Essential Services Commission Level 37 / 2 Lonsdale St Melbourne 3000 By email <u>energy.submissions@esc.vic.gov.au</u>

#### Background

I am a small scale generator – supposedly a 9kW solar system on a domestic household. As such, this submission is from a lay-person who is only starting to learn the complexity and intricacy of the electricity network and how it is priced.

My views on solar pricing were initially provided to the ESC in a submission to the 2016 FiT.

I remain concerned that retailers are taking advantage of small scale generators and by not providing a fair price for this generation they effectively remove any incentive to invest in small scale solar systems.

#### **Suggestion for Process**

It is evident that the electricity regulatory framework is complicated and I have found it difficult to make informed comment in the absence of information.

I found that the enquiry paper sets out the issues, provides some insights and background for the issues, and references relevant material; however, I suspect that a huge gulf is likely to exist in the understanding of these issues between seasoned industry participants and new/less informed users such as myself.

## Briefings

Given the importance of this review to small scale generators, it is important for the Commission minimize this power imbalance. This could be achieved, to some degree, by providing briefing(s) on the various issues and considerations.

## Information

In addition, it would be useful if information on the consumption and generation of electricity could be made available. It is difficult to make recommendations or draw conclusions in the absence of facts.<sup>1</sup> Ideally, such information should show generation capacity, actual generation, and consumption by time of day and type of generator. The more granular the information the greater the ability to conduct detailed analysis. Failing this, the provision of relevant analysis would be useful.

<sup>&</sup>lt;sup>1</sup> I have requested usage and generation statistics from my retailer who, while able to show aggregates on my account, are unable to provide any time-of-use information.

## Peak/Off-Peak

My retailer advises that peak period for electricity charges are from 7am-11pm. The peak rate is significantly higher than the off-peak rate and also the current flat rate. The peak / off-peak rates are around +/- 8c to the flat rate.

The timing of the peak period appears designed to charge most consumption at the peak rate. Any chance for consumers to optimize their peak / off peak usage of power would appear to be limited to insomniacs.

This an issue of information. Peak / Off-peak rates should **not** be mandated until the consumer has a mechanism for monitoring their consumption and hence empowered to modify behavior.

I am not against sensible peak/off-peak periods provided that consumers have the information and hence power to modify behavior.

## FiT

The differential between the usage tariff and the feed in tariff is very important for small scale generators.

When I installed my solar I was forced (no option) onto a peak/off-peak system. I suspect I use most of my power in the peak period – 7am to 11pm<sup>2</sup>. However, the FiT is based on an all day time weighted average – currently 5c per kWh.

The effect on my electricity bill of moving to peak/off peak tariffs is illustrated in the table below. Both usage and tariffs are approximate.

kWh	Flat Tariff	Pre solar	Peak/Off Peak	Post Solar
1,200	0.24	288	0.32	384
800	0.24	192	0.16	128
-1,000	0.05	-50	0.05	-50
Net Cost		430		462

This table shows that of the measly \$50 I can expect to receive in each account for generating 1,000 kWh (BTW I still consider 5c inadequate), \$32 is clawed back to the retailer leaving me with a net \$18 or **\$0.018c per KWh** for my generation!

On top of this, the discount my generator provides also discounts my FiT reducing the effective rate even further! I suspect that this is inconsistent with the minimum FiT regime.

<sup>&</sup>lt;sup>2</sup> Weekend is off peak.

I acknowledge that I gain a benefit in that I am actually using some of my own generation which acts to reduce my overall electricity bill. I am unable to quantify this as the information cannot be provided to me. That is a separate issue. Regardless, surely no-one has the right to charge me more simply because I use less of their services.

I consider that charging peak rates for usage but only paying solar generators a flat rate is simply theft by another name. The forced shift from a (lower) flat consumption tariff to a (higher) peak usage tariff all but removed the benefit of selling surplus power to the grid. A strong incentive is developing to go off-grid.

I also read with alarm that some of the 2016 FiT submissions were touting for deregulation of the FiT. Should that occur I suggest we would be quickly paid naught for our generation and probably charged a fee for the bother.

#### **Inconsistent Tariffs**

I am charged on a peak/off peak system by the distributor simply because I installed solar. My neighbor, without solar continues to pay a flat rate.

I have recently confirmed this situation. Another installation I had planned did not proceed as I was advised the rate would again be converted from a flat tariff to a peak/off-peak tariff. Apart from the capital cost which was meant to be an investment in our planet's future, the resulting tariff change meant that the cost of using electricity would increase.

As a principle, I would think that households should be charged the same tariff for consumption, irrespective of their generation capacity or potential.

#### Time-of-Use

In my 2016 FiT submission I suggested that simple time weighted (day and night) average rate for setting the FiT was inappropriate for solar generation. My understanding is that the current structure does not recognize the increase price for electricity in peak periods (commonly during daylight hours). I support the Commission's view that he true value of generation should recognize the time-of-use.

It would seem sensible to apply this principle to all small scale generation. Empowering generators to optimize their production (private benefit) would also optimize the public benefit through the supply of electricity in peak demand periods thus reducing the cost to consumers.

Generators must be armed with the necessary generation and demand statistics (or appropriate tools) to enable them to recognize the full potential that true value (time-of-use ) generation provides.

#### **Retailer Pricing**

As noted in my comments above, and the following responses to your questions (refer attachment), I consider that the retailer pricing mechanism must form part of your considerations as True Value is ultimately measured by the price we pay and receive for electricity.

Most importantly, retailers should charge for usage and pay for generation on a **consistent** basis. That is either time-of use for both usage and generation, or both at a flat rate. The current mismatch in charging time-of-use (peak/off peak) for usage and a flat rate for generation is an outrageous abuse of the public.

My initial responses to the questions you have raised are attachment. I hope to have the opportunity to refine these as my understanding of the issues increases.

**Clive Amery** 

#### ATTACHMENT Response to questions posed by the Commission

#### **COMMISSION'S APPROACH**

Q1. Do you agree with how the Commission is proposing to define true value? If not, why not? Are there other definitions the Commission could use?

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# Q2. Do you agree with the Commission's view that this Inquiry is focused on identifying the public benefit of distributed generation? If not, why not?

I am not convince you can ignore the private benefit. Rather the impact on the investor. How investors are treated by network providers will influence the net public benefit. What if investors are given the true value of generation but network providers differentially price usage in such a way to claw it back?

## Q3. Do you agree with how the Commission is proposing to define public benefit as it relates to distributed generation?

The network value should probably include environmental. From an uneducated viewpoint, I would think a reduced transmission load may indeed reduce the risk (and resultant cost) of bushfires started by the network.

Reduced demand for brown coal may also reduce the risk of coalmine fires and the resultant cost in fighting fires, compensation and the reported adverse impact on community health.

Social aspects may include the community health issue. I also do not know to what extent the state/local government operations (trains, trams, lighting, etc) benefit from the pricing system, which, depending on how they are funded, could also be considered a social benefit.

# Q4. Is the Commission's understanding of how the costs, to network businesses and consumers, of connecting distributed generation are calculated and recovered correct? If not, why not?

I seek to better understand this myself, so cannot respond.

# Q5. Do you agree with the Commission's proposed approach to the inquiry? If not, why not, and what alternative approach would you propose?

In order to provide an informed response, I would prefer to receive a briefing on the matters being considered as it is difficult for a small scale generator to gain a sufficiently detailed understanding of what are complex issues. I understand that an "invite only" session was held by the ESC in January but no information from that is available.

#### **DEFINITION OF DISTRIBUTED GENERATION**

# Q6. Do you agree with how the Commission is proposing to define distributed generation? If not, why not?

Appears sensible.

## Q7. Are there other definitions of distributed generation the Commission could consider?

#### WHAT VALUES CAN BE ATTRIBUTED TO DISTRIBUTED GENERATION

## Q8. Are there other public benefits that the electricity generated by a distributed generator provides? How can these identified benefits be quantified?

I do not have sufficient understanding of the system to comment. Refer response to question 2 concerning how various state/local government operations are treated. Concessional arrangements for industry (eg Alcoa) should be transparent and the public benefit quantified.

## Q9. Are there any environmental or other public benefits that a distributed generator provides to the distribution network? How can these identified benefits be quantified?

The impact of carbon emissions is of global importance. Locally, risks to the environment may be reduced through less fire risk (coalmines and bushfires). The cost is identified through insurance premiums and the cost of compensation. This extends to the additional burden on the health system.

#### **REGULATORY FRAMEWORK**

Q10. Are there other aspects of the current regulatory framework outlined in this paper that the Commission should consider when evaluating the adequacy of the current Victorian policy and regulatory frameworks governing the remuneration of distributed generation?

Transparency in the calculation DUOS/TUOS. And inclusion in the retailer's electricity account would be comforting.

Requiring network providers to treat customers consistently. le not charge different rates to users of electricity simply because they may have a generation capacity.

Ensure connection charges for small scale generators are the same and not charge differential fees because of who they choose to install their system. I have experience connection fees that range from \$30 to \$700. This fee appears to be for simply checking that the installation has been done correctly – not the connection itself.

Encourage electricity retailers to understand that the FiT is actually a minimum – not a maximum.

Penalize retailers who do not actually pay the minimum tariff (ie not apply any account discount to the FiT component).

Clarify that the 5c FiT excludes GST and make sure retailers are treating it correctly.

Recognize that solar power generation is usually in peak periods of usage and so pay a fair value.

If charging consumers a peak/off peak rate then they must pay for generation on a consistent basis.

Peak period from 7am to 11pm is a joke. I suspect most of power is consumed by most people in that period.

Q11. What is the impact of the current regulatory framework on the valuation of distributed generation in Victoria? In particular, what has been the scale and scope of support provided to distributed generators by: avoided TUOS payments, avoided DUOS payments, Network Support Payments, the Distribution Network Pricing and Assessment Framework, and the RIT-D??

A briefing on this would be useful.

I have found it impossible to get any meaningful information from retailers or distributors.

I am unable to get details of my ½ hour consumption and generation to determine how to optimize my usage and to verify my electricity bill.

#### **KEY ISSUES FOR THE INQUIRY**

# Q12. Do you agree with the Commission's proposal to develop a methodology for calculating the time-of-use benefit of the electricity produced by a distributed generator? If not, why not?

Time of use is essential as retailers are charge time of use for consumption. The current mismatch is unstainable and inequitable. Retailers are gouging small scale generators in the differential between the flat FiT and the true benefit to them.

#### Q13. Which of the two time-of-use options presented do you favour?

I have no details to determine which is fairer. I am in favour of any equitable system.

I note that my current peak tariff period is 7am to 11 pm. Your options are different showing off-peak starts at 10pm?

## Q14. Are there other time-of-use options that the Commission could consider?

What's wrong with the half hour actuals. Doesn't the technology exist for small scale generation?

# Q15. Are there other methodologies for calculating the locational benefit of distributed generation?

I think small scale generators are more concerned with what they are paid. A simple approach would be a set percentage of the rate the retailers charges it out? This would require strong pricing oversight.

# Q16. Do you agree with the Commission's view that the environmental benefit of distributed generation may be sufficiently reflected in the payments available under the RET? If not, can you provide evidence to detail what environmental benefits of distributed generation are not already captured by the RET scheme and how they can be valued?

I don't have sufficient knowledge of the RET workings to comment. A briefing!

Regarding other benefits, I have commented on bushfire and coalmine fires earlier. The costs of these events is quantifiable. Ask the insurers and network providers.

# Q17. Are there other methodologies that the Commission could consider for calculating the carbon benefit of distributed generation technologies that are not covered by the RET?

Understanding the RET would be a start.

# Q18. Do you agree with the Commission's proposal to undertake further analysis into the economic benefit of distributed generation to distribution networks? If not, why not?

Further investigation is warranted, as the current system is ineffective and I suspect small scale generators are being gouged.

## Q19. Do you agree with the proposal to focus this analysis on the three pieces of analysis highlighted? If not, why not?

It would be good to be briefed on the referenced analysis.

I would think all submissions are relevant at this stage and the referenced analysis useful inputs/background.

Without having examined the referenced analysis, I am of the view that by providing information (as suggested in my cover letter and more) may facilitate further analysis.

Ie It may be too early to focus on these three?

## Q20. Is there other analysis that might be helpful to the Commission in considering the economic benefit of distributed generation to distribution networks?

At some stage, whatever the outcome, true value needs to be condensed and sold to small scale generators as equitable.

I remain of the view that retail pricing mechanism also needs to be scrutinized as this is the coal face for small scale generators. Retailers change what they charge a consumer for electricity depending on what generation capacity that consumer has have. This is unconscionable.

While this may not be perceived to be an economic benefit, the pricing mechanism distils all considerations into a key economic statistic, the price received and paid for electricity. The cost charged to user and generators for this accounting service is a key factor in the price paid/received.

An appraisal on the future of the electricity network/grid wouldn't go astray. This seems to be a transition issue from a highly centralized generation capacity with resultant transmission/distribution costs to a decentralized system. So what will it look like and what needs to happen to get there?