

APVI Response to the Australian Energy regulator's Issues Paper on 'Regulation of alternative energy sellers under the National Energy retail Law', Oct 2013

November 2013

Background

The Australian Energy Regulator (AER) is seeking stakeholder input to regulation under the *National Energy Retail Law* of new types of 'alternative energy service providers', including solar PV firms offering to supply electricity to third parties via Solar Power Purchase Agreements (SPPAs). This has been prompted by approaches to AER by a number of businesses seeking authorisation or exemption to sell electricity through SPPAs.

AER is also interested to understand whether other alternative energy selling models exist, and whether these sellers raise implications under other consumer protection frameworks.

The issues paper notes that the AEMC identified three principles for developing a compliance regime for alternative providers. These are:

- facilitating new entry to the electricity demand management market, to stimulate competition for the benefit of consumers
- ensuring that (residential and small business) consumers are effectively and adequately protected
- ensuring that barriers to entry are not created by requiring potential new entrants (many of whom may be small businesses) to meet onerous and unnecessary compliance and accreditation requirements.

A central policy question is; under what circumstances should an alternative energy supplier be treated as a 'typical' energy retailer and therefore go through the onerous process of gaining a 'retailer authorisation', and under what circumstances should they be exempt?

In summary the issues paper describes two types of electricity provider.

- 1) 'Typical' energy retailers who, amongst other things, are usually the sole supplier of electricity to a customer's premises and the sale of energy forms part of the seller's core business.
- 2) Energy providers that are exempt 'to accommodate activities that do not fall easily into or warrant the full imposition of the retailer authorisation regime,' for example:
 - a strata/property/caravan park manager onselling to customers
 - the sale of energy to customers in remote locations
 - situations where the supply of energy to retail customers is not the primary focus of the entity and constitutes a very small portion if its business.

There are three types of exemptions:

- deemed (automatic) and registrable exemptions (together referred to as 'class' exemptions) which apply in certain situations such as embedded networks with a single meter. Examples include shopping centres, apartment buildings, and caravan parks or retirement villages.
- o individual exemptions, which may be granted upon application to the AER.



This submission is APVI's response to the questions posed in the AER issues paper.

Responses to Questions in Issues Paper

1. What, if any, other alternative energy selling business models are stakeholders aware of (apart from those listed in section 3), and what future business models do stakeholders consider could emerge?

APVI Response:

There are at least another two types of business models that could arise in the foreseeable future. They would arise:

A. To facilitate the sale of electricity that is exported to the grid to nearby customers

B. To allow alternative energy providers to sell electricity to a customer from a system associated directly with that customer's residence or business.

A. Sale of exported electricity to other customers

Currently the owners of PV systems are paid a much lower amount for PV electricity that is exported to the grid than they pay for electricity they use. There are reasons for this, with the main reason for the difference being the DUOS charges that must be paid by the retailer for any PV electricity that is on-sold. However, this creates a strong incentive for customers with PV systems to use as much electricity on-site as possible, including through the use of batteries. This will reduce DUOS income for DNSPs, which, where the DNSPs are regulated under a WAPC, will impact on the DNSPs themselves, and where they are regulated under a revenue cap, will increase costs for all customers through higher DUOS charges.

A preferable alternative could be for a mechanism to be established where PV owners can export electricity to their neighbours and incur reduced DUOS charges, which are proportionate to their actual use of the distribution network. This would be a better outcome for DNSPs (if under a WAPC), all customers (if DNSPs are under a revenue cap) and for the owners of PV systems. Such an approach would also help to overcome the very significant tenant-landlord split incentive problem that is constraining the uptake of PV on rental properties. However, this would require customers to be able to sell directly to other customers, or via some sort of aggregator or 'transaction facilitator' (as EBay does for consumer goods) that acts as an intermediary. One option for such an intermediary would be the relevant DNSP (although currently DNSPs are not allowed to sell electricity), as they would have ready access to the meter data and would know the locations of the customers on the network.

B. Sole source providers in isolated locations

There are many instances in rural and remote Australia where existing customers are on a very long feeder and so the per customer cost to maintain their electricity service is very high. Since all customers are under a standard tariff, this cost is cross-subsidized by all other customers. An alternative, which could give them better quality of supply, less bushfire risk and reduce cross subsidies, could be to disconnect them from the grid when network refurbishment is required, and instead use a remote area power systems (RAPS) consisting of various sources of electricity, depending on site conditions (eg. diesel generators, photovoltaics, wind generators, micro-hydro) and a battery supply. Alternatively, customers in fringe of grid locations could remain connected to the grid yet have better quality of supply with backup from a RAPS system. In the long term, this would reduce the need for grid upgrade.

In both instances, the DNSP, or a third party, should be allowed to provide power to the customer from the RAPS system at standard rates, with the benefits of reduced cost being spread to all



customers. While provisions are currently in place for off-grid customers, the above is a new class of customer: previously on-grid, who may reasonably expect to continue to receive grid-equivalent tariffs. Also, as stand-alone power supply options improve in quality and price, mechanisms will need to be in place to facilitate disconnection of customers where this is the best option for the customer, society and the utility.

2. What are stakeholder's views on the AER's proposed policy considerations set out in section 3 above?

APVI Response:

Α.

The AER should incorporate the possibility of this type of business model into their considerations. This of course goes broader than this Issues Paper, into the changes required for DNSPs to act as sellers of electricity.

Β.

The AER should clarify whether this type of business model is included as a class exemption.

3. What are stakeholders' views on the AER's proposed approach to granting exemptions and authorisations for alternative energy sellers in section 4?

APVI Response:

Α.

The AER should consider broadening the proposed approach to allow for the indicated type of business model. At this stage this approach is too ill defined to warrant a class exemption. However, the AER should ensure that the process of gaining an individual exemption is not too onerous and make this information readily available. There should also be some process established where a class exemption can be applied for. Note that this PV electricity will not be the customer's sole source, and so a retail exemption should be granted, with only an authorisation required.

В.

If this type of business model is not included as a class exemption, the AER should include it. This could be done in consultation with network operators that service rural and remote locations, as well as the RAPS industry.

4. What, if any, other considerations should the AER take into account to regulate the sale of energy under alternative energy selling models?

APVI Response:

This is a rapidly changing area, with changes occurring not only for the providers of alternative energy and for customers, but also for established energy industries having to adapt to these changes. In order to maximise renewable energy's contribution to least-cost energy services, established industries (especially DNSPs and retailers) will need a regulatory environment that allows them to explore a range of new business models – for example, in this case, DNSPs, in competition with 3rd party providers, being able to wheel PV electricity from one customer to another and charge a fee for this service. The provision of electricity to remote areas using RAPS systems could also be delivered by the



existing utility, which would again require changes to their regulatory environment, and perhaps some ring fencing of different business streams. However, allowing 3rd party access to provision of such services would assist in ensuring costs are minimized.

5. What implications, or future implications, could arise for the regulation of alternative energy sellers under the *Retail Law*, or other consumer protection legislative frameworks?

APVI Response:

This depends on the nature of the regulation and the types of business models. For the two outlined above, the first could increase payments by PV owners to networks (compared to the situation where PV owners install batteries) and so, under revenue cap regulation, decrease costs for other customers. The second proposal could improve the quality of supply for remote customers, and decrease cross-subsidies from other customers.

It is also worth considering that some point in the future the cost of energy storage technology may fall and alternative energy service providers may wish to offer PPAs involving 100% of supply in all areas. It would therefore be prudent for the AER to prepare for this eventuality, noting that it would not be in the national interest for energy retail law to hinder these sorts of PPAs by requiring alternative providers to have an individual exemption for each installation.

If the AER is to develop energy retail law suitable for a time when PPAs involving 100% of supply are common, consideration should be given to allowing consumers the right to opt out of high levels of consumer protection. Historically, with a small number of large electricity retailers, strict consumer protection laws presumably imposed negligible costs per customer. With the emergence of alternative energy service providers, however, if an individual exemption is required for each installation, the effective cost of consumer protection could be much more than it is actually worth. It may be that as long as there is choice in the market, consumer protection. For instance, protection may be separated out into those associated with safety, those associated with power quality, those associated with reliability and so on, with minimum requirements being set, but avoiding the need for gold-plated consumer protection.

6. What, if any, conditions should be placed on an individual exemption for an alternative energy seller?

APVI Response:

Again, this depends on the type of business model and the nature of the exemption. For the first example, no additional conditions (beyond the current consumer protections outlined in the Issue paper) would be required, because the PV electricity would not be the sole source of supply. For the second example, it is also likely that no additional conditions would be required, although, depending on the RAPS system chosen, there may be some requirements for customer maintenance, such as diesel re-fuelling or battery checks.



Attachment A: Background on the APVI

The APVI is an association of companies, government agencies, individuals, universities and research institutions with an interest in solar photovoltaic electricity. In addition to Australian activities, we provide the structure through which Australia participates in the International Energy Agency (IEA) PVPS (Photovoltaic Power Systems) and SHC (Solar Heating and Cooling) programmes, which in turn are made up of a number of activities concerning PV and solar system performance and implementation. Further information is available from www.apvi.org.au.

APVI Objective

The objective of the APVI is to support the increased development and use of PV via research, analysis and information.

APVI membership provides:

Information

- Australian PV data and information
- Standards impacting on PV applications
- Up to date information on new PV developments around the world (research, product development, policy, marketing strategies) as well as issues arising
- Access to PV sites and PV data from around the world
- International experiences with strategies, standards, technologies and policies

Networking

- Opportunity to participate in Australian and international projects, with associated shared knowledge and understanding
- Access to Australian and international PV networks (PV industry, government, researchers) which can be invaluable in business, research or policy development or information exchange generally
- Opportunity to meet regularly and discuss specific issues which are of local, as well as international interest. This provides opportunities for joint work, reduces duplication of effort and keeps everyone up to date on current issues.

Marketing Australian Products and Expertise

- Opportunities for Australian input (and hence influence on) PV guidelines and standards development. This ensures both that Australian products are not excluded from international markets and that Australian product developers are aware of likely international guidelines.
- Using the information and networks detailed above to promote Australian products and expertise.
- Working with international network partners to further develop products and services.
- Using the network to enter into new markets and open new business opportunities in Australia.



The International Energy Agency Programmes

PV Power Systems (IEA PVPS)

- **Mission:** To enhance the international collaborative efforts which facilitate the role of photovoltaic solar energy as a cornerstone in the transition to sustainable energy systems
- **Focus** (26 countries, 5 associates)
 - PV technology development
 - Competitive PV markets
 - Environmentally & economically sustainable PV industry
 - Policy recommendations and strategies
 - Neutral and unbiased information

Australia currently participates in:

- PVPS Task 1: Information Dissemination
- **PVPS Task 13**: PV System Performance

PVPS Task 14: High Penetration PV in Electricity Grids.

Solar Heating & Cooling (IEA SHC)

• **Mission:** International collaboration to fulfil the vision of solar thermal energy meeting 50% of low temperature heating and cooling demand by 2050

- Focus (21 countries, 2 associates)
 - Components
 - Systems
 - Integration into energy system
 - Design and planning tools
 - Training and capacity building

Current Australian participation:

- SHC Task 51 PV in Urban Environments
- SHC Task 48 Quality Assurance Support Measures for Solar Cooling Systems
- SHC Task 47 Solar renovation of non-residential buildings
- SHC Task 46 Solar Resource Assessment and Forecasting
- SHC Task 43 Solar Rating & Certification Procedures
- SHC Task 42 Compact Thermal Energy Storage
- SHC Task 40 Net Zero Energy Solar Buildings

For further information on the Australian PV Association visit: www.apvi.org.au

For further information on the IEA PVPS Programmes visit www.iea-pvps.org and www.iea-shc.org