Re: INTEGRATION OF DISTRIBUTED ENERGY RESOURCES 12/5/2021

Here is my feedback to the

"*Rule change request: The rule change request was submitted by SA Power Networks, the St Vincent de Paul Society Victoria, and the Total Environment Centre together with the Australian Council of Social Service. These proponents requested that amendments be made to the National Electricity Rules to integrate distributed energy resources more efficiently into the electricity grid. The draft rules incorporate many of the proposed rule changes they put forward, as well as opportunities the Commission identified to improve the regulatory framework, and consequential rule changes*."

Background:

- I am a Chartered Engineer / Consultant with over 30 years' experience in leading edge high-system-availability technology systems. From start-ups to mature businesses.
- I have worked in several monopoly industries in multiple countries during my professional career which gives me a unique perspective on this rule change request.

I am pro renewable energy to reduce pollution, power costs, greenhouse gas emissions and to develop new jobs as fossil fuel usage falls, but I do not support the current Rules Change Request.

I believe we need to encourage virtual power plant (VPP) capabilities across the country with positive advantages, not by introducing a negative incentive charge on the very people who are being proactive which is just the wrong signal to the consumer.

Everyone is using power, both industry and domestic homes, it makes no logical sense to pick a single subgroup who are the ones (a) reducing their carbon footprint the most and (b) exporting green power to other local users which also reduces the neighbours' carbon footprint.

- Why are you not introducing mechanisms to encourage industry and non-solar domestic consumers to change their consumption habits? e.g. change retail rates to encourage daytime consumption. Do not charge solar owners more, its back to front.
- Reducing daytime retail rates and keeping night time rates the same will have an instant and measurable positive effect today on the network and it avoids the "time of use" political pushback. Slowly increase night time prices over a few years which gently signals the battery/VPP model. Encourage timers on appliances for washing/drying in the daytime. With working from home many users could change their consumption habits if they had an incentive and encouragement.

Feedback:

- I do not support the current approach as proposed as I have serious concerns on the true business drivers from the requestors. In my opinion the true drivers for this change are being obfuscated by the needs of a monopolistic company whose business is heavily regulated.
- Having worked inside monopolies at both a strategic and engineering management level I understand the business drivers and challenges experienced by a monopoly. This type of business is heavily regulated and there are restricted avenues to expand its market and profits.
- Net power demand is dropping with an increasing solar base with self-consumption, so the only way a monopoly can improve their business revenues is to get their Public Relations Team to spin stories with the aim to slow solar uptake and/or to invent new revenue

streams. A new tax on the domestic solar generator is their obvious solution. Convincing a well-respected charity to support their cause is all part of the PR strategy spin for a monopoly.

Specifics:

- Introducing a small cost to feed in power to the grid would make sense to give a signal to the market if the feed in tariffs were above 30cents/kWh but the reality is that over the next few years the feed in tariff will keep dropping as daytime demand keeps falling on the power grid. *(until such a time that demand may increase with new demands such as electric car [EV] charging, but with the Government giving no incentives for buying EV's and now even suggesting extra taxes this seems a moot point for the next few years).*
    - A future feed-in tariff is likely to drop from the current 9c/kWh to be equivalent to the proposed export charge making a nonsense of the aim to encourage solar installations. The outcome will be a net "zero cents" feed-in tariff. What that will do is support the obfuscated strategy of a monopoly to increase daytime power demand by slowing the take-up of solar by households.
- Power fed into the network by household solar is overall consumed locally by other households, that is the whole point of distributed solar generation. It is not distributed across the entire state and therefore I do not see why it impacts the larger distribution network at the scale or cost being discussed by the monopoly.
- Existing Solar Users: A large majority of homeowners who are interested in solar have already made the investment and this has already changed the wholesale electricity market. Adding an export charge will not change their behaviour at all as they have already changed their consumption habits to self-consume what is possible. Adding an export charge will make no difference to their net export, as older systems have no capabilities for VPP anyway. So this is purely a new tax. How will this reduce network feed-in demand in the short to medium term? It will not unless the homeowner switches on their aircon and opens the windows to self-consume all their spare power. The *change of behaviour* must be aimed at non-solar houses to "do their bit".
- Domestic solar generation feed-in power is one of the cheapest sources of power for SA Power Networks (with no upfront capital investment necessary), where local neighbours buy at full rates via their chosen Retailer even though on average, they are not using the longer haul distribution infrastructure. So why should only the Solar owners be charged for feed-in when it is the non-solar neighbours who are consuming and benefiting from this cheaper energy?
    - Most retailers are charging full rates for power even when the wholesale price is negative, why can't this money be used to improve the local distribution networks?
- With the dropping of demand from traditional power stations, who do rely on the long-haul trunk network, there must be a reciprocal saving on the SA Power Networks infrastructure upgrade budgets
    - Where are these historical budget allocations and the subsequent savings as upgrades to Power Stations are no longer needed?
- Monopolies like to spin their PR stories, so you only see parts of the story. I have worked very closely with accountants in monopolies, and I understand in the finest detail how infrastructure figures can be financially manipulated using operational engineering "smoke and mirrors" to show favourable points of view to maximise perceived "costs" to fit a PR story. Historically a monopoly will for their own financial benefit, in a highly regulated industry, have chosen a particular financial "perspective" on capital and operational costs for the Regulator. That is why I am concerned on the real drivers behind this proposal.
- Batteries are still expensive and will be for many years. Very few people will be able to afford to retrofit their solar system with batteries. Especially as the payback is around 10 years and

people must be confident that they are staying at their address for an additional 10 years to break even let alone make an actual saving.

- Why aren't the Industrial traditional Power Generator Stations being asked to pay? They are the ones who do need long haul distribution and most of the infrastructure.