

Australian Energy Market Commission  
Level 15, 60 Castlereagh Street Sydney  
NSW 2000

11 April 2024

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Response to:

AEMC Draft rule determination ERC0346  
Unlocking CER Benefits rule change

Thank you for the opportunity to comment on the AEMC draft rule determination “Unlocking CER Benefits rule change”.

This response is a joint effort, pooling the extensive expertise of both Rheem Australia Pty Ltd (RAPL) and Combined Energy Technologies Pty Ltd (CET). Our complementary interests in the AEMC’s draft rule determination ensure a comprehensive and informed feedback.

Our views, concerns and recommendations as outlined below, draw from our extensive experience across our fleet of thousands of mixed CER residential sites we have deployed across the NEM and WEM, whereby orchestration of these mixed CER residential sites is to the benefit of Consumers, to enhance grid security of supply, and to support and accelerate the hosting of renewables on the grid.

As the largest Australian manufacturer of water heaters, Rheem markets a wide range of solar, heat pump, high efficiency gas and electric water heater models to the domestic water heating market. Our brands include Rheem, Solahart, Vulcan and Aquamax. Additionally, we are now the number three supplier of photo voltaic (PV) systems in the country via our Solahart channel. Over the last six years we have also commenced the manufacturing and installation of smart electric water heaters, orchestrated locally with other CER via CET HEMs, and in aggregation controlled remotely by our technology partner CET, via their cloud platform for grid services. Today Rheem has products in over 4 million Australian homes.

Combined Energy Technologies Pty Ltd (CET) is an Australian technology company specialising in energy management for residential, commercial, and micro grid systems. CET systems utilise a local Energy Management Gateway to provide secure communications and local orchestration of a wide range of CER devices and CER manufacturers. Local orchestration of CER devices is achieved through a suite of CET Energy Management modules that provide cost effective power metering, communication, and control. CET has extensive experience in the integration and orchestration of systems with multiple CER devices including the integration of solar PV, batteries, water heating, electric vehicle chargers, pool pumps and A/C for the benefit of the residential consumer, retailer, DNSP, and the grid.

Together, Rheem and CET have been actively participating in the emerging orchestrated CER market for nearly 10 years with thousands of cloud-connected, mixed, orchestrated CER sites (Solar PV, batteries, smart water heaters, HVAC, pool pumps, EV chargers, and other CER) across the NEM and the WEM. Over this time, we have identified and resolved many issues (at live field sites) around how mixed, smart CER sites can be orchestrated to achieve the best financial outcomes for consumers while providing a foundation for grid support services and, hence, grid security of supply. Empirical data from an existing fleet of thousands of NEM and WEM consumer sites of mixed CER support our observations and concerns in this response to the draft rule determination. The data from these sites support our technical and commercial conclusions that align with the National Electricity Objective (NEO) principles.

### **The Draft Rule Determination for “Unlocking CER Benefits”**

The commission has identified three core areas that the draft determination focuses on with the intent to provide better outcomes for consumers and the market:

1. *creating an enduring framework that allows large customers to choose multiple energy providers for their premises.*
2. *opportunities to optimise CER flexibility for small customers (households and small business), and*
3. *enabling measurement of energy flows using in-built technology.*

Our comments, experience, and concerns focus on core areas 2 and 3 above. We believe the rule change as drafted will create new sub-metering monopolies that will disrupt behind-the-meter and CER orchestration services currently provided by “Off Market” Energy Market Service Providers such as Rheem and CET. We believe there will be impacts on Home Energy Management (HEMs) orchestration of site CER and on the provision of DNSP grid services (e.g., Demand Response and Dynamic Connection Compliance.) In its current form, the determination of the draft rule will create a new monopoly market for metering coordinators (MCs), enabled by the NER, which provides MCs with privileged access to the metering platform. This protection of unregulated MC products and services built into the metering platform further enables an anti-competitive environment and a monopoly supplier facilitated by the current NER.

Specifically, we have concerns that further MC monopolies will be enabled by the draft rule determination as:

- the proposed secondary sub-metering settlement point can only be operationally managed by the primary retailer’s nominated metering coordinator (MC).
- the MC can assume operational control of a third-party sub-meter that an Energy Market Service Provider may install for the provision of HEMs and/or DNSP DR and/or DOE compliance services disrupting those services as the NER would then only allow MC access to the meter.
- As the MC has privileged access to the metering platform, they can develop/embed products and services within the platform, thus creating a market distortion, impacting the ability for competitive products and services to compete against them in an open market.

We elaborate on our concerns below.

**a) Opportunities to optimise CER flexibility for small customers (households and small business)**

***Concerns re an MC assuming operational control over embedded (or external) third party sub-meters***

There are 100’s of thousands of sites that use “off market” Energy Market Service Providers (e.g. HEMs Providers, Aggregators, DNSP Dynamic Connection Service Suppliers) to orchestrate CER behind the meter for consumer financial gain (e.g. solar self-consumption, tariff arbitrage/load shifting) and via residential site aggregation, consumer sites provide services such as DNSP Minimum and Peak Demand Abatement for network constraint management, and Dynamic Connection compliance.

These sites all require additional “third-party” metering at the NMI for net power flow measurement (as the NER precludes local access to real-time power data from the site smart meter), which incurs additional costs for consumers. Further, site-wide orchestration of flexible CER requires circuit or embedded device-level metering within flexible CER, such as EVSE chargers, Smart Water Heaters, Pool Pumps, BESS, Solar PV generation, etc.

The metering used by many of these HEM providers/aggregators would likely comply with the new proposed sub-metering specification with little or no modification. Noting that many of these meters have class 1 accuracy and some are also used for contingency FCAS, while AEMO MASS compliant, they do not need to be pattern approved. Additional suppliers for the new sub-meter types could positively put downward cost pressure on sub-meter supply. However, the current MC control over the meter market and hence the operational control of sub-metering arrangements as proposed for residential sites in the Commission’s draft rule change means there will be a great reluctance to pattern approve these meters if the MC can just walk in and assume operational control of a third-party meter. Further, once the MC takes operational control of a meter in a sub-metered arrangement, the NER “kicks in” with the MC afforded rights and protections such that “off-market” Energy Market Service Providers are precluded from accessing their meter / sub-metered CER

control, with significant impacts to site HEMs orchestration and grid services such as Dynamic Connection compliance.

As such, the current draft rule determination has significant technical, commercial, market competition and regulatory implications, all of which will negatively impact existing behind-the-meter services for consumers, for grid security of supply, and severely impact the current open competitive market for behind-the-meter CER services. To summarise:

- The Commission’s draft rule change proposes the MC for any sub-metering arrangement will be the same as the MC for the site gate meter. This would further extend the privileged monopoly position that the MC has to access the metering platform with no competition possible via “Off Market” Energy Market Service Providers.
- Under the proposed sub-metering arrangement, the MC can assume operational control of any third-party sub-meter, separate or embedded in CER (EVSE, Water Heater, etc.).
- Protected by the NER, the MC would assume sole access rights to the submeter. As the MC would take operational control of a submeter and hence the associated CER, this would disrupt HEMs orchestration services at the site and impact off-market grid services such as DR and Dynamic Connection compliance, as the off-market service provider no longer has access/control rights to the particular “on-market” submeter / CER device.
- As evidenced in retailer supply contracts, we have seen the provision of energy to a consumer being tied to “handing over” rights to metering data and the retailer/MCs' discretionary control in switching any controlled load circuit. We envisage the retailer/MC extending energy supply contracts to include sub-metering. This again precludes an open market for multiple providers to provide services as the NER protects the MC in its monopoly position.
- There is steady growth in dynamic connection services (import/export limits) as required by DNSPs. For Example:
  - i. SA Power Networks – mandatory for solar PV,
  - ii. Energy QLD is mandatory for >20A (single-phase) EVSE and is currently optional for a site-wide Dynamic Operating Envelope (DOE).

Connectivity to the DNSP DERMS via the CSIP-AUS / Sep 2.0 protocol is being provided by a myriad of certified “off-market” energy market service providers that ensure site compliance for a Dynamic Connection. An MC taking operational control of CER metering and a retailer taking control of CER subject to dynamic connection compliance raises many legal, anti-competitive, DNSP compliance, and regulatory issues.

Under the proposed sub-metering arrangements, a retailer cannot possibly know whether a consumer would be better off financially by opting for disparate control of, say, an EVSE charger as opposed to site-wide orchestration of that EVSE charger with control optimized, for instance, to consume excess solar. Our experience is that site-wide visibility of all flexible and inflexible CER plus coordinated orchestrated control of flexible CER (with real-time knowledge of static load) gives the best outcomes for consumers and the grid. This is our experience across thousands of residential sites in the NEM and WEM and was our experience as an aggregator in AEMO’s project Edge.

Further, it is unreasonable to assume that consumers are educated enough to understand all the above consequences when provided with, for instance, a discounted power offer to enable on-market sub-metering of a particular CER, such as an EVSE charger.

## **b) Embedded metering and pole mount EVSE chargers**

Market distortion for competitive products and services is already occurring in the pole mount EV charger space. (e.g., Ausgrid’s pole mount EVSE charger rollout was partially funded by ARENA). The sub-metering arrangements as proposed in their current form will further enable these monopolies, whereby MCs, and using their privileged access to the metering platform:

- To tightly integrate Type 4 meters with pole mount EVSE chargers, leveraging their privileged access to the metering platform to create unregulated new products and services within the metering platform, with protection from competition afforded to them by the NER.
- To provide cloud aggregation and other services for CER integrated with or attached to on-market metering, again precluding competition as only the MC / MDP can access the metering platform either locally or remotely.
- To leverage retailer / MC metering supply contracts with MCs protected by the NER such that retailers are precluded from contracting with suppliers that cannot make such tightly integrated products for “on-market” use without being an MC. Further, market dominance and supply contracts with existing MCs shut out any competition.
- Using the same communications link for unregulated monitoring and control functions of pole mount EVSE chargers for regulated Energy Data retrieval. This communications path via the on-market meter is being used to carry out other control functions for the MCs' own commercial purposes, again protected by the NER, and enabling a competitive advantage for MCs with EVSE charger remote access protected by the NER to the MCs' benefit.

These practices would be further enabled by proposed new sub-meter arrangements giving MCs another pathway to lock out competition and build on their monopoly position. For example, the MC would have a compelling offer (and even contractual requirement) for the Retailer only to deploy product developed/provided by the MC with inbuilt pattern approved metering, which only the MC can provide on market as the NER precludes other suppliers/service providers from integrating on market metering with CER and participating in such sub-metering arrangements.

For both the existing and proposed new sub-meter types, this market failure needs to be addressed as a matter of urgency and before any final rule change determination.

## **Summarising**

Product manufacturers and off-market Energy Market Service Providers that are not MCs cannot access the evolving market that the MCs are creating using the on-market metering platform that only MCs can access despite none of these capabilities being a regulated requirement for the supply of energy. This regulatory loophole/market failure is precluding other suppliers of competitive products and services, including other cloud control platforms offering services for remote aggregation of EVSE and other CER, from entering the market. This reduces competitive offerings and the choice of products and services that will drive down consumer prices. The sub-metering arrangements proposed in the draft rule determination will only further enable these monopoly-controlled products and services.

### ***Implications of the Draft Rule Determination as is currently proposed.***

It is our view that the Draft Rule Determination as proposed:

- Will result in sub-optimal outcomes for consumers in the orchestration of their behind-the-meter CER resources.
- It will disrupt grid security of supply in the provision of DNSP CER-enabled DR and Dynamic Connection compliance services provided by off-market energy market service providers, as the MC would take operational control of the sub-meter and hence the attached CER. Under the NER, only the MC can access an on-market meter; thus, the situation will evolve whereby the off-market service provider can no longer access their own meter/ CER.
- Disenfranchises energy market service providers whereby the MC can take operational control of third-party sub-metering and/or displace such metering with their own metering when taking control of sub-metered CER that is not pattern approved (another cost to consumers).
- Further enables the MC monopoly position in competition with other energy market service providers with the MCs sunk costs of the metering platform and MC embedded unregulated ancillary capabilities

being paid for by the consumer, with competitive energy market service providers not afforded the same access rights to the metering platform to provide competitive offerings, and with the MC leveraging the access protections of the NER for their commercial gain.

- Further distorts and preferences the MC in the overall behind-the-meter CER products and services space, creating an uneven playing field that is and will be dominated by MCs, thus “locking in” the consumer and removing consumer choice.

In our view, if this Draft rule determination (in its current form) is enacted, innovation and open market competition for “off-market” CER products and services such as HEMS, DNSP DR, and DNSP Dynamic Connections behind the meter, along with competition in the supply and control of Pole Mount EVSE Chargers, will be severely compromised. The Draft rule determination serves only the MC/Retailer and will likely destroy the “off-market” Energy Market Service Provider ecosystem. The Draft rule will facilitate anticompetitive behaviour at the consumer's and the grid's expense.

As this submission has been prepared using the expertise of several Rheem and CET personnel, I would ask that any enquiries related to the submission be directed to the contact(s) below in the first instance. We will then coordinate follow-up responses to your enquiries or further meetings, if required, with the appropriate personnel within our organisations.

Yours Sincerely,

A handwritten signature in black ink, appearing to read "Scott Ostini". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

**Scott Ostini**  
General Manager, Energy Solutions & Transformation  
Rheem Australia Pty Ltd