
From:
Sent: Friday, 26 July 2013 11:02 PM
To: ESCOSA:Essential Services Commission of South Australia
Subject: Review of the Solar Feed-in Tariff Premium-Issues Paper

I am a private individual researching the power needs of a typical home, incorporating Solar PV and battery storage in addition to the grid to supply the power needs.

I have an alternative perspective to the outcomes of a varying Solar "Feed In Tariff" {FIT} as it affects typical residential power customers.

I have had Solar PV installed since 2006. This was prior to any FIT and was not driven by economics, but as a way of reducing my carbon footprint with lowering future carbon emissions. This is typical of many other Solar PV customers. Initially the meter just ran backwards and forwards. This was essentially a parity system and seemed a fair way to do business. Later, metering of export was enabled and a govt FIT of 44c/unit as well as 20c/unit by my retailer complicated the billing, and initiated many of my friends to upgrade their systems. The Solar FIT initially has stimulated the residential uptake of Solar PV, as these customers struggle to find ways of offsetting the continued increase cost of electricity supplied from the grid. Governments promised Solar FIT for extended periods, as an incentive to encourage growth of the Solar industry.

The initial Solar FIT was reduced to the govt 16c/unit and retailer 9.8c/unit. At the time of inception this was close to parity, but is now being eroded by the increase cost of purchased power.

My own observations are that

- a high priced FIT promotes residential consumers to install the biggest solar PV they can, in an attempt to generate a surplus, to balance out the future costs of buying electricity. This makes available quantities of electricity during the day with yields that can be easily estimated from weather data models. The quality of the energy is related to the quality of the grid distribution system. There is the possibility of significant reductions in carbon emissions. from fossil fuel power generation
- a low priced FIT allows basically free electricity supplied by residential consumers to be onsold at premium prices to other consumers by the retailer. The retailer will not necessarily pass on this free power value to other customers as profits drive business.. Consumers considering Solar PV will be forced to only install sufficient Solar PV to satisfy day time loads, with essentially no export. Consumers will still have to buy electricity at night and in conditions of low Solar PV yield, so will still be locked to increasing electricity costs. The generating capacity is not really affected. This has little impact on reducing carbon emissions.
- A battery storage, Solar PV solution has the ability to reduce grid consumption to approx 1/10 over a year, and essentially allows the residential consumer to be independent from the effects of increasing power costs. The future carbon emissions are potentially reduced by a factor of 10 for residential customers.

I can conclude that with increasing electricity charges, that more customers will elect to utilize battery storage, with installed Solar PV, with the potential of causing significant reductions to grid

consumption. If the retail distributor is not paying for electricity supplied from residential Solar PV customers, then there is no reason to export surplus. There is a potential for the grid generator to only see a need to supply 1/10 the annual energy for the domestic market if the residential uptake is total.

I do not see that a time without the main central power generator is what is needed. Reducing the value of exported power, by allowing "the market " to determine the price may force enough customers to ask the question, of what are the alternatives to increasing power costs. Local battery storage and Solar PV is a new alternative, and the costs will continue to drop, so this will become more attractive as a solution.

I think that a reasonable parity price for Solar PV needs to be in place with pressure placed on the dominant energy suppliers to figure out how to make better use of this high energy value power that is being made available by residential Solar PV customers.