

Submission for Solar Feed-in Tariff Review

Energy is important to consumers as well as suppliers and each should have their views considered in setting electricity prices. Up until now, Aurora seems more interested in making a profit for themselves and the government with little consideration for consumers. Monies earned by Aurora have been used by other government agencies, which indicates that the energy market is being over charged and is being used as a tax collection agency. This situation is not acceptable and should be stopped.

Property owners have spent substantial sums of money buying solar panels for their roofs. Most are willing to do this in order to protect the environment, reduce electricity bills and to assist the Tasmanian electricity business to earn money from the sale of electricity to the mainland.

These owners have put power back into the grid but many have never been paid for this power. Certainly, monies earned have been deducted from future electricity bills but that is not the same as getting a cheque for their efforts. Consumers are expected to pay their electricity bill in a certain time but the reverse does not seem to be so.

Some years ago, Aurora Energy stated that solar panels cost them \$12m a year in lost revenue. By this, are they saying they have lost sales of electricity or are they referring to the difference between the cost of buying power from their hydro/wind suppliers or home solar panels and wind generators?

Charging for power

There are two ways to look at how homes with solar panels can be charged for power.

System 1. The current monetary calculation system where the cost of energy supplied minus the cost of energy bought is charged to the householder.

System 2. The alternative is to look at the kilowatts of energy supplied to the household minus the kilowatts energy received from the household.

You may think that there is no difference but there is. The alternative method can best be explained as the householder generating power and if more power is being produced than needed the excess is loaned to Aurora. Of course, the lender wants that energy back when the sun is not shining.

Let us work out a cost for each system ignoring all other aspects except the energy itself. For instance, if a household uses 1000kw/year and generates 900kw/year and each kw costs 28 cents, then the equation becomes:

$$\text{System 1} \quad (1000\text{kw} \times 0.28) - (900\text{kw} \times 0.28) = \$28$$

$$\text{or} \quad \$280 - \$252 = \$28$$

So, under the current system the consumer pays \$28

Now, if the price paid by Aurora for energy provided by household panels is reduced to 8.5c the equation becomes:

$$(1000\text{kw} \times 0.28) - (900\text{kw} \times 0.085) = \$203.50$$

$$\text{or } \$280 - \$76.50 = \$203.50$$

So, under the current system with a reduced buyback tariff the consumer pays \$203.50.

If we now calculate the second equation where energy actually used is calculated we get:

$$\text{System 2} \quad (1000\text{kw} - 900\text{kw}) \times 0.28 = \$28$$

So, under System 2, the consumer would now pay only \$28, a saving of \$175.50.

By using System 2 the consumer saves \$175.50 or should that be Aurora is ripping off consumers by $175.50 - 28 = \$147.50$

Under System 2, if the consumer produces less power than they use they would get a bill for the balance owing. If, however, over a 12-month period (allows for seasonal changes) the consumer generates more power than needed Aurora would pay for the excess at a rate of 8.5 cents per kw/hr.

There are different tariffs for different times of the day and different uses (power, heating etc.) that could confuse electricity costing to solar panel households. Seeing solar power would be generated in the daytime, that should be the sell/buyback rate of payment. Wind usually blows strongest in the day so the same rate should be used.

Charging for poles and wires

Currently, if a household is in a gated community and generates excess power, that excess would be used by neighbouring household to run their refrigerator etc. Therefore, poles and wires are not a consideration because the power goes into a local distribution box. However, these adjoining households are charged the poles and wires element on their bill. The same applies for adjacent properties that would only use poles and wires in their street, yet they are charged as though the power comes from main generators far away.

Power losses due to distance

Electrical losses are reduced because power generated from solar panels is being generated at the location where it is being used. The electricity does not have to travel over great distances and what the panel owner does not use is sold to nearby neighbours. However, the neighbours of households with solar panels do not benefit from local production, in other words, Aurora is charging neighbours for a supply element (transmission loss) that is fictitious.

Exporting/importing power

Although Solar Feed-in Tariff panel are not producing a very high percentage of power being generated in Tasmania it does give an opportunity to sell more power to the mainland, giving additional income to our state. In times of drought, less power would need to be imported, thus saving the state money. Also, more water storage would give the state more certainty of supply in times of drought.

Incentive

The government has stated: “The review will consider feed-in tariff arrangements to ensure appropriateness in rewarding those people who have already installed solar and the incentive for future solar installation in Tasmania.”

I find it hard to believe that reducing the buyback price paid for electricity from the going rate of 28 cents/kwh to 8.5 cents/kwh is an incentive for future solar installations or the creation of additional power for export from Tasmanian.

Battery power

If the cost paid for panel generated electricity by Aurora is reduced to 8.5 cents without something like “Example 2” accounting, those with panels will ask: “Is it worth selling excess electricity to the grid or should I store it in batteries for later use”? If stored in batteries, Aurora losses out because now it has to supply more power to make up for the decrease in solar panel output in high usage times, which reduces the water stored or electricity available for sale to the mainland. Certainly, at off peak times the need for power would be reduced but selling to the mainland would result in a lower price being obtained.

Also, another consideration to take into account is the future increase in power required for charging electric cars. These cars already have batteries so battery storage would be attractive to consumers as a cheap storage option.

Un-Australian

Changing the buyback rate on a certain date and increasing the overall cost of electricity to households with Solar Feed-in Tariff in Tasmania is contrary to what the Prime Minister is calling for. He wants cheaper power for all Australian and therefore, to increase the cost to a section of the community as is happening now is un-Australian.

Summary

By adopting a system where calculations are based on energy used (System 2) rather than the cost of electricity (sold and buyback) would give people an incentive to buy and use solar panels or wind generators. Such a system reduces the cost of power to users, lessens the need to upgrade poles and wires and lets the state earn additional revenue by exporting more power, thus putting less stress on the environment from mainland coal fired generators.

As it would be impossible to account for over charging some customers for the use of poles and wire or fictitious transmission losses as explained above, the benefit gained by Aurora should offset the buyback price to those that generate the condition, the households with solar panels or wind generators.

Author: Owen Bartrop|
Unit 2, 112 Tasman Street
Devonport TAS 7310
orf@internode.on.net
Ph 0439 620 158