17 September 2020

Ed Chan Director Australian Energy Market Commission

Lodged online

public interest ADVOCACY CENTRE

Dear Mr Chan,

Submission to Distributed Energy Resources integration rule change

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit legal centre based in New South Wales. Established in 1982, PIAC tackles systemic issues that have a significant impact upon people who are marginalised and facing disadvantage. We ensure basic rights are enjoyed across the community through litigation, public policy development, communication and training. The Energy + Water Consumers' Advocacy Program represents the interests of low-income and other residential consumers, developing policy and advocating in energy and water markets.

PIAC welcomes the opportunity to respond to the AEMC's consultation paper.

Cost reflective tariffs for consumption can help address DER access

As the TEC/ACOSS rule change notes, the Rules were built around an assumption of one-way energy flow which is being challenged by the uptake of Distributed Energy Resources (DER) such as rooftop solar and batteries. Without intervention or reform, equity issues will arise as households without DER pay a higher proportion of network costs and network limitations prevent some households from investing in their own DER.

These barriers to the efficient uptake and use of DER can be addressed, and the impacts greatly reduced, by the introduction of more cost reflective tariffs for consumption.

Applying more cost reflective tariffs for consumption (such as peak demand charges or critical peak pricing) would better reflect the impact consumers place on the network and incentivise optimising their DER systems for self-consumption. Households would thereby be incentivised to shift load to coincide with solar generation, orient solar panels to face west (and/or east) to coincide better with energy consumption and to store excess solar generation for use during times of higher demand. This would help limit the impact of DER on networks open up more network capacity for exporting DER in a more deliberate and efficient way.

PIAC recommends that any major reforms to pricing of export or generation capacity should follow, not precede, the full implementation of cost-reflective pricing of consumption.

Assisting the transition to cost reflective tariffs

Support measures to protect vulnerable households with high peak usage from unintended impacts of cost reflective pricing are necessary and achievable.

Energy concessions and rebates play a crucial role in supporting low-income households. The current flat concession rates, however, do not scale to a household's energy

Level 5, 175 Liverpool St costs, particularly as household sizes and load profiles vary. PIAC recommends

Sydney NSW 2000

Phone: 61 2 8898 6500 Fax: 61 2 8898 6555 www.piac.asn.au

a shift towards a percentage-based primary concession to provide support alongside the transition to cost reflective pricing.

The cost reflective component of tariffs may be phased in to ensure consumers with high peak usage have time to understand new tariff structures and respond accordingly. For example, the cost-reflective component, such as a peak demand charge, could be set to initially account for only a small proportion of the LRMC, and be incrementally increased to recover LRMC and some residual costs as less is recovered through volumetric and fixed charges.

DER connections must provide a default export capacity

Any DER connection must come with a default level of export capacity – for instance 5 kW – above which consumers could pay for greater access to the grid. Permitting a basic level of export for all DER connections allows more households to benefit from sharing solar generation, especially as peer-to-peer trading, virtual power plants and community batteries become more common. PIAC opposes setting a default level of export at 0 kW outside of limited specific locations that are identified to have materially constrained network capacity.

Households must be given the option to receive higher export capacity in return for a one-off charge. The level of basic export allowance and the charge for higher allowances must be regulated and transparently determined.

An up-front connection charge for export is preferable

If any change were to be made to allow charging for DER export to the grid, PIAC prefers an up-front connection charge.

This better aligns with a household's one-off decision to choose and invest in a DER system, signals to the household the full impact (both positive and negative) of the decision to invest, and reflects the nature of network changes and upgrades required. It may prompt a better optimised DER installation that, for example, has less need for export capacity by including battery storage and/or westerly orientation of solar panels. These decisions are more easily and economically made as part of the initial installation than as a retrofit partway through a DER system's life.

PIAC's view is that DUOS-type charges for export capacity are unlikely to ever be in the consumer interest. While they may have merit in a very distant future if DER becomes the primary source of distributed energy, an ongoing, DUOS-style charge for export capacity would require comprehensive changes to network and retailer charging and billing systems, tariff setting processes, and cost and risk allocation. DUOS- style charges also provide price signals removed from the DER investment decision, thereby weakening the incentive for better optimised systems.

Distributor obligations to plan for DER

If DER owners have paid for increased DER export capacity as part of their connection charge, this creates an obligation for the distributor to deliver on this capacity. If there is insufficient network capacity to allow for the export capacity DER owners have paid for, the network could compensate households (like under guaranteed service level obligations). Given that network upgrades are often lumpy and may take time to deliver, compensation payments can be made to affected households until a critical mass is achieved to justify the network expenditure.

While incentive schemes play an important role in driving network investment and operations, PIAC is cautious of introducing any new incentive schemes. These can have complicated

interactions with existing obligations and incentives and risk of being ratcheted upwards, resulting in consumers potentially paying to deliver services in excess of what they value them.

Continued engagement

PIAC would welcome the opportunity to meet with the AEMC and other stakeholders to discuss these issues in more depth.

Yours sincerely,

Miyuru Ediriweera

Senior Policy Officer, Energy and Water Public Interest Advocacy Centre

Direct phone: +61 2 8898 6525

E-mail: mediriweera@piac.asn.au

Craig Memery

Policy Team Leader, Energy and Water Public Interest Advocacy Centre

Direct phone: +61 2 8898 6522

E-mail: cmemery@piac.asn.au