

Submission to IPART draft paper on Solar FIT for NSW.

On page 52 of the draft is a graph that shows the average spot prices for the last 4 years. The peaks seem to occur between 10am and 5pm with a smaller peak from 6pm to 8pm. I would assume that the spot prices reflect demand on the system however the graph on page 32 illustrates a customers' generation and consumption profiles over one day and this suggests that the peak in consumption is between 4pm and 10pm. Does this mean that a typical residential customer has a peak from 4pm to 10pm and the business and industry peak is from 10am to 5pm? I note that the Energy Australia (as an example) regulated tariff for residential customers PowerSmart Home has a peak tariff from 2pm to 8pm weekdays of 40.6c/kWh, 9.6 c/kWh off peak (basically night hours) and a shoulder of 16.4 c/kWh.

I would agree with IPART that a FIT for solar is appropriate but that the rate should be 8 to 10 cents for the shoulder period which is $16.4 - 8 = 8.4$ cents below the shoulder tariff. This same difference should then be applied to the peak tariff, giving a FIT for the peak period of $40.6 - 8 = 32.8$ c/kWh. I note that the business rates and periods are very similar to the residential which makes me wonder about the graph on page 52.

I would argue that the FIT paid should reflect the difference in energy price throughout the day as solar has a huge potential to reduce network costs if the appropriate regulatory policies are put in place. With an incentive for small scale solar to provide peak power the industry will quickly move towards storage of power for short periods. Battery technology will quickly develop and reduce in price and become more efficient once there is a reason to do the research. Until small power producers are paid appropriately for peak power there is no incentive for storage to be investigated.

Once small scale solar has the incentives to also have short term storage the grid will benefit in a huge way. Even now there will be an increasing uptake of battery storage so that residential customers can reduce their reliance on the expensive peak price from 2pm to 8pm, so long as they can stay on the grid and have storage as well.

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