Consumer Energy Resources Taskforce
Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
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Submitted via online survey

20 August 2025

Re: Redefining roles and responsibilities for power system and market operations in a high CER future

Thank you for the opportunity to provide feedback on the *Redefining roles and responsibilities for power system and market operations in a high CER future - Consultation Paper to progress M3/P5 workstreams of the National CER Roadmap* (Consultation Paper).

The Energy Efficiency Council (EEC) is the peak body for Australia's energy management sector, working to ensure Australia harnesses the power of efficiency, electrification and flexible demand to deliver a prosperous, equitable, net zero Australia.

The EEC fully supports the Consultation Paper's assertion that consumer energy resources (CER) such as rooftop solar, batteries, electric vehicles and flexible loads can deliver significant consumer benefits and system value by improving reliability and reducing costs.

Unlike supply-side infrastructure, most CER are connected to the low voltage (LV) distribution network. As such, distribution network service providers (DNSPs) are in a unique position to support the integration and effective operation of CER due to their access to data and understanding of when, where, and what types of CER would provide system benefits.

Some DNSPs are providing an increasingly diverse set of services and value for customers by evolving their operations to achieve greater productivity, efficiency, utilisation and flexibility. However, without system-level reforms to regulation and incentives, the vast majority of DNSPs will have no commercial or regulatory driver to change their current business models.

The EEC has provided responses to high level themes set out in the Consultation Paper below.

The capability framework (chapter 3)

The EEC commends the CER Taskforce's detailed work on the capability framework. The EEC is in general agreement with the overall assignment of roles and responsibilities set out.

The Consultation Paper notes that DNSPs currently play the role of DNOs and DSOs and that a key question is whether they can do this effectively under current governance arrangements. The EEC strongly suggests that regulatory reform is needed to ensure that DNSPs can play both roles effectively and that this should be a priority action (see below). This action may inform how the roles, expectations and accountabilities in the six areas in the Consultation Paper are formalised.

Distribution-level market design (Chapter 4)

The EEC considers that there may be a role for a distribution level market in future and notes CEPA's assessment of the three market design options results in Design C being the most likely to promote efficient investment, efficient operation and adaptability, albeit with higher complexity and cost.

However, there are incremental steps that can be taken now at less cost, and in a shorter timeframe to integrate CER for the benefit of the whole system.

The EEC therefore supports a modified version of Design A. The EEC recommends that network constraints are included in the optimisation problem. If DNSPs are incentivised correctly, enabling flexible demand through increased orchestration of CER or through off market mechanisms should be included in their role.

Design C could potentially be trialled in a suitable jurisdiction in parallel to the evolution of the current market model, and the changes to governance structures being put in place (discussed in more detail below).

The EEC tentatively supports the position set out in the NEM Review Draft Report that 'integrating CER within the existing market is preferable to creating new distribution-level wholesale markets.'

However, successfully integrating CER into the wholesale market as envisioned by the NEM Review Panel, relies on mechanisms such as the Wholesale Demand Response Mechanism (WDRM) and Voluntary Scheduled Resources engaging in 'Dispatch Mode'. As noted in previous EEC submissions, there are limitations in the design of these mechanisms, which need to be addressed to enable greater integration of CER.

If CER is not effectively integrated into the NEM wholesale market through the evolution of current market mechanisms to allow more CER participation in the wholesale market, and reform of DNSPs' role and responsibilities (as set out below), more fundamental reform should be considered.

The EEC believes the successful integration of CER depends on this evolution of the wholesale market, and reform to the role and responsibilities of DNSPs.

Governance options (Chapter 5)

The EEC believes the current governance arrangements (which includes both the institutions and the regulatory regime) are not fit for purpose and have helped maintain a perverse incentive for DNSPs to expand network infrastructure with little regard for non-network solutions, such as orchestrated CER and energy efficiency.

Broadly, the EEC supports pursuing regulatory solutions (Option 4), complemented by a coordination and facilitation body (Option 3).

Pursue regulatory reform

The EEC strongly advocates for regulatory reforms to address issues identified in the Consultation Paper and incentivise DNSPs to consider how the network can best facilitate whole of system benefits. Some examples of areas of reform are set out below, but the EEC recommends a full review of DNSP regulation and incentives is undertaken.

If the DNSPs are regulated and incentivised to comprehensively consider non-network solutions, DNSPs would be best-placed to fulfil the role of the DSO.

There is the potential for this to change over time, perhaps with the role of DSO being tested in a suitable jurisdiction, but the EEC recommends prioritising reform of the current framework over introducing new actors at this stage.

Reforms must create a more level playing field between capex and opex expenditure

The current economic regulation of Australian DNSPs favours traditional network infrastructure investment over demand-side solutions including aggregated CER. As noted in the Consultation Paper 'potential preference for network options (capital expenditure (capex) based) over CER or other non-network options (operating expenditure (opex) based) is because capex is capitalised into a network's regulatory asset base (RAB) on which they earn a regulated return'.

The EEC supports a detailed investigation and consideration of possible new models to level the playing field between non-network solutions and network solutions. This could include consideration of replacing separate capex and opex allowances with a unified totex model.

Reforms should aim to improve network utilisation and consider other objectives

DNSPs currently have very little incentive, beyond reputational risk, to increase network utilisation. The EEC considers that changes to incentives are needed to link network utilisation to commercial returns.

The current metrics of network utilisation are also no longer appropriate in a two-way energy system. Researchers at the Institute for Sustainable Futures at UTS have proposed two alternative headline metrics to traditional network utilisation which should be further explored:

- Total Energy Throughput Utilisation (TETU) focussed on maximising the customer value that is facilitated by a grid connection, in the form of energy imported from the grid, exported to the grid and self-consumed.
- Two-way Power Flow Utilisation focussed on understanding and balancing the level of capacity risk accrued to deliver the network productivity represented in the TETU. This provides visibility of the critical time-of-day and seasonal variations in two-way grid usage that inform how TETU can be maximised[1].

Reforms should also examine other objectives that DNSPs could contribute to achieving, including accelerating decarbonisation or building networks that are more resilient in a changing climate.

A new body is needed to provide consistency and coordination

Consistency in data sharing and transparency on levels of real time constraints across DNSPs to other market participants is essential to enable aggregators and retailers to unlock the potential of

[1] Langham, E, Ibrahim, I., Rispler, J and Roche, D. (2024). Reimagining Network Utilisation in the Era of Consumer Energy Resources. Prepared by UTS with the support of Energy Consumers Australia. Version 1.1, Nov 2024.

distribution-level CER. Separate to enabling real-time data sharing, consistency in data reporting more generally is needed to accurately compare the performance of DNSPs across the country.

The EEC supports the formulation of a Coordination and Facilitation Body (CFB) who is responsible for consistency and coordination of systems and processes across DNSPs.

The EEC looks forward to continuing to engage with the Consumer Energy Resources Taskforce on this workstream. For further information on anything in this submission, please contact me on jeremy.sung@eec.org.au or 0411 934 701.

Best regards,

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