the new retail product arrangements envisaged by the reforms can be achieved under the current market rules, we consider the benefits set out in the Energeia report are entirely illusory.

We see no justification to the view that the reforms would increase the incentives for the retailer to coordinate CER or provide more innovative service offerings. The fundamental risk-cost exposure of retailers and their ability to manage this by orchestrating CER is not impacted by the ability to add a submeter at the customer premises and have this settled separately from the parent meter.

The Energeia report did not look at the negative economic effect of consumers, currently using a HEMS, transitioning to a disintegrated secondary metered arrangement. Such an arrangement may be made initially attractive to a consumer where they are offered an upfront attraction bonus, without them being able to fully appreciate the long-term financial implications of this inferior technical arrangement. There are various ways the consumer could be effectively locked into such an arrangement.

Creating new sub-metering monopolies

It is no secret that MCs are positioning themselves as VPP and HEMs providers through strategic acquisitions and partnerships with local and international technology providers.[1] This is leading to greater I/O functionality and edge computing capability in their 'meters'.

This puts MCs is direct competition with a range of new energy service providers like Home Energy Management System (HEMS) providers.

The Commission's proposed changes to Clauses 7.3.2 would allow a small customer to install a secondary (Type 7 or 8) or use a meter already embedded in a device (many existing devices are likely to be eligible for Type 8/9 pattern approval). The MC "*would only be required to commission and maintain the meter*".[2] This suggests the MC and retailer can assign themselves operational management of any single Type 7 or 8 meter at a customer premises. While this could be a stand-alone device such as a solar inverter, as mentioned above, but given the value for flexible CER flows from BTM coordination, they will have a stronger interest in multi-device controllers (such as a HEMS or hybrid inverters).

As a result of the Commissions propose changes, the MC and retailer may be able to assign themselves operational control of metering from service providers they are in direct competition with. This is an asymmetrical and potentially anti-competitive dynamic, as:

- The MC is in an effective monopoly position as the primary metering provider at the premises and so the customer can be effectively captured by their services
- Other service providers cannot acquire rights to other competitor meters in the same way, or to the primary site meter, as can the MC
- Given the lack of competition in metering in Australia, MC competitor acquisitions and development costs can be effectively socialised (funded by all consumers). By

[1] See for example, https://www.intellihub.com.au/what-we-do/virtual-power-plants and https://www.intellihub.com.au/what-we-do/residential-energy-providers
[2] AEMC (2024) *Draft determination - Unlocking CER benefits* p.75

contrast, independent competitors are typically in a loss-leading position and are so vulnerable to even small anti-competitive conduct
- The monopoly position of the MC gives rise to the risk of 'third-line forcing', whereby the MC offers preferential access to data, or pricing, to selected providers
- MCs are well-resourced to promote market reforms that strengthen their market position at the expense of their competitors.

In summary, the Commission's draft Rule change gives rise to substantial competition issues that need to be more fully considered before the Rule is made.

Giving AEMO visibility

Having closely considered the system security implications of high levels of flexible CER[3], enX has formed the view that AEMO will never need device-level visibility of CER. Effective resource adequacy and system security outcomes can be maintained through equipment technical standards and by increasing obligations on market participants for forecasting and meeting bidirectional dispatch targets at the market-region level (i.e. achieving a genuinely two-sided market). If we are in fact moving to a two-sided market, then AEMO's interest in device-level visibility is obsolete.

Innovative product can be readily delivered at the site level

To illustrate the counterfactual case to reform, we draw your attention to a recent completed modelling exercise[4] completed by enX for the Australian Renewable Energy Agency. The study uses V2G as a case study, but the same principles apply to any large flexible CER.

Our study applied a range of tariff offerings and demonstrates optimal utilisation of CER can best be achieved where consumers are exposure to genuinely cost-reflective pricing at a site level. Importantly, for customers with flexible CER, applying these incentives at the site level can achieve additional benefits, beyond those modelled, by encouraging 'semi-flexible' loads to be moved to 'off-peak' times.

In terms of customer risk preferences, there are already many options for customers at different extremes of the market:

- Amber customers take on and manage dynamic price risk at the site-level
- Reposit No Bill customers opt to assign all their energy costs (and risks) Reposit

A whole-of-site approach also ensures that dynamic operating envelopes can be implemented with the highest probability of meeting compliance whilst ensuring consumer amenity and financial savings are maximised.

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[3] enX (2023) *EV Technical Standards for Grid Operation*
[4] enX (2024) *Network Tariffs for V2G*

In summary, enX sees benefits in permitting a second settlement point where that point is contestable, and where there are low barriers to new energy service providers becoming the MC. As a middle-ground step, the proposed change seems to offer no discernible advantage over current arrangements and may create significantly detrimental outcomes for consumers by lessoning competition.

We would welcome the opportunity to address any questions you might have about our submission.

Sincerely

Jon Sibley