Clean Energy Council submission to the ESC Draft Decision: Minimum Electricity Feed-in Tariffs

Executive Summary

The Clean Energy Council (CEC) welcomes the principles and broad approach to regulation of feed-in tariffs in Victoria, as outlined in the draft decision by the Essential Services Commission (ESC). While we have some reservations (outlined in this submission), we support the principle of feed-in tariffs that are:

- Based on consideration of system-wide benefits of distributed generation and not merely the financial benefits to an electricity retailer;
- Technology-neutral;
- Time-varying;
- Location-specific; and
- Mandated by regulation

The ESC has proposed a feed-in tariff (FiT) that potentially has different rates applying during peak, off-peak and shoulder periods of the day, weekdays and weekends, and seasons. CEC supports this approach, however in our view it does not go far enough. Distributed generators should also be able to compete for supply of electricity during critical peak periods when the system is under strain and the power is most needed. To maximise the benefits of distributed generation this would require a high FiT payment (commensurate with the prevailing wholesale electricity price) to be available during critical peak periods. By opening up competition to power supply during critical peak periods, the financial savings in poles and wires investment will be maximised.

What is now required is a strategy for implementation of the ESC's proposed framework, especially in the context of the imminent completion of the smart meter roll-out in Victoria. CEC would welcome the opportunity to work with the ESC to develop an implementation strategy for the principles and broad approach outlined in the draft decision. For example, there may be an opportunity to develop an 'opt in' system for solar households and businesses that would take advantage of the smart meter roll-out, enabling a time-varying FiT based on movements in the wholesale electricity price during each half-hourly period. An 'opt-in' process of this type would be advantageous in that it would enable:

- A 'soft start' for the uptake of smart meters and time-varying tariffs, without the risks associated with a mandated change to tariff structures;
- Incentives to maximise the network value of distributed generation; and thereby
- Lower electricity bills for all consumers.

Fair and efficient regulation of feed-in tariffs

In recent years a number of reports and reviews have acknowledged the desirability of a feed-in tariff that is technology-neutral, time-varying and location-specific. In 2008, the Council of Australian Governments (COAG) agreed that all new FiT schemes would conform to a set of national principles and these principles would also be used in reviewing existing schemes. Among these principles are the following (emphasis added):

- Residential and small business renewable energy generators should have the right to export energy to the electricity grid and market participants ***should be required to pay*** for that exported power at a price at least equal to the value of that energy in the

relevant electricity market and the relevant electricity network it feeds into, ***taking into account the time of day*** during which energy is exported.

- ***The terms and conditions for small renewable generators should be incorporated into the overall regulation of the minimum terms and conditions for retail contracts*** so that charges for purchasing electricity and other terms and conditions are no less favourable than those for customers without small renewables.

Feed-in tariffs should be technology-neutral

Feed-in tariffs should be technology neutral to ensure that all electricity fed into the grid from small-scale distributed generation is treated in the same manner, regardless of the technology utilised.

The feed-in tariff provisions of Victoria's Electricity Act 2000 cover a broad range of distributed generation technologies with a capacity below 100kW, including wind energy, solar energy, hydro generation and biomass.

At present virtually all small scale distributed generation is from solar photovoltaic (PV) systems. However, new technologies (such as residential storage) are already on the market and are being adopted by a growing number of households and businesses. These technologies should not be excluded from eligibility for a FiT payment.

It is unclear whether the legislation makes adequate provision for payment of feed-in tariffs for electricity fed into the grid from residential storage systems, some of which may be part of a solar PV system and some of which may not.

If necessary, the Electricity Industry Act 2000 should be amended to clarify that electricity from small scale residential storage systems is eligible for feed-in tariff payments.

Feed-in tariffs should be time-varying

Feed-in tariffs should be time-varying, incorporating a peak, off-peak and critical peak payment, to reflect market wholesale prices at the time of electricity production. Several policy development forums and bodies, such as the Council of Australian Governments (COAG) and the Productivity Commission, have recommended greater attention be paid to FiTs that are higher during periods when electricity value is highest. The purpose of price structures of this kind would be to improve incentives to maximise distributed generation exports when its system-wide value is highest.

The Productivity Commission (2013) noted that, "existing time-invariant tariffs do not encourage householders to orient units to the west to maximise generation in periods of peak demand late in the summer afternoon". To facilitate the achievement of these objectives the Productivity Commission recommended that, "State and territory governments should change the feed-in tariffs for any uncontracted small-scale distributed generators exporting power into the grid, so that their tariffs reflect the market wholesale prices at the time of energy production".

In its recent review of demand-side participation in the National Electricity Market (NEM) the Australian Energy Markets Commission (AEMC, 2012) recommended that, "consideration be given to the ability of time varying tariffs to encourage owners of distributed generation assets to maximise export of power during peak demand periods".

The VCEC (2012) expressed a similar view, noting that "adopting time-of-use pricing is desirable, because it provides a stronger economic signal to distributed generators of the value of production when overall electricity demand is high".

All things being equal, it could be expected that a time-varying FiT would better encourage small embedded generators to increase their export at peak times when compared with a fixed rate FiT.

CEC welcomes the recommendation by the Essential Services Commission (ESC) that,

> Since time-of-use retail electricity pricing will become available to small Victorian consumers in the second half of 2013, it will be practical to defer consideration of time-of-use feed-in tariff structures until the ESC's review of the minimum FiT for 2015.

As the ESC has observed, there would be administrative complexities associated with introducing a time-of-use FiT. Nevertheless, it would be desirable to bring forward consideration of time-varying FiTs as early as is practicable. CEC would welcome the opportunity to collaborate with the ESC in the development of a time-of-use FiT.

Feed-in tariffs should be location-specific

CEC welcomes the acknowledgment that distributed generation can reduce the costs of distribution network capacity augmentation and that in constrained areas of the network the financial savings are likely to be large. We support the recommendation for a location-specific component of a feed-in tariff that recognises the network value of embedded generation and provides an incentive to encourage take-up in those parts of the system subject to the greatest constraint.

We note with interest the ESC's recommendation that,

> Distribution network value should be compensated through an adjustment to the connection fee to take into account any reduction in the long run marginal cost of augmenting the distribution network as a result of the embedded generator being connected to the distribution.

The CEC is not aware of publicly available data sets that would enable the distribution network value of embedded generation to be calculated in a manner that is robust and transparent. There would be significant benefits from requiring distribution businesses to be more transparent and accountable in relation to information such as network congestion. It would, for example, enable regulators to set tariffs and fees so that there are incentives for efficient investment in distributed generation in those parts of the system subject to the greatest constraint. It would enable the distributed generation industry to focus its efforts on areas where system-wide benefits would be greatest.

CEC would welcome the opportunity to collaborate with the ESC in considering the extent to which publicly available information on distribution network constraints enables efficient investment and regulation and the reforms needed to improve this aspect of the regulation of distribution networks and feed-in tariffs.

Feed-in tariffs should be mandated by regulation

Feed-in tariffs need to be regulated to ensure that investment in distributed generation is directed efficiently to maximise system-wide benefits and to ensure that customers have access to an efficient and fair price for exported electricity. Feed-in tariffs will not be efficient (eg. incorporating time-varying and location-specific payments) if setting feed-in tariffs is left to electricity retailers.

Electricity gentailers gain a significant financial benefit at times of critical peak pricing. It would not be in the financial interest of a gentailer to enable distributed generators to compete to supply electricity at critical peak periods. There is a crucial role for regulators in opening up the critical peak electricity supply market to competition by distributed generators.

New South Wales (NSW) is the only Australian state to have deregulated feed in tariff payments to customers. The NSW experiment has failed. Not one electricity retailer is paying the amount that the Independent Pricing and Regulatory Tribunal (IPART) has determined is the financial gain to Standard Retailers.

IPART has determined that the benchmark rate for the electricity fed into the grid by owners of solar PV systems is 7.7 to 12.9 cents per kWh. As stated in its report (IPART, 2012) on solar feed-in tariffs, "The upper bound of our benchmark fair and reasonable feed-in tariff reflects the financial gain to Standard Retailers for regulated PV customers".

As of June 2013 eight of the fourteen NSW electricity retailers offered no feed-in tariff whatsoever. Five retailers offer a feed-in tariff at or below the lower bound of the IPART benchmark rate. Only one retailer (AGL Sales) offered a feed-in tariff that was above the lower bound of IPART's estimate of the financial gain to Standard Retailers. No electricity retailer offered a peak and off-peak feed-in tariff or any other form of time-varying feed-in tariff.

New South Wales consumers have fared poorly from the New South Wales experiment to deregulate feed-in tariffs. Solar consumers have suffered from a lack of consumer protection. Other consumers have suffered because investment could have been directed more efficiently, in a way likely to reduce electricity prices.

To meet its policy objectives for feed-in tariffs, the ESC must continue to regulate feed-in tariffs.

Conclusions and Recommendations

1. Clean Energy Council supports the ESC's acknowledgment that the efficient regulation of feed-in tariffs requires recognition of the system-wide benefits of distributed generation.

   Feed-in tariffs should be based on system-wide benefits and not merely the financial benefits to an electricity retailer.

2. Clean Energy Council supports a technology-neutral approach to feed-in tariffs.

   Feed-in tariffs should be available to households and businesses who have invested in energy storage systems, regardless of whether or not the system incorporates micro-generation such as solar PV.

3. Clean Energy Council supports a time-varying approach to feed-in tariffs.

   Distributed generators should not be prevented for competing for supply of electricity during critical peak periods. The feed-in tariff during critical peak periods should be commensurate with the prevailing wholesale electricity, which can exceed $12 per kWh.

4. Clean Energy Council supports location-specific feed-in tariffs.

   Currently there is insufficient publicly available information on distribution network congestion to enable location-specific tariffs to be set in a manner that is efficient, transparent and accountable. Distributors should be required to publish the necessary information.

5. Feed-in tariffs must be mandated by regulation.

   It would not be in the financial interest of a gentailer to open up the critical peak electricity supply market to competition from distributed generators. This is a crucial role for regulators.

References

Australian Energy Markets Commission (2012), *Final Report: Power of Choice Review – Giving Consumers Options in the Way they use Electricity*

Council of Australian Governments (2008), *National Principles for Feed-in Tariff Schemes*

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

Independent Pricing and Regulatory Tribunal (2012), *Solar feed-in Tariffs: Setting a fair and reasonable value for electricity generated by small-scale solar PV units in NSW*

Productivity Commission (2013), *Electricity Networks Regulatory Frameworks,* Report No. 62, Canberra: April 2013

Victorian Competition and Efficiency Commission (2012), *Power from the People: Inquiry into Distributed Generation; Final Report*, Melbourne: