

10/032/2016

Submission to the Energy Regulator part 1 of 2

I would like to take this opportunity to voice my input on behalf of:

Save our Solar Tas.org, as the principal, whom have some 3,500 followers and had some near 3000 petitioners against the changes to the feed in rate overseen by the previous Government under Bryan Green.

As a retailer of P.V. grid connect solar and thus representing industry interest and that of my 1000 past customers and the value opportunity for future both local commercial sites and the general home dweller mums and dads etc.

As a concerned member of the general Tasmanian Public

I also believe that I have been consistent in representing the general public common broader viewpoint in regard to the value of rooftop solar in Tasmania for all concerned.

It is simply that Tasmania is in a unique position to take advantage of roof top P.V. embedded solar for some of the following reasons:

The “Merit Order effect” simply is irrelevant in our state Hydro based system.

We see reports that we currently (until the cable broke) had imported some 40% of our power needs Y.T.D.

We currently have a drastic position of low water levels.

Embedded P.V. solar can assist positively in a multitude of positive ways, frankly I have not been presented with any concrete negatives against P.V. embedded solar for the Tassie market.

The only one that is contentious is the increase in the kw price of power due to any higher feed in rate being awarded. This small cost seems to have been over exaggerated. We maintain that solar owners are not being awarded the full “costs avoided” in the current F.I.T. rate.

Thus we see that new and prospective solar owners are subsidising the k.w. current price. The small level of increase per kw to value feed- in correctly is offset by the overall benefit derived for the State i.e. gst revenues, significant employments levels, greater business activity across all direct and indirect segments involved.

We also mention that energy customers saw a margin increase to Aurora and other retailers from July 2014, from the Regulator, of some 2 cents being a near 50% increase in their margin! Primarily those other retailers failed to arrive for the non contestable market.

Therefore we see such excess margins available to more than cover against any perceived increase accordingly, as no new retailers in non contestable market have arrived.

We also feel that this sector should be closed off from competitors as the one big model i.e. Aurora are profitable and should be kept “In House” for the continued future benefit if Tasmanians two prime benefits, that is price control and security of service levels.

In regard to the value of P.V. solar to be embraced and not crippled instead, as I see we have lost some 90% of installations and with that some 90% of 250 equivalent full time jobs! 12 in my business alone! Some 80% off my workforce! Others have simply closed down. like 1800 Tas Solar, & Energy Matters and others deferred back to the Mainland such as Euro Solar.

Our data also demonstrated that the cost increase per kw year one was close to 2 tenths of one cent! and grew with the predicted installation rate then budgeted under 1-1 F.I.T. regime of two cents per kw by year ten, whilst maintaining those full 100's of jobs & GST revenues.

Simply this could be some 450 jobs against our rather conservative projections but could be greatly increased again with an new revitalized market place. Including a waiting commercial sector now ready to emerge as well. I suggest that a five interest free offer in combination to a 1-1 feed in rate for an initial determined M.W. level perhaps seeing a target of 20% solar achieved of solar, then stepping back to “retailers wholesale price as ongoing to see perhaps 40% solar, would drive results, payment could be via Aurora account then would be typically cash flow neutral paid back for investors against their otherwise expected power bills.. In regards to the Commercial sector, whilst we have been to a large number of commercial prospects, we currently have had a small number invest. We found by in large that most small and medium businesses paying rack rate are keen about the concept, but the current portrayed negatives surrounding the politics, coupled with the poor feed in rate, are the main barriers against investment here. Contestable customers are also disadvantaged by longer payback rates that are exaggerated by them paying a separate peak load fee being a large portion of their bill. This largely does not count in the general kw usage, where the base kw rate savings figure can only be used to value towards self production from their own embedded solar.

In reference to the cost of the FIT, our submission to the Regulators resulting in a meeting with Craig Burgess and Dean Tipping two years ago, drew no negatives and indeed they commented that they found no flaws in our presentation math's or data demonstrating a neural cost avoided F.I.T. position. Our submission justified 100% of high voltage “Transmission” and all but say 2% (as generous) of “Distribution” network costs. Thus leaving the retail margin out as they deserve the full margin no matter whose k.w.'s they sell. This would have resulted in a F.I.T. rate of near triple the 5.51 cent (plus gst) that currently irks and has dissuaded the potential solar investors. This has reflected in just my business alone dropping from some 25 systems a month back to a 2 per month average instead.

We believe that their superiors and advisers in Treasury & Aurora etc. swayed the Government of the day to only set the rate at the pre transmission production cost and line losses, thus ignoring the many advantages of fostering and hastening the growth of the diversified embedded power station funded within the Tasmanian community of both private and business sectors and with no cost to the state purse either directly or indirectly. All this without Hydro or foreign input, yet driving our local economy, seeing businesses and households free up their expenses on power, whilst also contributing significantly to water reserves in Tasmania, “Our Solar Battery”.

Further, given favorable conditions to invest, businesses, by being able to mitigate one of the 3 typically highest costs in their operation, become more competitive and are then in a much better position to create and expand their business, or simply are able to maintain their business viability against the tough marketplace.

Householders could also see relief of power costs as they are concerned heavily about this expense where energy costs have multiplied due to “Gold Plating “ and nationalization of the energy market. Tasmanians have an extra burden due to requirements of heating in winter. I feel I have assisted this by introducing the “Heat Pump” concept to Tasmanians some 23 years ago by nurturing and fostering the concept into the market to then see it embraced solidly now as the most economic and efficient heating method.

This alone has made heavy reductions on the grid demand as direct electric heating methods can be 5 to 7 times dearer to run, wood and gas for heating are also too expensive now.

Let’s face it, fortunately we are the result of Electric Eric’s visionary outcomes of Hydro power - for that we are all grateful. But with Gordon below Franklin etc. off the agenda we must aggressively address our unique opportunity with solar, as Germany, Denmark California, Japan and other jurisdictions have embraced proactively.

We can lead in Australia, as we have a unique position in Tasmania of that huge storage of water potential, if interwoven with both big end Wind etc along with local embedded solar P.V. together saving water as our battery system that can once again bring our power fortunes to maximum advantage for Tasmania. This partnership of investments will secure domestic and small business demand, and bring comfort of security to the likes of Comalco, Pasminco etc, as well as encouraging potential new industries that would only invest in a stable power rich economy. There is a huge mainland export opportunity, where I say again that we, if positioned with adequate reserves, can resume and grow sales for their peak load requirements. This will surely see future growth in demand as the fossil fuel dominant mainland continues to need our power resource.

One of the most prudent drivers to generate investment in rooftop embedded P.V. is a locked-in, long term, high value F.I.T. rate. Therefore I propose consideration to returning to either a 1-1 rate, or the full costs awarded rate, which our prior submission demonstrated at

somewhere near triple the current F.I.T. rate. This bears no cost burden in real terms, in fact it would be very cheap against the current stop gap measures incurring hefty costs to provide power, and of which a continuance or repetitious outcomes into the future are simply untenable to allow.

I can refer to a state Liberal policy dated 16/03/ 2010, where proposals to provide low interest loans and sundry are mentioned by the then forward thinking then Shadow Minister.

See media release **Real Change– A bright future for energy in Tasmania** see attached email correspondence enclosed.

We do need to present a secure and long term strategy to encourage investment, I put it that major investors whom would provide a wind farm etc would ensure they have long term contracts in place. I suggest that we create security for investment by perhaps matching the R.E.T. rebate, 15 year abatement program for domestic solar. System sizes is now capped by Tasnetworks to 10 kw per domestic site, which is appropriate for grid load reasons. I suggest then it be 25 years for commercial users, where power prices for contestable clients for instance are lower and such businesses need longer term investment R.O.I. security. There are other issues relating to quality of equipment and sellers that are under the current Green House Office rules are allowable for installation. I suggest a tightening up of this, perhaps prudently tougher standards under the banner similar to the Preferred Supplier Scheme would better protect investors to a more appropriate level than currently exists.

If the feed in rate had been left as is at 1-1 back then some two years ago then, and we would not have lost some 12,000 system installs at an average of 4.5 kw per system size (The then reported average size system installed in 2013 period, along with 1330 kw hrs per kw per annum being Aurora/ Treasury average solar gain annually per kw p.a. Note that our case study systems in Launceston demonstrate 1512, as our lowest annual solar gain per kw p.a. and “1577” last year and although the yield drops by 6% for southern Tasmania, one can appreciate that our claims are somewhat conservative.

This equates to $12,000 \times 4.5 \times 1330 = 71,820,000$ or 71.8 giga watt annual generation capacity lost and of generation and generating water reserves lost p.a. This would account for some 100 giga watts losses to date over the past 28 months and again with continuing new installations over the future 12 months would equate to some 160~170 Gw all against the stepped installation process.

With a 100 m.w. generator using some 2 tons of fuel per day now instead!!! and Plus them the emerging small commercial solar market was also stalled that may have resulted in double this figure again to some 140 + g.w. p.a. and along with some 450 jobs lost to our state economy in the solar industry.

By creating an attractive environment for investment, could see a return to some 250 domestic installations p.a. but could double the uptake in k.w. load and jobs from the hesitant business take up of P.V. rooftop could put us on target to some 658 m w annual extra

production by 2026. See table

Installations	Quantity	system	Generation	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	K.W.	k.w.	P.a.	G.W.	G.W.	G.W.	G.W.	G.W.	G.W.	G.W.	G.W.	G.W.	G.W.	G.W.
domestic	5000	4.5	29925000	30	30	30	30	30	30	30	30	30	30	30
commercial	750	30	29925000	30	30	30	30	30	30	30	30	30	30	30
totals	5750		59850000	60	60	60	60	60	60	60	60	60	60	60
Progressive Totals				60	120	180	239	299	359	419	479	539	599	658

All this is reasonably achievable, as you may note that installations peaked at 7,658 in 2013. This can be conservatively delivered from embedded solar and again doubling prior 2012/3 industry employment rates in Tassie to some 450 jobs, but only if you provide the correct environment to encourage investment.

Small generation unit - solar (deemed)

*Base data Provided by C.E.C. website

	TAS installs	Cumulative Total	% increase		TOTAL AUST	% Increase
2001	-	-			118	
2002	1	1			251	
2003	9	10	900%		664	265%
2004	17	27	170%		1,089	164%
2005	13	40	48%		1,406	129%
2006	4	44	10%		1,115	79%
2007	25	69	57%		3,480	312%
2008	161	230	233%		14,064	404%
2009	1,452	1682	631%		62,916	447%
2010	1,889	3571	112%		198,208	315%
2011	2,475	6046	69%		360,745	182%
2012	6,364	12410	105%		343,320	95%
2013	7,658	20068	62%		200,407	58%
2014	4,207	24275	21%	Flow on from cut off of F.I.T. Nov 2013 new sales actually more like 95% down	180,123	90%
2015	1,797	26072	7%	Some recovery	130,253	72%
Total	26,072				1,498,159	

This is at simply no expense to Government purse, indeed actually via GST revenues and employment outcomes our economy would prosper. Along with this a resulting diversified and localized major privately owned power station that could provide a valuable and

growing megawatt local capacity, as per my conservative forecast outcome table below presents.

This in turn saves much needed water levels in dams, could offset imports over time and thus allow valuable exports of power as was the main idea of Bass-link first up!

All this largely by Tasmanians individually whom simply reap a superior benefit by offsetting their own power used at full R.R.P. but with such a low feed-in rate which is seen as unattractive and a rip off across both commercial and domestic potential embedded P.V. investors decision makers.

P.V. owners are considering moving to personal site battery storage, but this does little for the greater good of the state. P.V. owners are much better off using the grid feed in as their battery instead.

Whilst PV solar cannot solve the water security alone, I submit that the overall benefits are significant here and should be embraced for the wide ranging benefits.

Naturally larger investment into other alternatives would partner my suggested path with P.V. to also assist to build a reliable and profitable power system whilst also maintaining a richer level of water security.

Another additional way to reduce consumption:

Another older statement I made was simply aimed at Government back two terms ago, and is simply "Government assets ... Change the light globe" Fluorescent tubes can see 50% energy reduction, Dichroic's and standard globes up to 95% savings in energy, plus street lighting could go totally solar, or at least LED ! This strategy would deliver longer term low maintenance costs as well.

The Local state solar opportunity is unique for Tasmania and can be a shining example to the world alongside other forward thinking jurisdictions and particularly presents a great marriage of opportunity, driven by the fact that our primary Hydro based system matches almost seamlessly here, whereas again I state that the mainland Fossil fuel primary situation sees dislike for solar by retailers of power due to the Merit order Effect. Yet when power shortages typically occur over summer on the mainland, we should be in the prime position export and take advantage at premium prices per k.w. too.

I trust that this submission gets a fair hearing and can be seen in a new light, by our fairly new State Government, and drive confidence in same moving forwards, as not only a sensible and responsible path, but also one that embraces forward thinking to move our state forward towards a more prosperous position long term.

Thank you for your time and hopefully appreciation of the Value of embedded P.V. rooftop solar for Tasmania.

John Thirgood

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And Proud Tasmanian