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Ergon Energy Network Regulatory Proposal 2025-30

Turbo Charging Distributed Energy Resources

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Master Electricians Australia (MEA) is the trade association representing electrical contractors recognised by industry, government and the community as the electrical industry's leading business partner, knowledge source and advocate. You can visit our website at www.masterelectricians.com.au

In late 2023, MEA submitted a response to Ergon Energy Network's (Ergon) consultation (our initial submission) regarding its 2025-2030 regulatory proposal. Our submission can be found at the following link: https://www.masterelectricians.com.au/wp-content/uploads/2024/01/MEA-Submission-Ergon-Energy-Network-Regulatory-Proposal-2025-30-October-2023.pdf . Our response to the AER's consultation will reflect our comments made in our initial submission.

MEA are strong advocates for policies and initiatives which support consumer energy resources (CER) [note this is referred to as distributed energy resources (DER) in the *Ergon Energy Network Regulatory Proposal 2025-30* paper (the Paper)]. A core policy we promote is time-of-use tariffs and its innate capability of allowing consumers to reduce energy bills through responding to price signals whilst simultaneously reducing demand pressures on the grid. This in turn reduces Ergon's network augmentation requirements.

Given the ambitious climate targets and corresponding electrification strategies at both State and Federal levels, we recommend that Ergon transitions from its proposed "build up pace" for CER to a more assertive "fast and furious" investment approach. Implementing these recommendations will position Ergon to proactively support Australia's electrification momentum rather than impede it. Reallocating a portion of the CAPEX augmentation budget to CAPEX CER enables swifter integration of CER into the network, reducing the need for additional augmentation funding. MEA further urges Ergon to reconsider gradually transitioning its vehicle fleet to electric vehicles (EVs) to align with Australia's ambitious climate targets and increasing trend of EV adoption.

We advocate Cost Reflective Time of Use and Generation (CRToUG) tariffs will likely influence consumer behaviour which simultaneously supports grid stability. While MEA supports increasing peak demand costs and the proposed time-of-use windows, we caution Ergon that vulnerable groups, such as low-income households, may be willing but unable to utilise CER assets to respond to price signals and avoid peak demand prices. For these cohorts' assistance may be necessary to avoid undue financial hardship.

It is important the role of licensed electrical contractors in installing CER technology is recognised by Ergon and the AER. Not only is this the appropriately skilled trade to assist in CER installation but will also assist in swifter CER rollout while driving down costs through market competition. We seek support from Ergon and the AER in these efforts. MEA stands ready to support and inform Ergon as a key stakeholder in Queensland's market.

Investment Priorities

Our position on the investment priorities has not deviated from our initial submission, and can be viewed at the following link for greater detail: https://www.masterelectricians.com.au/wp-content/uploads/2024/01/MEA-Submission-Ergon-Energy-Network-Regulatory-Proposal-2025-30-October-2023.pdf .

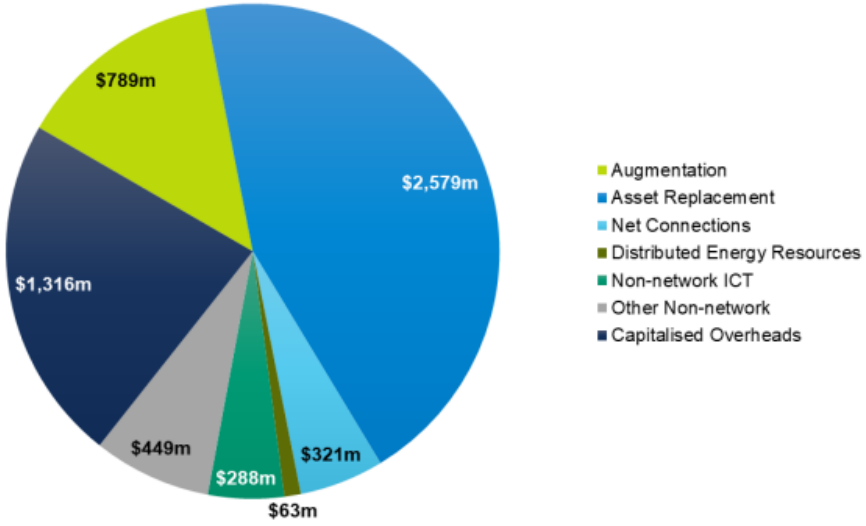
MEA believes that CER is a key solution to directly addressing price, reliability and climate change concerns of electricity supply and the network. The access to load sharing relieves demand pressures on the grid as consumers have increased ability to independently source, utilise and sell excess solar energy to the grid during peak times of demand. This will result in

reduced energy bills, especially when paired with time of use tariffs (ToU) designed to incentivise a change in consumer behaviour. We underscore the importance of utilising licenced electrical contractors as authorised service providers (ASPs) to install smart meters, accelerating CER adoption and facilitating the introduction of innovative tariffs and products to consumers.

Throughout multiple submissions, MEA has advocated many of CER's benefits which can only be fully realised when policies and infrastructure catch-up with technology currently at consumers' disposal. MEA supports Ergon's inclusion of a priority for CER network integration but believe that its status and importance should be lifted.

Expenditure Plans for 2025-30

Capital Expenditure (CAPEX)



Source: "Ergon Energy Network Regulatory Proposal 2025-2030" *Ergon* [January 2024], at 81.

Consumer Energy Resources (CER)

In our initial submission, MEA endorsed the 'fast and furious' investment option. Given Ergon's preference for the alternative 'build up pace' despite stakeholder preference for the 'fast and furious' investment approach, we urge the AER to reassess this decision.[1] Over the next five years, we anticipate a significant rise in electrification, particularly with the expected surge in EV adoption. It is imperative that CER infrastructure can accommodate this mass electrification. To ensure a seamless transition into CER and to fully maximise its benefits, the network must stay ahead of the electrification curve rather than lagging behind and playing catch-up.

By embracing the "fast and furious" approach of aggressively integrating CER, the entire energy market can experience quicker price reductions. This benefits not only those who are unable to generate solar power or install Battery Energy Storage Systems (BESS) but also facilitates the sharing of solar-sourced energy among neighbours in local networks.

If Ergon were to significantly invest in CER infrastructure capacity during the upcoming regulatory period, it would also prevent redundant investment in traditional augmentation.

[1] "Ergon Energy Network Regulatory Proposal 2025-2030" *Ergon* [January 2024], at 110.

Overinvesting in augmentation costs could result in consumers being charged twice — once for unnecessary augmentation and then again for necessary CER integration investment.

With CER, rather than relying on large, centralised storage that needs long runs of HV transmission lines to transfer the energy to our cities and towns, BESS is located in private homes and businesses and installed throughout towns and cities utilising the existing distribution infrastructure which can achieve dispatchable storage much cheaper and quicker than the current network. This removes the single points of failure, and increases network resilience, whilst at the same time incrementally and progressively increasing system storage capacity with each individual system installed. This is particularly significant for rural and remote areas as it gives greater access to more stable and reliable energy.

Augmentation, Connection Costs and CER

Ergon's revised CAPEX budget since the initial consultation has resulted in an increase in planned augmentation and connection CAPEX while decreasing CER CAPEX. In alignment with our response under *'Consumer Energy Resources (CER)'*, we reaffirm our stance in our initial submission, advocating for a further decrease in augmentation CAPEX and a greater increase in CER CAPEX. Whilst we accept that continued investment is required for augmentation and connection within the traditional network, MEA is concerned that the proposed investment spread unnecessarily over-invests in traditional networks. MEA posits that Ergon must be prepared for the era of electrification we are rapidly heading towards and allow customers in rural and remote areas the best opportunity to access secure and reliable energy.

Other Non-Network Capital Expenditure

It is unfortunate that Ergon has chosen not to proceed with transitioning a portion of their vehicle fleet to EVs. In our initial submission, we advocated a transitional approach for Ergon to adopt EVs as older vehicles become due for replacement. This transitional strategy would have allowed Ergon to gradually integrate EVs into their fleet while ensuring a smooth transition without disrupting their operations.

MEA are advocates of bi-directional charging and EVs capability to provide additional, flexible BESS capacity. We believe all residential and commercial premises should be positioned to charge EVs.

Considering Australia's ambitious climate goals and shift towards electrification, we argue that choosing not to allocate at least a portion of the $243 million fleet[2] CAPEX budget towards EVs and charging infrastructure is a misguided use of resources. With the expected surge in EV adoption over the near future, opting for non-electric vehicles in the meantime represents an unnecessary and extra financial burden on consumers. By investing in an electric fleet, Ergon would send a powerful signal to the community that EVs are mainstream, and not a threat to the grid.

Tariff Strategy

Engaging on Change the Five Themes

Strengthening of Peak Price Signal

MEA supports increasing the Long Run Marginal Cost (LRMC) but with caveats. We note there are vulnerable groups who are willing but unable to transition to CER. These groups include low-income households, tenants and high-rise apartment complexes. Consequently, while we support peak price signals to influence consumer behaviour to change their time of energy

[2] (n2), 122.

consumption, it must be ensured price signals are equitable to those vulnerable groups who are unequipped to respond to the price signals.

Nevertheless, we acknowledge that these higher costs can gradually offset maintenance expenses over time by alleviating demand pressures during peak periods. Furthermore, in light of Ergon's revenue cap, this will also reduce energy costs during minimum demand periods further incentivising consumers to utilise energy during off-peak windows.

Time of Use Windows

MEA are advocates of time-of-use tariffs designed to alter consumer behaviour to reflect price signals for storing, time-shirting, and selling excess solar power. Such incentives will likely incentivise the widescale uptake of BESS and HEMS, to put downward pressure on peak demand prices later in the day.

MEA supports:

- Residential customers - zero distribution charges for energy used between 11am-4pm daily, and a continued peak rate between 4pm-9pm.

- Small business customers – zero distribution charge for energy used between 11am-1pm daily, and a continued peak rate between 5pm-8pm weekdays.

- Large business customers – MEA supports the proposed tariff structures.

Two-Way Tariffs

Throughout our submissions in response to Federal, State and Industry CER consultations, MEA has consistently promoted cost reflective time of use and generation (CRToUG) tariffs as a core CER policy. This requires an appropriately priced Feed in Time Tariff (FITT) scheme when consumers provide excess energy back to the grid during peak demand. The charge cost for those exporting during the day will cover network maintenance costs for accommodating excess power at period of low demand. MEA sternly believes that pricing signals are necessary to incentivise CER implementation, enable consumers to maximise value for their private energy assets and cumulatively contribute towards stabilising the security and reliability of the grid.

Tariffs should be designed to incentivise consumers to invest in CER. By introducing ToU and CRToUG tariffs, consumers will receive price signals for exporting and storing excess generation in BESS or EVs. To enable these tariffs to successfully support the grid, the pace of smart meter installation needs to be accelerated. MEA believes recognising licenced electrical contractors as accredited service providers is the solution. The faster smart meters are installed, the faster consumers can implement CER technology, the faster innovative, demand-based tariffs can be fully optimised.

MEA supports dynamic connection agreements where they give consumers and Ergon greater flexibility to control and manage loads on the grid.

Load Control

Introducing CRToUG tariffs for consumers with CER infrastructure like rooftop solar PV, BESS, and HEMS removes the need for any load or generation curtailment/control. We note that load control device and generation curtailment during peak demand and generation may be warranted for grid stability for those consumers without access to BESS or HEMS who are unable to utilise dynamic load control during peak demand periods.

However, it is MEA's position that any consumer with BESS and dynamic load control provided by a HEMS, should be exempt from being forced to use load control or generation curtailment.

Tariff Streamlining

No issues noted, so long as it does not impact the successful implementation of CRToUG tariffs.

Key Benefits and Risks

Key Benefit for our Customers

We note key priorities for energy consumers include:

- Affordable
- Clean
- Reliable
- Secure.

CER directly address and provides sustainably reliable solutions to achieving consumer demands regarding energy:

- Financial – reduced energy costs are achieved by producing, storing, and trading surplus energy during peak demand periods. This boosts households' disposable income, thereby fostering a sustainably strengthened macro-economy.

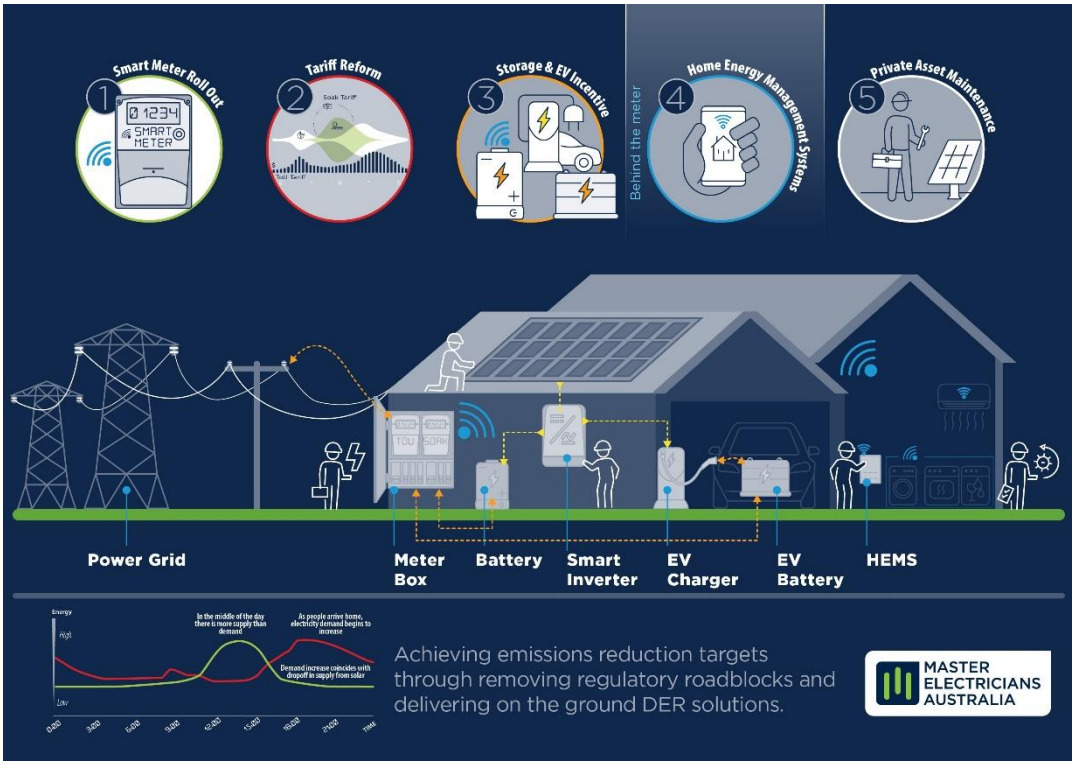
- Improved Equitable Access to Stabilised Energy – rather than relying on large, centralised storage that needs long runs of HV transmission lines to transfer energy to our cities and towns, BESS is located in private homes and businesses installed throughout towns and cities which can utilise pre-existing distribution infrastructure. Eliminating individual points of failure enhances network resilience, ensuring broader and fairer access to stable energy for vulnerable regions.

- Enhanced Grid Stability - With the anticipated population growth and increase in EV adoption, the stability and reliability of the NEM grid is at risk. CER mitigates this by lowering peak grid demand and enabling consumers to supply excess energy back to the grid during periods of undersupply.

- Climate Disaster Resilience - CER stands as a readily accessible solution that strengthens Australia's resilience to climate events. In the face of a climate disaster disrupting grid energy supply to households and businesses, consumers can seamlessly access solar energy generation and utilise stored surplus energy.

- Environmental – CER holds significant potential to support Australia's climate targets through offering an alternative to traditional fossil fuel energy sources.

Diagram illustrating how CER works and how this benefits consumers and the grid.

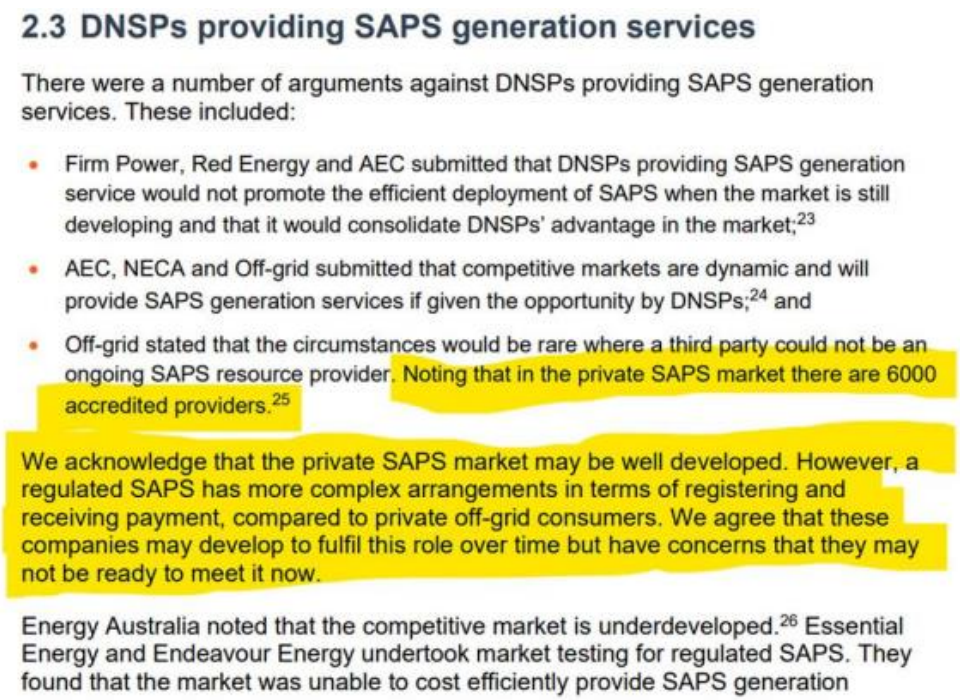


For these reasons, we strongly advocate for a greater allocation of funds towards CER CAPEX to facilitate a 'fast and furious' integration of CER into the NEM network. We propose reallocating funds accordingly.

Stand-Alone Power Systems (SAPS)

MEA supports the thinking behind the installation of SAPS to improve network resilience and to reduce the amount of transmission lines in areas where the cost of maintaining transmission lines is demonstrably greater than using a SAP. We do have concerns that the installation of SAPS is outside the scope of ERGON's core business as a DNSP, and that the principles of a DNSP being a Supplier of last resort and Ring-Fencing considerations come into play here.

Through the Ring-Fencing Guideline Version 3 – Explanatory note, the AER acknowledges there are 6000 licensed private SAP installers in a well-developed market, yet still expresses reservation on using them, appearing to favour DNSPs performing the works.



2.3 DNSPs providing SAPS generation services

There were a number of arguments against DNSPs providing SAPS generation services. These included:

- Firm Power, Red Energy and AEC submitted that DNSPs providing SAPS generation service would not promote the efficient deployment of SAPS when the market is still developing and that it would consolidate DNSPs' advantage in the market;[23]
- AEC, NECA and Off-grid submitted that competitive markets are dynamic and will provide SAPS generation services if given the opportunity by DNSPs;[24] and
- Off-grid stated that the circumstances would be rare where a third party could not be an ongoing SAPS resource provider. Noting that in the private SAPS market there are 6000 accredited providers.[25]

We acknowledge that the private SAPS market may be well developed. However, a regulated SAPS has more complex arrangements in terms of registering and receiving payment, compared to private off-grid consumers. We agree that these companies may develop to fulfil this role over time but have concerns that they may not be ready to meet it now.

Energy Australia noted that the competitive market is underdeveloped.[26] Essential Energy and Endeavour Energy undertook market testing for regulated SAPS. They found that the market was unable to cost efficiently provide SAPS generation

Source: "Electricity distribution Ring-fencing Guideline Explanatory statement – Version 3" *Australian Energy Regulator* [November 2021], at 15.

MEA contends this directly contradicts the principle of "supplier of last resort", and that DNSPs would be better off engaging directly with industry to build capacity and to formulate a clear purchasing/supply policy for Electrical Contractors to facilitate the installation of Regulated SAPs on private assets if that is deemed the best approach, using a clear and transparent guideline to arrive at that decision.

In the same AER Ring Fencing Guideline Version 3 – Explanatory note 3, there is a table identifying SAP sites, listing Ergon with 2000 sites.

Table 1 – Potential SAPS Sites for each DNSP

DNSP	Forecast Deployment Data
Ergon Energy	1000-2000
Essential Energy	880-1400
AusNet Services	300-400
Ausgrid	175-250
Endeavour Energy	12
Powercor	10
SA Power Networks	5
TasNetworks	5
CitiPower	Unknown
United Energy	Unknown
Evoenergy	Unknown

Source: "Electricity distribution Ring-fencing Guideline Explanatory statement – Version 3" *Australian Energy Regulator* [November 2021], at 17.

MEA believes very strongly in the principle of private assets being worked on by the private sector, and DNSPs living up to the promise of "supplier of last resort". In short, if works are to be carried out on private property, the default position should be for a licensed electrical contractor in the private sector to perform the electrical works and the DNSP to perform the regulated works (such as metering).

MEA accepts there will be circumstances where Ergon, in living up to its community service obligations in remote areas, may find that it is not commercially viable for a private provider to provide the services. However, more-often-than-not, there are many QLD electrical contractors in the private market who specialise in SAPS, employ staff in regional and remote areas, and provide an efficient market competitive product. This is recognised in section 2.1 of the AER document.

2.1 Contestable supply of generation services

Regulated SAPS are split into the provision of two service groups:

- distribution services provided by DNSPs and regulated as such under the NER, and
- generation services provided by a SAPS resource provider. This service is considered as an "other service" under ring-fencing. As such DNSPs are not allowed to provide these services.

The AEMC noted in its review that the ring-fencing guideline might, in some circumstances, result in outcomes that are not in consumers' interests.[16] Through submissions, a number of instances were identified in which a DNSP may not be able to find a third-party SAPS resource provider, including that:

- A third-party provider is not available or willing to offer services;[17]
- The SAPS may be too small to make outsourcing the generation services economical;[18] and
- A third party may not be able to offer the ongoing operating and maintenance required to meet NER technical and performance standards.[19]

In these circumstances, a DNSP may not be able to find a SAPS resource provider. This could result in consumers not being switched to a regulated SAPS, even though it is the most economical option for DNSPs and in consumers' long-term interests to do so. Therefore, there may be merit in the DNSP acting as the SAPS resource provider.

Source: "Electricity distribution Ring-fencing Guideline Explanatory statement – Version 3" *Australian Energy Regulator* [November 2021], at 13.

MEA asks for clarity on the following –

- A clear and transparent policy with defined conditions for the installation of a SAPS to replace hard wired network equipment.
- A clear and transparent definition of “supplier of last resort”, to define the circumstances where Ergon could install a SAPS instead of a licensed Electrical Contractor.
- A purchasing/pre-qualification policy to be developed in consultation with the industry to give clarity as to what standards suitably qualified electrical contractors must meet to go on a panel of suppliers for the installation of SAPS.

MEA is committed to improving resilience and safety on the industry and making best use of new technologies to achieve safe and efficient community outcomes.

Conclusion

Ergon should reconsider its choice of the "build up pace" investment CER option and opt for the alternative "fast and furious" investment approach. By aggressively integrating CER into its network during the upcoming regulatory period and allocating a larger budget to CER, Ergon could reduce the need for extensive infrastructure refurbishment costs. MEA believes that incentivising co-investment with consumers in CER will ultimately result in Ergon spending less money on network capacity as the peak demand smooths dramatically with the increasing adoption of distributed BESS to time shift the daytime oversupply to the evening peak.

We have maintained our position that Ergon should slowly begin transitioning its vehicle fleet to electric vehicles (EVs). Given the ambitious climate targets set at both the State and Federal levels, we foresee a substantial increase in EV adoption in the near future. MEA contends that continued investment into only non-electric vehicles is financially inefficient for consumers, considering the anticipated impending shift towards EVs.

Throughout multiple Federal and State consultations, MEA have consistently advocated that Cost Reflective Time of Use and Generation (CRToUG) tariffs are a core policy which benefit all stakeholders. Adopting such tariffs will shape consumer behaviour to respond to price signals thereby assisting in stabilising and maintaining the grid in response to minimum and peak demand.

It therefore stands we support increasing the peak demand long run marginal cost as it provides an incentive for consumers with CER assets to adjust the timing of their energy usage, thereby alleviating pressure on the grid. However, we advise against setting prices too high, as this may pose challenges for vulnerable groups, such as low-income households, who may be willing but unable to access CER assets to respond to these price signals. We also support the proposed time of use windows. However, for this strategy to be successful, Ergon must actively embrace private BESS and EVs, and reduce barriers to integration within the local network.

CER addresses core consumer demands including affordable, clean, reliable and stable energy. Swift and substantial investment in CER is a clear solution that meets consumer needs while enabling Ergon to uphold grid stability and functionality.

Insignificant acknowledgement has been given towards the role of the private sector installing CER technology within private premises. MEA strongly believes that licenced electrical contractors should be recognised as accredited service providers and should be exclusively used for installing/replacing metering in private residential and commercial premises. This will in turn increase the pace of CER technology rollout. Furthermore, utilising the private sector will create market competition within the metering sector, driving down consumer costs compared to being left to retailers and their metering providers solely performing these works. MEA would appreciate the support of Ergon and the AER in these advocacy efforts.

As a key stakeholder in the Queensland market and a critical bridge between consumers and Ergon, MEA stands ready to continue engaging in discussion to inform Ergon and the AER.