Submission to Essential Service Commission Draft decision paper: MINIMUM ELECTRICITY FEED-IN TARIFF TO APPLY FROM 1 JANUARY 2016 Melbourne Energy Institute

The Melbourne Energy Institute (Institute) welcomes the opportunity to provide comment on the Essential Services Commission Draft Determination of the Victorian Feed-in Tariff for 2016.

The Institute brings together the work of over 150 researchers, across seven faculties at The University of Melbourne , providing international leadership in energy research and delivering solutions to meet our future energy needs. By bringing together discipline-based research strengths and by engaging with stakeholders outside the University, the Institute offers the critical capacity to rethink the way we generate, deliver and use energy.

The Institute presents research opportunities in bioenergy, solar, wind, geothermal, nuclear, fuel cells and carbon capture and storage. It also engages in energy efficiency for urban planning, architecture, transport and distributed systems, and reliable energy transmission. Economic and policy questions constitute a significant plank of the Institute's research program and include: market regulation and demand; carbon trading; energy system modelling; climate change feed backs; and social justice implications of energy policy.

Response to Draft Decision:

The Institute supports the continued adoption of the pricing principle used by the Essential Service Commission (Commission) in its determination .of the minimum Feed-in Tariff (FiT) for 2014 and 2015 that:

> *"..small renewable energy sources should receive full credit for the benefits of the electricity they supply to the market."*
>
> **(page 9, ESC 2015)**

However, the Institute does not support the continued use of the '*established methodology*' by the Commission in determining the minimum energy value of embedded generation. This methodology does not capture the environmental benefits that arise from distributed generation (e.g. rooftop solar), which is in conflict with the stated pricing principle.

In previous determinations, the Commission has accepted the important environmental benefit of reduced carbon emissions. The Commission argued that this was accounted for using the '*established methodology*' through the price of electricity:

> *"The Commission considers that an important environmental benefit is reduced carbon emissions, and the value of this environmental benefit has been taken into account as the carbon tax is factored into the price of electricity."*
>
> **(page 26, ESC 2013)**

On 17 July 2014, the Commonwealth Parliament passed the Clean Energy Legislation (Carbon Tax Repeal) Act 2014. Consequently, a price on carbon is no longer factored into electricity prices, and the environmental benefits from electricity feed-in from renewable energy sources is not at all reflected using the *'established methodology'*.

This draft decision (and previous decisions) reference the Victorian Competition and Efficiency Commissions (VCEC) 2012 inquiry into distributed generation. The terms of reference for this inquiry included a requirement to (our emphasis):

> *(1) Assess the design, efficiency and effectiveness of feed-in tariff schemes, including market-based gross feed-in tariff schemes, in the context of a* ***national carbon price****.*
>
> **(page v, VCEC, 2012)**

The inquiry reported (our emphasis):

> *"With the advent of the carbon tax, the energy value for distributed generation output is best captured through a wholesale-based price (which **includes the carbon tax**) adjusted for network losses that is set by the competitive market. A well-specified FiT recovers this value."*
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> **(page 188, VCEC, 2012)**

As part of this inquiry, the VCEC engaged ACIL Tasman[1] to assess methodologies for determining a Feed-in Tariff rate. Since the inquiry and methoodlogy were predicated on the existence of a national carbon price, key recommendations are no longer relevant, and use of this methodology is no longer appropriate. Unless the market failure of carbon pricing is appropriately addressed, this methodology does not adequately capture the benefits. Further, the installation of distributed generation (such as rooftop PV) is likely to be sub-optimal while this market failure (and distorted price signal) exists.

The Institute acknowledges that:

> *In making a determination for the purposes of section 40FBA(b)(i), the Commission must have regard to—*
>
> *(a) prices of electricity in the wholesale electricity market; and*
> *(b) any distribution and transmission losses avoided in Victoria by the supply of small renewable energy generation electricity.*
>
> **(Electricity Industry Act (VIC) 2000 – sect. 40FBB)**

The legislation does not expressly limit other factors the Commission may have regard to. Clearly, and as previously accepted by the Commission, reduced carbon emissions are a benefit of distributed renewable energy (such as rooftop solar). This is a highly relevant factor in determining tariff levels. As acknowledged by ACIL Tasman, in the absence of carbon pricing, feed-in tariffs are useful in supporting zero emission generation technologies:

> *"Regulated FiTs have traditionally been targeted at small scale distributed generators and to particular generation technologies, often technologies with low or zero greenhouse gas emissions. They have been seen as a way of supporting those technologies in the absence of, or transition to, a carbon price."*
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> **(page vi, ACIL Tasman 2012)**

The Institute supports the development of an alternative methodology that correctly values distributed generation.

Summary:

- **The Institute agrees that *'small renewable energy sources should receive full credit for the benefits of the electricity they supply to the market'***
- **An important environmental benefit of such technologies is reduced carbon emissions, as previously acknowledge by the Commission.**
- **Since the repeal of the cabon tax the 'established methodology' does not capture the environmenTal benefits of the supply of electricity from small renewable energy sources at all.**
- **An alternative methodology is required to ensure renewable energy sources *'receive full credit for the benefits of the electricity they supply to the market'***

Thank you for the opportunity to provide comment to this process and please do not hesitate to contact us on the Melbourne Energy Institute on 03 8344 3519.

1Allen Consulting Group and ACIL Tasman merged in 2013. (Now ACIL Allen)

References:

ACIL Tasman 2012, *Modelling Feed-in Tariffs: Final report (A report prepared to assist the Victorian Competition and Efficiency Commission)* May 2012

Essential Services Commission (ESC) 2013, *Minimum Electricity Feed-in Tariffs: For application from 1 January 2014 to 31 December 2014 - Draft Decision*, July 2013

Essential Services Commission 2015, (ESC) *Minimum Electricity Feed-in Tariff to Apply from 1 January 2016: Draft decision*, June 2015

Victorian Competition and Efficiency Commission 2012 (VCEC) 2012, *Power from the People:Inquiry into Distributed Generation, final report,* July.