

Energex Regulatory Proposal 2025-30



Turbo Charging Distributed Energy Resources

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 Energex's 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-Energex-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 *Energex 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 the network augmentation requirements of Energex.

Given the ambitious climate targets and corresponding electrification strategies at both State and Federal levels, we recommend that Energex transitions from its proposed "build up pace" for CER to a more assertive "fast and furious" investment approach. Implementing these recommendations will position Energex to proactively support Australia's electrification momentum rather than impede it. Reallocating a portion of the CAPEX augmentation budget to CAPEX CER should enable swifter integration of CER into the network, reducing the need for additional infrastructure augmentation funding. MEA further urges Energex 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 for Cost Reflective Time of Use and Generation (CRToUG) tariffs to influence consumer behaviour which simultaneously supports grid stability. While MEA supports increasing peak demand costs and the proposed time-of-use windows, we caution Energex 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 prevent undue financial hardship.

It is important the role of licensed electrical contractors in installing CER technology is recognised by Energex 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 Energex in these efforts. MEA stands ready to support and inform Energex and the AER as a key stakeholder in Queensland's energy 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-Energex-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 Energex’s inclusion of a priority for CER network integration but believe that its status and importance should be lifted.

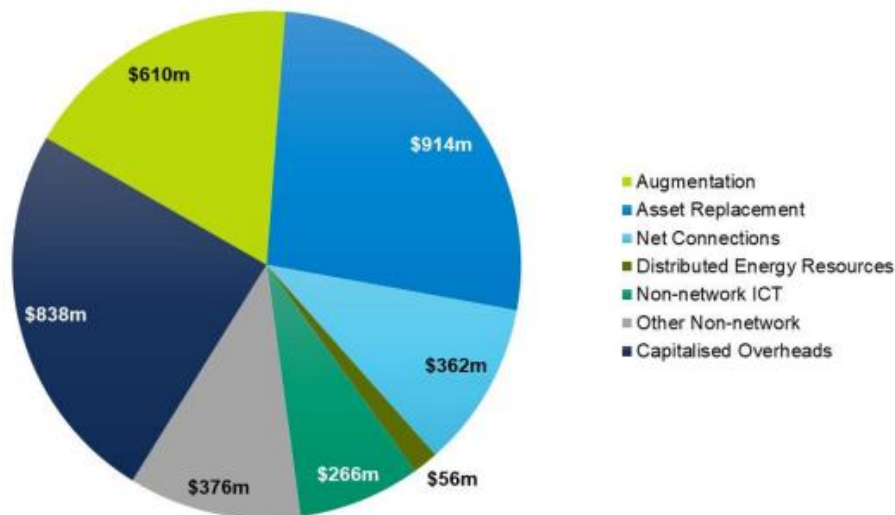
Deliver the Electricity Infrastructure Required for the Brisbane 2032 Olympic and Paralympic Games

The Olympics and Paralympics (the Games) incentivises both short- term and long-term economic benefits through tourism and international investment. Having unreliable network electricity during this global event can negatively impact such economic benefits.

Benefits of investing in the Games will flow beyond the event and into the local community where residential and commercial buildings will utilise improved network sooner than planned. These investments extend beyond the Games, with a continued beneficial impact for the community in the long term. MEA highlights Energex’s investment plan to “ensure only future planned works identified as being critical to delivering a reliable supply of electricity for the duration of Brisbane 2032 are brought forward and that expenditure is prudent and efficient”¹. Any costs beyond necessary investment could be socially unjustifiable for a one-off event.

Expenditure Plans for 2025-30

Capital Expenditure (CAPEX)



Source: “Energex Regulatory Proposal 2025-30” *Energex* [January 2024], at 82.

¹ “Energex Regulatory Proposal 2025-30” *Energex* [January 2024], at 64.

Consumer Energy Resources (CER)

In our initial submission, MEA endorsed the 'fast and furious' investment option. Given Energex's preference for the alternative 'build up pace' investment approach, we urge the AER to reassess this decision. 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 Energex were to significantly invest in CER infrastructure capacity during the upcoming regulatory period, it would also prevent redundant investment in traditional augmentation.. 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.

Augmentation and CER

We acknowledge that Energex's revised CAPEX budget since the initial consultation has resulted in a reduction in planned augmentation costs. While we appreciate this adjustment, we maintain that further changes are necessary. 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 Energex must be prepared for the era of electrification which we are rapidly heading towards, allowing all consumers the best opportunity to maximise CER benefits.

Other Non-Network Capital Expenditure

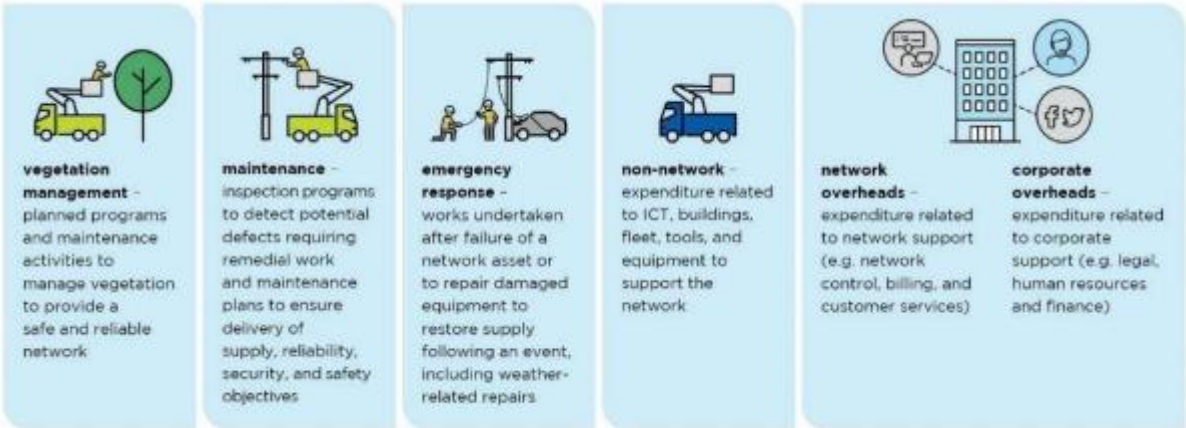
It is unfortunate that Energex has chosen not to proceed with transitioning a portion of their vehicle fleet to EVs. In our initial submission, we advocated a transitional approach for Energex to adopt EVs as older vehicles become due for replacement. This transitional strategy would have allowed Energex 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. MEA 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 \$199 million fleet CAPEX budget² 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, Energex would send a powerful signal to the community that EVs are mainstream, and not a threat to the grid.

Operating Expenditure (OPEX)

MEA acknowledges Energex’s proposed OPEX has materially reduced, particularly with notable adjustments related to smart meters and the applied productivity factor. Given the current cost-of-living crisis, where some households and businesses are struggling with basic needs, it is imperative that Energex takes proactive measures to minimise costs passed on to consumers.



Source: "Energex Regulatory Proposal 2025-30" Energex [January 2024], at 130..

Impacts for Network Performance

Whilst we appreciate network resilience is a vital expenditure for Energex, we caution the proposed OPEX does not allow for over-indulgence in costs relating to the upgrading, replacing and/or refurbishing of transmission infrastructure which would be better directed towards CER integration.

Metering Services

MEA support the imposition of legacy network costs to be borne by all customers on the network as it is the most equitable approach. Nevertheless, we suggest introducing alternative incentives to stimulate increased adoption of smart meters to ensure the shared cost does not demotivate those who are yet to adopt smart meters from doing so.

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.

² (n1), at 121.

Consequently, while we support peak price signals to influence consumer behaviour to change their time of energy 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 Energex'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 ToU tariffs designed to alter consumer behaviour to reflect price signals for storing, time-shifting, 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 (CRTToUG) 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 and 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 CRTToUG 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 Energex greater flexibility to control and manage loads on the grid.

Load Control

Introducing CRTToUG tariffs for consumers with CER infrastructure like rooftop solar PV, BESS, and HEMS would mean that there would be no need for any load or generation curtailment/control. 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 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 CRTtoUG tariffs.

Key Benefits and Risks

Key Benefit for our Customers

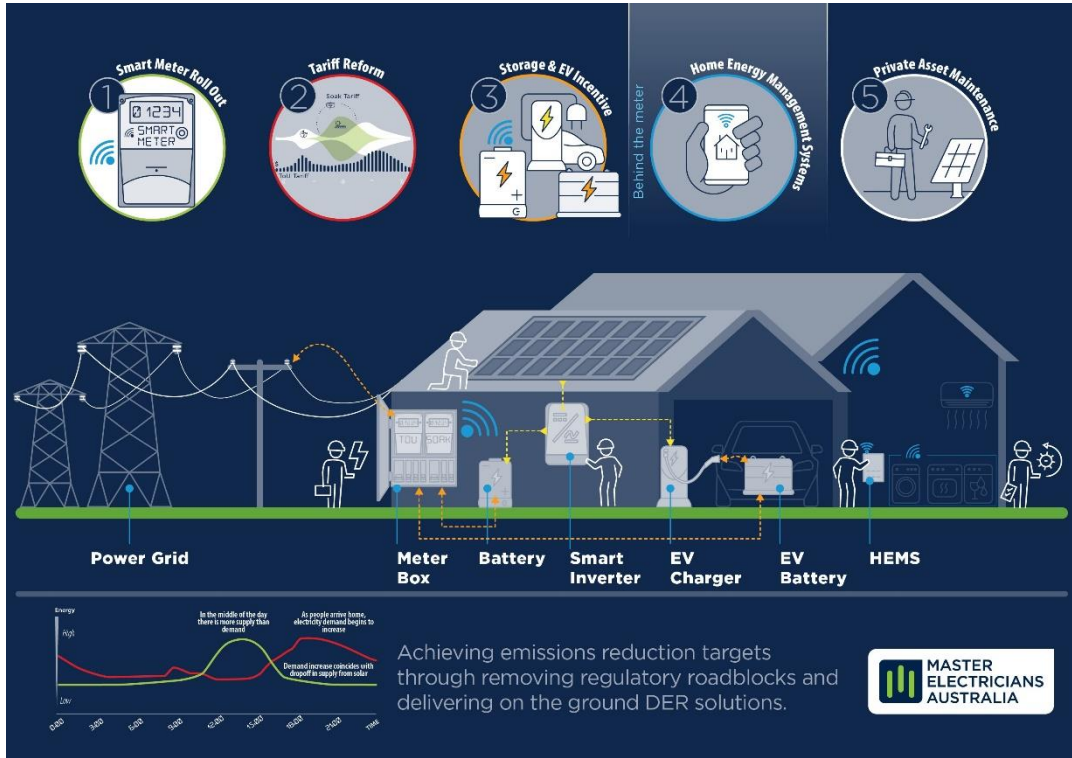
We note key priorities for energy consumers include:

- 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 DER CAPEX to facilitate a 'fast and furious' integration of CER into the NEM network. We propose reallocating funds.

Conclusion

Energex 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, Energex could reduce the need for extensive infrastructure refurbishment. MEA believes that incentivising co-investment with consumers in CER will ultimately result in Energex 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 Energex 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 (CRTToUG) 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, Energex must actively embrace private BESS and EVs, and reduce barriers to integration with 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 Energex 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 Energex and the AER in these advocacy efforts.

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