

## NSW DPE Promoting Innovation – Responses (where given)

**8a. Are the suggested guiding principles appropriate and adequate to guide government strategy for enabling high levels of active DER in New South Wales?**

Pricing signals should be utilised as an initiative to best serve driving towards net zero and reducing energy consumption. A region-specific approach aimed at kWh's consumed, through pricing incentive regimes, would form a key pillar in any net zero plan.

**8b. What practical measures should the government consider to support DER and the suggested guiding principles?**

Government strategies that encourage a shift towards DERs should equally consider Energy Efficiency (EE) measures to effectively enable and support DER access, via a holistic energy approach. In this regard the goal would be to reduce household energy consumption on average and grow DER systems whilst educating the consumer. Supporting the consumer through multiple avenues including simplification of both DER and EE options would be beneficial. DERs based on such a model would contain highly efficient and flexible PCEs to manage bi-directional energy flow to maximise household self-consumption. Further, they should be a reliable and proven technology mix to afford the highest availability of power at all times and drive equitable LCOE DER systems that are robust as well as the lowest cost solutions network wide.

**8e. What could be done to ensure vulnerable, low income and other 'locked out' households are not disadvantaged by the energy transition?**

Consideration to new building codes to include passive solar designs, particularly around thermal water/heating/cooling, would ultimately assist low-income households and ensure they do not miss out on this energy transition. Adaptation of passive house design integrated with active solar energy and EV charging across the early stages of building development (design) is key to avoid high cost later stage integration. Daytime charging for workforce EV and bicycle charging to maximise solar production and reduce demand on the grid outside of peak sun hours is highly recommended. Sizing sub boards to be future ready to accommodate BESS and PV, is an example of the sort of forward thinking required.

**8h. What are the most promising clean energy solutions for delivering material private, network and market benefits?**

Locally designed, manufactured and supported clean energy technologies offer the greatest net benefit to communities and the wider economy. Demonstrated years of field deployment and stranded asset avoidance must be considered to ensure energy security at a local and national level.

**9a. How can customers be encouraged to only install solar systems that suit their current consumption needs? What would be the most effective measure to achieve this aim?**

Limiting households to a minimum sized PV system is short sighted given the collective shift to all electric homes, which are environmentally more responsible. As the average Australian household owns their home for >11 years, the owner/occupier continues to determine the households needs, so why restrict the installed capacity - which is ultimately limited by available roof space. Depending on energy consumption, export limiting may need to be deployed.

**9c. What can the NSW Government do to mitigate the potential problem of breaching lack of load thresholds?**

In periods of lack of load, these will likely lead to low export tariffs and low energy import. This will incentivise industry and consumers to install batteries or personal load management devices. In this way batteries act as a load for energy arbitrage.

**9e. What issues or barriers, including around consumer protections, need to be considered if implementation of dynamic operating envelopes is pursued?**

There are significant benefits in tariffs that reflect real-time pricing. With clarity and certainty on such pricing, again consumers and industry will leverage this affect for greatest return. We stress that clarity and certainty is key in this regard.

**10b. Is there value in DNSPs being able to remotely access or communicate with DER assets on their network to check and dynamically manage settings in accordance with changing conditions on the network?**

Provided customer data is maintained and secured at all times, it can be helpful to the DNSPs to have greater control and functionality, in turn promoting more DERs in the grid.

**10c. If an additional check of the inverter setting is required, who would be best placed to carry this out?**

Customers would best benefit going to a qualified third-party provider.

**10d. Should New South Wales fast track mandating that all new DER installed must be active (i.e. visible and controllable)? What approaches should be considered to ensure these assets are active?**

Unless we can have a guarantee of 100% compliance, this would be a fractured and potentially pointless mandate. Where complexity can be reduced it should be. In this instance the additional connection is entirely redundant.

**11b. What should the NSW Government do to help improve the visibility of changing operating conditions across the distribution network? Are behind the meter DER assets a viable and cost-effective solution?**

DERs behind the meter are a viable option with many value-added benefits. It should be understood though as to who (customer or DNSP) is seeking the greatest benefit.

**14a. What are the stakeholder views on the AEMC's proposed service delivery model?**

Consumers should have choice within an open market as to whether they go to a third party for SAPS or DNSP-led solution. Depending on the situation a microgrid system or an individual system can be both as equally successful. The quality, quantity and reliability of these systems needs to be as a minimum as good or better than the pre-existing grid connection. Augmenting the grid must be performed with utility grade equipment. Any offers made to end consumers should clearly stipulate response time to site for any discontinuation of supply. Providers of SAPS should be able to respond and rectify any breakdown within 24 hours. This then requires provision of adequate components and/or sub-assemblies to fully support the SAPS network. Furthermore, no system should be implemented without a backup energy source. In regard to asset ownership, the market influences should allow this decision, be it outright purchase, PPA or other (e.g. lease agreement).

**15a. What are stakeholder views on the AEMC's proposed pricing model?**

Pricing should be both competitive and transparent in all instances. In the proposed free market model, the DNSP is open to charge in accordance with the NEM, however this may put it at a commercial disadvantage.

**15b. To what extent is non-cost reflective pricing a barrier to the roll-out of SAPS systems?**

Pricing for SAPS should reflect triple bottom line (environment, economic and social) impacts.

**15d. To what extent is the pricing model likely to affect the efficient sizing of the SAPS system and the customer's experience?**

Pricing will not be a one size fits all and any pricing structure that doesn't consider the customer first will hinder uptake significantly.

**16c. Should consideration be given to an increased exemption cap above that provided by the AER's national exemption cap?**

Procurement of SAPS related goods and services should be made transparent and within a consistent framework where procurement processes require at a minimum greater than one tender or quotation.