I propose the new rule allowing DNSPs to charge residential customers for power exports (FIT) be rejected. This is a too simplified approach to power management for residential customers.

My solution would be to have control of power to the house appliances, air-conditioning, pool, house battery, solar PV and a BEV, with suitable metering and controls at each residence, with these being accessible, so the owner decides whether to import or export or use his own power.

The charges for power exports (FIT) should be rejected:

- The proposed export charges would be a very small proportion of revenue eg total Qld revenue of $4,863m/yr; all Australia would be much larger.
- The AEMC report states the customer cost (those with solarPV) will average at $74/year each. Victoria states it will cost approx. $27 m/year.
- The Qld Government takes a dividend from Energy Queensland Limited (as in EQL budget) of $443m (2019-2020 FY), and EQL states the Solar Bonus scheme costs $277m/yr. This is an example of a much higher tax on customers than the proposed export FIT.
- The AEMC report (p251) states “As such export charges have a small impact on the incentives for new solar PV systems, particularly small and moderate systems sizes, and even at large sizes, the majority of the revenue incentive remains.”. They recognise the low value of that FIT.
- The returns on investment for SolarPV installations have been reducing over the last 10 years, as the costs added to the power bill increase eg the fixed charge going from $0.1/day to $1.17/day, metering charges, increased energy import charges per kWh, and reduced energy export prices paid per kWh. This export charge is another expense to be added.
- Will this export charge being introduced increase in the future?

If an export (fit) charge must be made, it should be a percentage charge applied to the regular bill of eg less than 5% of the export rebate. An efficient way to move power exports to desired times would be to adjust the export payment rates by time, not to apply an export tax.

A wholly renewable energy society should be the objective, and implementing costs and taxes on generated power by a small section of the community will be a disincentive. Normally taxes are applied to profits, not revenues. This charge is a tax being applied to solarPV revenues, and would be more efficient if applied within existing taxation collection systems.

All residential customers should be offered low cost solarPV systems of at least 7kW with batteries of at least 12 kWh to be independent of the grid, and allow their other system uses to run on renewable power, eg BEV, HWS, and A/c also.

Further, there should be a push by governments (and the AMEO) to improve household and other energy efficiency, so power bills reduce over time.
On DER control proposed by the utility companies, pool pumps must be controlled by the owner, because the reason the pumps are run is to control the Chloride to a safe limit for swimming and/or prevent algae growing in the pool water. How can an external party ensure the pool system is safe to turn on or off as the pool system is subject to maintenance, repair, pump speed, water level and temperature effects, and power cost considerations?

I see these major problems with power systems across Australia:

- The generation by solarPV for domestic customers is not measured and reported. SolarPV generation is becoming a significant impact on the NEM, but only the export power is tallied.
- There is a large price differential for power from the different fuels, and use of larger amounts of renewables should lower the costs. If so, how will all the corporations involved be funded?
- The NEM should be run with an objective to cut greenhouse gas emissions, as well as the price. The priority should be Solar/Wind/Hydro (renewable), Gas, and then Coal. How can this be promoted?
- There is a large difference between the power cost in the NEM (wholesale about $100/MWH) and that paid by domestic consumers (retail $300/MWH). Is there a program to reduce this price difference?
- Qld proposed a charge for BEV power use with a specific connection, but if supplied by a house solarPV system, it could be free to the consumer. This should be able to be provided by the owners SolarPV at free cost of power.
- The Qld Solar Bonus Scheme should be amended as it states if the inverter size in increased, the FiT tariff is stopped. This restricts a residential customer to increase their generation, and restricts growth of renewable energy over many households.

Regards,
David Collen BE(Chem), retired.