The Northern Alliance for Greenhouse Action
Submission to:

ESC's Modernising Victoria's Energy Licence Framework issues paper

&

The Victorian Government (DEDJTR) Review of the General Exemption Order Issues Paper

Contents

About NAGA

The Northern Alliance for Greenhouse Action (NAGA) is pleased to take this opportunity to submit a response to the review of the Energy Licencing Framework.

NAGA is a network of nine northern metropolitan councils that operates across the metropolitan region of Melbourne, working to achieve significant emissions abatement and energy cost savings by delivering effective programs and leveraging local government, community and business action.

Our members include Banyule City Council, Darebin City Council, Hume City Council, Manningham City Council, City of Melbourne, Moreland City Council, Moreland Energy Foundation Limited, Nillumbik Shire Council, City of Whittlesea and the City of Yarra. NAGA formed in 2002 to share information, coordinate emission reduction activities and cooperate on research and develop innovative projects.

Overview

We support the need for a review of Victoria's electricity licensing and exemptions frameworks. The electricity market in Victoria has undergone substantial change since these frameworks were last reviewed and it is important that a new framework maintains consumer protections whilst facilitating innovative new energy models. The focus of our submission primarily concentrates on the treatment of "Alternative Energy Sellers" and smallto medium scale activities.

In particular it seeks to address the questions in the Department of Economic Development, Jobs, Training and Resources (DEDJTR) issues paper around (note in italics our additions to the original questions to incorporate additional relevant perspectives):

1) What is the appropriate mechanism for authorising these models in Victoria, exemption or licence? *And what other mechanisms could achieve more effective outcomes, such as insurance schemes, collective approaches, other options or combinations?*
2) What are the existing regulatory *and market design* barriers to the establishment of these models?
3) At what scale, and for which electricity *or other energy service* supply activity, is an exemption or *other innovative arrangement* appropriate?
4) If the government was to grant an exemption *to, or establish an alternative arrangement, with* an alternative energy seller *or energy service provider*, what conditions should apply?

Our submission also addresses the following questions in the Essential Services Commission (ESC) paper:

1) Does the Framework need to be improved to facilitate the development of *and fair market access for* new energy technologies and business models? If so, what improvements are needed?
2) Are there any particular areas of duplication or inconsistency between the Framework and the National regulations that need to be addressed?

3) What are the consequences, for the industry and consumers, of licensees having different obligations to make a standing offer? *And what are your views on the present approach to standing offers?*
4) What are the consequences, for the industry and consumers, of licensees performing the same activity but being subject to different licence obligations? *What can we learn from current experience, how is this an issue already, and how might this be an issue in future?*
5) What are the consequences for the industry and consumers of a lack of clarity and consistency in the capacities licensees must obtain?
6) To what extent are inconsistent and unclear licence conditions adding cost *or adversely impacting on* industry *(both incumbent and potential competitors)* and consumers?
7) To what extent do the Commission's current guidance notes lack relevant information and add cost to licence applicants? *Or allow unfair use of market power or distortions against emerging competitors?*
8) What are main costs *and barriers* to applicants from the current licence application process? Could these costs be reduced without reducing the quality of the application process?
9) Are there potential benefits from moving to a single flexible Victorian energy licence *or other options?*
10) Does the draft licence structure create any additional costs *and to whom*?
11) What would be the costs and benefits of introducing the proposed draft conditions, including those relating to small-scale activity?

Summary of Key Points

In summary we recommend:

- That licencing and exemptions are brought under the one responsible body, rather than the current split between the ESC and DEDJTR.
- That the ESC develop the capacity to provide certificates of opinion and advice to proponents as to whether and when licencing is required.
- That consumer protections are addressed more broadly beyond licencing and exemptions, instead through alternative approaches like insurance based schemes.
- That a 'shared consumer protection' model be introduced in parallel with existing arrangements for small-scale operators.
- That the existing barriers for small scale operators gaining fair access to the market are recognised.
- That whilst we notionally support the proposed simplified, flexible and proportional licencing framework, we note that it is still likely to be too onerous for many types of alternative energy sellers, such as community energy projects.

- That the Victorian Government consider reviewing the requirements of licensing under Division 5 of the Electricity Industry Act (2000) to allow the ESC to apply these conditions on a case by case basis
- Until the current legislative barriers are removed, community energy projects should fall within an exemption category
- That the Victorian framework should be better aligned with the principles in the national market, particularly regarding the treatment of alternative energy sellers by the Australian Energy Regulator (AER).
- That licencing requirements should be different for when energy is supplied as an essential service and when customers are unable to switch or exit from an arrangement.
- That different customers have different levels of vulnerability and that the framework should reflect this and offer differing levels of protections as a result.
- The Explicit Informed Consent is a key feature of any contracts between customers and alternative energy service providers
- That a clearer definition of small scale generation activities is provided including criteria and thresholds.
- That clarity is provided on how the new energy models that local governments are facilitating and supporting might be implicated by the new framework.
- That there are triggers for partial reviews of the framework as new energy models emerge, allowing the framework to be flexible and adaptive to change.

1. Key Issues

1.1 Governance of licensing

NAGA has provided a single submission to both the ESC and DEDJTR issues papers as we share the view expressed by other consumer advocates, such as the Consumer Utilities Advocacy Centre (CUAC) that there needs to be a 'systems approach' to licensing and exemptions, with one body responsible for both. At present the licensing framework is the ESC's role to administer, whilst exemptions fall under the responsibility of DEDJTR. This creates unnecessary fragmentation and confusion for consumers and retailers alike, and we recommend that new governance arrangements are developed to bring both frameworks under one body. Also, it is worth highlighting that these review processes take considerable time and energy for organisations that do not have substantial resources to spend on consultative processes, so streamlining the process in future would be appreciated. It is also recommended that consultation workshops are held well in advance of submission deadlines.

We that the ESC no longer issues certificates of opinion, or offers any advice as to when licensing or exemptions should apply to specific situations. However, the AER does provide this advice in other states. For a small organisation, uncertainty can imply potential legal and/or financial risk, which can

undermine likelihood of action in the interests of consumers or by emerging small competitors. It is recommended that such functions should be reinstated by the ESC. This could be part of a registration process that also allows the ESC to keep track of exempt projects.

In general, we support the aims of the new proposed licencing framework put forward by the ESC to reflect proportionality and flexibility, given not only the range of scales of activity, but also the types of new service providers. We also recognise that there is a semantic debate around the concepts of licensing and exemptions, and recognise that an exemption is essentially still a license, just with less conditions and less recognition/legal standing. We notionally support that the ESC intends to create a stripped back small scale licence that is equivalent to an AER exemption. However we note that there currently exists some statutory conditions under the Electricity Industry Act 2000 (EIA) that will make licensing difficult for small scale activities. We recommend that DEDJTR initiate a review of the EIA to address the legislated requirements of a license under Division 5 of the EIA including:

- a requirement for licence holders to publish their tariffs and terms and conditions online (via the Commission and on its own website), in a newspaper and in the Government gazette;
- a requirement that tariffs and terms and conditions must not be inconsistent with those of the Commission (potentially requiring compliance with the Energy Retail Code);
- the payment of compensation for any wrongful disconnection of customers; and
- prevention of fees for late payment.

It is our view that these requirements should be discretionary and applied on a case by case basis by the ESC. However, it appears at the moment these are legislated requirements of any license.

The underlying aims are really to ensure consumers are adequately protected, and to increase flexibility to facilitate fair treatment for new types of market participant that may emerge. Later in this submission, we propose an approach that meets these aims but offers an alternative to the specifics of the ESC proposals.

The specific changes in the ESC proposals can be summarised as incorporating into the licensing framework:

- the capacity to authorise any or all of an entity's energy supply activities in one licence
- a section containing a standard set of universal conditions that could apply to all licensees;
- in addition to those universal conditions, sections containing standard sets of conditions that could apply to particular energy supply activities; and
- the capacity to authorise, and include licence conditions, according to the scope and scale of the licensed activity.

The framework should recognise that there are many groups that are seeking to establish alternative energy seller models that operate under a not-for profit or minimal profit basis, and so should not be required to compete on a level playing field with established retailers.

We also support the proposed small scale licences that can provide one licence for multiple activities, whether or not it is a generation, supply and sale, or distribution activity. This recognises that this distinction is no longer appropriate in the modern electricity market.

1.2 A Different Approach to Consumer Protection

The conceptual model of licenses and exemptions potentially lacks flexibility and efficiency in a rapidly changing environment with emerging small and diverse competitors. It also applies one model of consumer protection: that regulatory controls should constrain the actions of market participants to limit adverse impacts on consumers. There are many other ways of achieving similar outcomes, such as third-party no-fault insurance scheme for victims of car accidents and the housing industry insurance-based scheme to protect consumers from poor building work. It may well be that review of a wider range of consumer activities identifies other models that could be applied in the energy sector.

The core objective is to ensure that consumers are guaranteed fair and affordable provision of an essential service – delivery of energy services that allow them to operate as a household, maintaining comfort, cleanliness, light and socially valuable activities. As technologies, business models and social factors evolve, it is increasingly difficult to predict what mix of on-site energy consuming, generating, storing and management technologies may replace or combine with grid-sourced energy and energy management solutions to deliver these essential services. The present approach to protecting individual consumers from disadvantage necessarily places onerous requirements on those providing the services, which disadvantages emerging, small service providers relative to large organisations or national and state governments, which are able to invest the time, effort and money in compliance.

Given the complexity of existing arrangements, and the resulting challenges in introducing major changes, we recommend that an alternative approach, designed for small energy service providers, which includes a ‘shared consumer protection’ model should be introduced in parallel with existing arrangements. It should initially be open to only a limited range of participants, such as not-for profit groups (including local government) and small private operators (e.g. caravan parks, apartment buildings, owners corporations).

As with other similar schemes, this approach could be funded via a small levy on consumers (possibly just those who use the new scheme or, arguably, all consumers) and administered by an appropriate government body.

This body would:

- monitor prices and charges applied under alternative models, and ensure they were fair. Where consumers are charged more than a ‘fair’ price, there would have to be a voluntary agreement that documented the reasons for the higher price, and that the consumer could opt out under reasonable circumstances
- engage with energy service providers of different kinds so that, where a problem emerged, a consumer could be guaranteed reasonable access to energy services. For example this could involve solutions, such as:

- a portable PV/storage/generation system, combined with high efficiency appliances that could provide necessary services until a long term solution was able to be achieved;
- installation of on-site efficiency, storage and/or generation options to be funded by a loan repaid by the occupants at a rate linked to 'standard' energy costs; and/or
- interim payment of ongoing energy costs while the situation is resolved through mediation or formal adjudication

1.3 Aligning with national policy

We agree that this review should seek to better align the Victorian framework with the National Energy Consumer Framework (NECF). However, any alignment should note that there is a major failure of national consistency in retail regulation currently that increases complexity and fragmentation, and that the national approach does not address the issues considered here in an effective manner. Further, achieving consistency should not come at the expense of consumer rights or fair market access for new entrants. We also note that there is a review planned for the NECF later in 2015 that seeks to clarify consumer protections for new products and services. Instead of amending the NECF, these new models might be better treated by an enforceable energy-related code to complement the Australian Consumer Law (ACL), including dispute resolution mechanisms[1].

We also note the concentration of "gentailers" (retailers that also own large generation assets) in the market leading to reduced competition, and perverse barriers to new forms of small-scale generation or retailing. From our perspective, current energy market institutions and regulatory arrangements favour incumbents over emerging innovative energy models. This is a bad outcome for Victorian consumers on the whole, as it reduces the productivity gains that could come from effective and efficient competition and the adoption of new technologies and services[2].

A licencing framework that unlocks barriers to innovative energy models will help to partly address the failure of competition in the retail market in Victoria since deregulation. Rather than deliver lower prices for consumers, Victoria's retail market has margins that appear to be approximately twice of that in other jurisdictions. Further, households that fail to actively engage in selection of a retailer and regular checking of their prices – often low income or vulnerable consumers, seem to pay substantially higher prices[3]. Similarly, a recent AEMC survey has shown that Victorian consumers are less satisfied than those elsewhere in the National Electricity Market (NEM). It is important that the failings in the

---

1 http://www.piac.asn.au/sites/default/files/publications/extras/15.03.20_supporting_innovation_emrwg_paper_response.pdf

2 http://www.piac.asn.au/sites/default/files/publications/extras/150508_governance_review_piac_submission_final.pdf

3 http://www.bsl.org.au/fileadmin/user_upload/files/research/reports/BSL_A-critique-of-the-Victorian-retail-electricity-market_July_2015.pdf

Victorian retail energy market model be addressed, as this is being proposed as a model for other jurisdictions.

1.4 Alternative energy sellers and small scale generation activities

We understand that the ESC is looking to more comprehensive licensing of small scale activities and alternative energy sellers. Whilst licencing may be important in certain circumstances, comprehensive licencing is likely to create an unnecessary regulatory burden and act as a barrier to entry for businesses, local governments and households wishing to innovate and have more control over their energy. This is in line with the 2007 review by the ESC of small-scale generation in embedded networks, where it was considered that there was no net benefit from licencing small-scale operators[4].

Even under the proposed simplified, flexible and proportional licencing framework, the requirements for licencing are likely to be excessive and onerous for many types of alternative energy sellers. Currently, the proposed small-scale licences would require compliance with the Electricity Distribution and Energy Retail codes, and other relevant law and guidelines. This could lead to small-scale operators such as community solar projects being unviable, especially if required to comply with the Retail Code and pay an unknown licence fee. Also, currently licensing requires adhering to Division 5 in the Electricity Industry Act 2000 (mentioned above). Other models, such as those proposed in this submission, could be developed that protect individual consumers while maintaining flexibility for small-scale operators.

Until these issues are addressed we recommend an exemption category for community renewable energy projects. The Pricing Rule associated with licensing would be a further barrier for community energy organisations that may choose to offer flexible pricing to consumers outside of standard electricity contracts. For example, an investment model used by a community solar organisation may fall under a lease to buy type of arrangement, and a consumer may choose to opt into a higher $/kW arrangement to transfer ownership sooner.

Similarly, there does not appear to be a definition for small-scale generation activities. The issues paper simply states that "small-scale electricity supply can include the activities of electricity generation, transmission, distribution, sale or supply – but are performed at a reduced scale." The ESC should clarify the definition of small scale, and whether there are particular thresholds for activities and requirements to apply, such as the amount of energy generated, the number of customers, the proportion of energy in relation to a customer's total supply or the peak demand.

[4] http://www.esc.vic.gov.au/getattachment/819e811f-e249-4a8a-85d3-28cdcefa232e/Small-scale-licensing-framework.pdf

1.5 Objectives

As the AER states in its issues paper, the regulation of emerging innovative business models should be principle-based rather than destination-based[5]. We agree with this approach and have outlined several principles throughout our submission as it applies to different elements of the licencing framework.

However, we also consider that the current objectives of the ESC and the National Electricity Objective (NEO) are extremely narrow and warrant review. We share the view of the Public Interest Advocacy Centre in that the guiding instructions of Australian Energy Markets should reflect consumers' interests more broadly to include social and environmental objectives over the long term[6] and to reflect the fact that consumers do not specifically want units of energy: they want services that involve use of energy. It would be consistent with international practice to reframe the objectives to consider social and environmental objectives like affordability, greenhouse gas emissions and a focus on total lifecycle cost of energy services, not merely 'unit price' (e.g. $/kWh).

Although the NEO is outside the scope of this review, the same applies to the objectives of the ESC. The Essential Services Commission operates under a similar objective to the National Retail Law that seeks to make decisions that are "in the long term interests of consumers". Unlike the national law however, the ESC has additional objectives that require it to have regard to the financial viability of 'the regulated industry'. Arguably, this objective conflicts with the ability of the ESC to allow innovative new business models and even energy efficiency improvements that serve the long-term interests of consumers, if it threatens the financial viability of the incumbents or the emerging market participants are outside the present regulated participants. This reflects the difficulty in defining the 'regulated industry' and the problems created by this approach.

The focus on 'price' rather than the 'total cost' is often at odds with the 'long term interest of consumers' and has driven short term thinking and narrowly focused decision making throughout the market's various institutions. The interpretation of 'efficient investment' [by the electricity supply sector, not consumers] has resulted in unbalanced rule making and a market bias that supports centralised infrastructure rather than demand management or other non-network solutions. Even now, the scale of investment on the consumer side of the meter in equipment to deliver energy services is substantial in comparison with investment by the electricity supply industry. In the future, the proportion of total investment on the customer side of the meter could grow, and could involve multiple parties who will influence the reliability and cost of delivery of energy services, and who will actively compete with investment on the supply side of the meter.

In the treatment of alternative energy sellers we note that the AEMC Power of Choice review outlines three key principles for consideration. We support these principles and think they capture the key issues when considering authorisations/exemptions. The principles are:

---

[5] https://www.aer.gov.au/sites/default/files/AER%20-%20Issues%20paper%20-%20regulating%20innovative%20business%20models%20under%20the%20NER%20-%20November%202014.pdf

[6] http://www.piac.asn.au/sites/default/files/publications/extras/150508_governance_review_piac_submission_final.pdf

- 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; and
- 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 (and we would add 'or be unfairly denied access to customers by incumbents that can exert unfair market power').

We are encouraged that the language in both of the ESC and DEDJTR issues papers broadly reflects these principles and seeks to not create unnecessary barriers to innovation whilst maintaining consumer protections. However, by proposing to adapt the existing framework, the potential to learn from other sectors and use alternative frameworks to achieve better outcomes is lost.

1.6 Energy as an essential service

One of the key considerations for determining whether an alternative energy seller should be authorised or exempt should relate to whether they are providing an essential service. We support that whenever an alternative energy seller takes on the role of an energy retailer and provides energy as an essential service to the exclusion of other suppliers, then licencing or some other mechanism to ensure secure access to essential services (as proposed in this submission) is required and customer protections are needed. But in many circumstances, alternative energy suppliers do not act as an essential service, and this should be taken into account.

In some cases this can mean that a failure by the alternative supplier may increase costs or create problems for existing suppliers, so mechanisms to account for this are required. For example, while a certain proportion of rooftop PV generation can be accommodated within an existing electricity network, higher levels can potentially lead to additional infrastructure costs. Likewise if many consumers are dependent on a third party energy (or storage) supplier that fails, costs will be incurred in providing a secure replacement service. The 'insurance' proposal in this submission addresses this by focusing on the actual costs of such situations, not the predictions of costs by competing incumbent energy supply businesses or energy regulators with limited capacity to imagine creative future solutions.

In general terms we recommend the approach taken by the AER in determining when to obtain a retailer authorisation. Under this approach, a licence is required if:

- an alternative energy seller is the sole supplier of gas or electricity at a premises and no other options for supplementary delivery of essential energy services are available;
- the alternative energy seller prohibits the customer from entering into a contract with another retailer, or requires the customer to enter into a contract with a specified retailer without options or compensation mechanisms where they are shown to be disadvantaged; or

- the alternative energy seller is registered with the Australian Energy Market Operator (AEMO) in the wholesale market for the particular fuel source, and is the financially responsible retailer for the particular premises.

The AER however consider that a retailer authorisation would likely be required when the seller is the primary source of energy to the premises of a small customer [7]. However, this is not necessarily an appropriate determinant of an essential service provider. In some cases, and increasingly with the rise of storage technologies, an alternative energy seller (or other energy service provider) may provide the majority of a customer's electricity service needs. Despite this, the customer may still be connected to the grid, maintaining an essential service should there be a failure with their alternative energy supply. However, we do recognise the potential equity issues if an authorised retailer providing a customer with backup access to the grid is required to take on the burden of licensing requirements when a behind the meter provider is exempt whilst providing the majority of the customer's electricity.

1.7 Consumer protections and a vulnerability approach

The rise of new products and services warrants considerations of new provisions for consumer protections. However, it is important that a framework is flexible enough to consider the characteristics of the consumer and their associated vulnerability. This recognises that different consumer groups need different levels of protections and have differing capacities. For example a large business or a council entering a power purchasing agreement (PPA) with a provider may have more capacity to understand the risks and make informed decisions about a contract without consumer protections acting as regulatory barriers to emerging market participants.

We support a principle for considering consumer protections like that proposed by PIAC:

"Energy- specific consumer protections should protect and empower customers in vulnerable situations in the energy market and to ensure equality of access to market benefits."

This is based on the definition of vulnerability outlined by the UK Office of gas and electricity markets (Ofgem) being when a consumer's personal circumstances and characteristics combine with aspects of the market to create situations where he or she is:

- significantly less able than a typical consumer to protect or represent his or her interests in the energy market; and/or
- significantly more likely than a typical consumer to suffer detriment, or that detriment is likely to be more substantial

It is also important to note two additional factors.

First, the present retail market arrangements have led to a situation where the least empowered and most vulnerable pay significantly higher prices for electricity in Victoria, as they remain on 'standing' tariffs or, by failing to check regularly, the discount contracts they are on drop back to the standing tariff after a period of time without them necessarily realising it.

[7] https://www.aer.gov.au/sites/default/files/AER%20-Alternate%20energy%20sellers%20-%20Final%20statement%20of%20approach%20-%20July%202014.PDF

Second, many new energy models that local government and community organisations may wish to pursue seek to alleviate energy poverty of vulnerable members of the community. For example, work is currently underway by the Victorian Greenhouse Alliances to look at a state-wide solar leasing model between councils, solar leasing providers and vulnerable households. One of the main goals of such a project is to reduce power bills and increase comfort levels for participants, in the same way that the successful Darebin Solar Savers project has achieved[8].

However, we do see the need for a broadening of consumer protections that can deal with rising adoption of alternative products and services. Earlier in this submission, we have proposed options for a broad approach to such protection using an 'insurance' approach or similar.

Further, as the Alternative Technology Association (ATA) made reference to in their submission, certain demand management products and services could be made available to vulnerable consumers, such as those on life support or that require medical heating or cooling. Care needs to be taken that these customers don't sign up to products or services that cause them detriment and that they are afforded appropriate consumer protections. The question is whether this is afforded through a licencing framework or through some other vehicle.

We support the view of the ATA that explicit informed consent (EIC) is a key feature of any contract between a customer and a service or product provider. This means the customer should be provided with easily understood and transparent information regarding the nature of the contract they are entering, understanding all of the risks. The key challenge with this approach will of course be demonstrating that the customer does in fact understand the contract they are entering, beyond simply providing a signature.

2. New Energy Models

2.1 The changing energy market

Local government is showing increasing interest in working with their communities to take advantage of new technologies and models in response to community sentiment. Financial, social and environmental factors are influencing this trend. Further, councils have played active roles in energy supply in the past. From the 1800s until the 1990s, Victorian municipal gas and electricity utilities generated, distributed and sold energy. Councils also provide many essential services to their communities either directly, through contracting, or through joint approaches. These include waste collection, construction and the operation of major recreational and other facilities as well as the delivery of a range of other services.

Already, local governments are exploring, trialling and implementing a range of innovative models to provide energy services to their communities. In many cases, these involve partnerships or other

[8] http://www.positivecharge.com.au/news/article/darebin-solar-saver-videos

relationships with third parties, including established energy companies. These new energy models must be designed to cope with rapid and unpredictable change.

The fundamentals are:

- households and businesses want services, for which energy (and, increasingly, electricity) may be an important input;
- a household or business may have, within its site, equipment that consumes, stores, manages and/or generates electricity (on-site generation may deliver none, part or all of the electricity required, and may also export electricity; the equipment may be purchased and owned by the consumer, be paid for over a period of time, or be owned by another party): and
- they may not be directly connected to an electricity grid, either being self-sufficient or importing/exporting electricity via portable storage, electric vehicle, chemical (e.g. hydrogen) or some other physical mechanism

They are likely to be connected, via a metering device (which may also manage demand), to a traditional electricity grid, micro-grid or other network of wires owned by another party. The capital and operating cost of the meters, wires, transformers and other equipment is typically spread over time and shared among those connected, and recovered by the provider over time.

Changes in behaviour and/or technology made by the individual may impact on the financial returns of the provider, creating potential financial risk and opportunity for the provider.

This is not a new phenomenon: consumers have been able to reduce energy consumption, switch to other energy sources (e.g. gas, wood) without penalty. However, the range of options available today is increasing, and the risk of 'stranded assets' held by distributors is now seen as greater. This has led to new contractual arrangements (e.g. contracts with retailers of significant duration), pressure for higher fixed charges, extra charges for PV owners and other mechanisms intended to maintain the revenue of distributors.

There are contrasts between the rights of providers to make such arrangements and the buyer-seller relationships common across much of the economy, even where providers make substantial infrastructure investments (e.g. in shops, manufacturing capacity) but cannot or do not claim entitlement to a guaranteed return on those investments. Such arrangements can also block innovation, competition and freedom of action.

There is also a fundamental power imbalance between an individual electricity consumer and the agents that provide either or both of the on-site equipment (that may consume or generate electricity) and/or its supply/export/measurement infrastructure. The consumer may be dependent on one or more providers for accurate information on which to base purchase or contracts, and/or essential, reliable service delivery. The provider may be a small business or large organisation with substantial market power, greater knowledge and access to expensive support such as legal advice and access to capital. These interactions create a need for effective consumer protection and ethical business practices.

The present electricity market model has adopted an approach to balancing these competing elements through the present electricity market rules and supporting legislation. However, increasing numbers of individuals and organisations, including local councils, are challenging the necessity and validity of the

present approach. Rapid technology change and emerging factors such as climate change, as well as concerns for social justice, are adding to this momentum.

A key concept when distinguishing the differences between issues and opportunities for distributed energy generation is separating out activities that occur between network assets and those that are located "behind the meter". This refers of course to the electricity meter, which is owned by the distributor (although consumers actually pay for it over time). Activities behind the meter typically sit outside of the strict regulatory framework of the NEM that govern activities on the network side of the meter. For the purpose of distinguishing new emerging energy activities, we group the following emerging models using the categories of *behind the meter*, *grid connected* and *off-grid*.

However, whilst this delineation may have made regulation easier in the past, the idea of the meter is becoming more and more arbitrary, as more and more consumers become prosumers, and are selling excess electricity back into the networks. Smart grids, distributed generation and storage technologies will increasingly see information and power move in multiple directions, and multiple meters may be installed for a variety of reasons. Keeping this in mind, the following models attempt to fit either behind or in front of the meter, but acknowledge that there is more and more cross over between these models and this may not be the most appropriate frame to treat licencing.

2.2 Alternative Energy Seller Models

Behind the meter

2.2.1. Generation for self-supply

This model includes onsite solar PV generation, cogeneration and other forms of distributed energy generation primarily for self-supply. Until now this model has fallen within a general exemption order for less than 30MW. For many years this has been the model that the entire solar PV industry has been based on involving sale of systems for self-generation.

This model has worked to date primarily through the sale of excess energy to the grid through arrangements with licenced retailers through feed in tariffs. However, there are key issues with the rights of these small scale generators that are not being reflected by the Essential Services Commission. This relates to access to the grid and also receiving fair value for exported energy (see our submission to the recent ESC minimum Feed in Tariff here). Small-scale generators selling excess to the grid through an approved retailer should remain outside the licencing framework.

2.2.2 Leasing/PPAs

There are a number of businesses in Victoria now offering solar leases and Power Purchase Agreements (PPAs) in which solar PV equipment is leased for the purpose of self-generation. This approach can address the barrier of the high up-front capital cost involved in purchasing a solar PV system. We note that there is currently a discrepancy between a PPA and a lease, where a lease sits outside of the licencing requirements and does not offer the same level of customer protection as a PPA.

The majority of PPAs and leasing arrangements will be through secondary providers, and will be an optional service for a customer. Given that a PPA and leasing arrangement does not excessively prohibit a customer's ability to access the broader market, it is reasonable to not require a retailer authorisation for a solar PPA provider.

We recommend that these are treated in the same way as the AER treats solar PPA individual exemptions in other states, requiring the seller to:

- clearly inform its customers that their seller is not an authorised retailer;
- explain it is not bound by obligations under the Retail Law that apply to an authorised seller, but is bound by all other relevant customer protection legislation;
- refrain from registering in the wholesale market for the purposes of purchasing energy; and
- not be the financially responsible retailer for the premises.

We recommend that a licencing framework should include a class exemption for selling electricity for consumption on commercial premises where there is onsite generation. This would reflect the Western Australian legislation, and reduces unnecessary red tape for businesses to voluntarily opt into a PPA agreement, and not require applying for an exemption. These class exemptions could also apply to households, and be open to landlords and their agents that wish to develop a model to sell solar electricity to tenants at a price less than the prevailing retail electricity price. This could go some way to addressing the current inequity between some groups of consumers (renters versus owner occupiers) for access to solar and other distributed generation.

If a class exemption is not considered feasible, then at least a PPA provider that is offering essentially the same service to multiple clients should be able to receive an exemption for all the clients at once.

We also support the use of a code of conduct for PPA providers for ensuring adequate consumer protections, and note the updated Clean Energy Council (CEC) solar PV retailer code of conduct that has recently been released and approved by the Australian Competition and Consumer Commission (ACCC). The 'insurance' approach proposed earlier in this submission could provide a mechanism to underpin consumer rights.

2.2.3. Innovative purchasing

Local governments are driving the uptake of renewable energy through developing innovative purchasing models to provide access to low cost solar PV through bulk buy, rates based payback schemes and other approaches. In most of these circumstances, it is likely that the customer voluntarily opts into an arrangement, and will receive a supplementary supply of grid electricity. For example, a council may choose to install a solar PV system on a building that it owns, but leases out, and then recoup the charges from tenants through either a type of green building charge or other payment. It is considered that the majority of these types of activities should be exempt, yet still require some form of explicit informed consent of participants. However the framework should offer clarity on when and whether a licence is required.

2.2.5. "Wheeling arrangements"

"Wheeling arrangements" refer to when a distributed generator seeks to sell their excess power to their neighbours via their own wiring, avoiding the need for use of the costly distribution network. The key issue here is that the electricity may be delivered across property boundaries. Several local governments are seeking to develop this type of model, whereby distributed generation acts as a supplementary supply. This is distinct from the idea of Virtual Net Metering (discussed below) as wheeling arrangements do not typically involve the licensed distribution network and still sit behind the meter. The wheeling agent would construct and maintain any internal distribution wiring 'behind' the regulated meter.

It is recommended that the ESC or Victorian Government provide clarification as to how such arrangements would be treated in a regulatory sense.

In front of the meter

2.2.6 Virtual Power Stations/Virtual Power Plants

This model refers to situations where distributed energy resources are managed as a single aggregated entity within a network to manage supply and demand. This is enabled by advanced monitoring and control systems, and can be scheduled and sold into the wholesale market by an aggregator. The most common application of this model is for aggregated demand response or demand reduction by end-users in response to the needs of the wider network and associated market signals. Such an approach is currently being trialled by Reposit power, whereby distributed battery storage is aggregated and dispatched and traded into the NEM using a centralised control system. This is sometimes referred to as Virtual Power Plants.

The framework should provide clarity on this type of model and acknowledge the attractiveness of this model with the rise of storage, and also the wider grid benefits of unlocking these models. It is likely that visibility of storage will be a key issue in developing a framework. Unlike solar PV which has high visibility due to the sale of small scale renewable energy certificates, storage installations are currently not registered in a systematic way, so they are, like energy efficiency improvement, fuel switching and behaviour change, essentially invisible to market operators.

Another emerging issue for the rise of storage is the ownership and rights to the sale of the energy. Given that storage also is of higher network value, households and commercial prosumers that own and sell from storage should be able to recoup these costs through attractive licencing arrangements that do not act as a barrier. It is important that a licencing framework removes barriers to entry for potential new prosumers (which may be both residential and small business). This should avoid having to deal with onerous and unnecessary compliance and accreditation requirements, or allowing incumbent retailers or network operators to exercise unfair market power.

2.2.7 Virtual Net Metering

Similar to the "wheeling arrangements" mentioned above, there is much interest in developing models that allow what is known as "Virtual Net Metering". This is a concept that describes the sale of excess electricity from a distributed energy resource to a third-party located nearby at a cost that reflects the

limited use of the distribution network. This model is virtual in the sense that the electricity is not always physically transported to the consumer via separate wires, but is fed into a network with other existing sources of supply and reflected in the transfer of electricity pricing in billing reconciliation processes[9].

This model is likely to be a partnership between an existing energy retailer, generator and consumer and distribution company. It is important the framework does not prohibit this type of activity. Some local governments have particular interest in this model for selling to self. This would be a situation where a council may have a large roof with low daytime energy use that it wishes to install solar PV on to offset electricity use in another council building with high daytime energy use.

There are a number of different models for VNM:

- generation to be transferred to another meter(s) owned by the same entity
- generator customers to transfer or sell their exported generation to another customer(s);
- community-owned renewable energy generators to transfer their generation to local shareholders;
- community retailers to aggregate exported electricity generation from generator customers within a local area and resell it to local customers

It is recommended that the framework provide some guidance to a mechanism for consumers to buy and sell excess distributed generation without a retail licence.

It is important that the framework protects VNM operators and participants from unfair pricing and technical requirements imposed by energy retailers or network operators, using their market power. For example, in many local parts of the existing electricity grid, there is substantial excess capacity, and/or likely use of the grid replaces electricity from other sources rather than increases total electricity flows. Yet a network operator could attempt to charge high prices for the use of the network or claim unreasonable costs due to 'lost profits'.

2.2.8 Off-grid

Off grid customers require different protections and different considerations. We support the views of the Alternative Technology Association, that when consumers seeking to live with a Stand Alone Power System (SAPS), fully understand the risks and benefits and that particular attention should be given to performance guarantees[10].

This should be set out through an Explicit Informed Consent that:

- provides a performance guarantee with respect to the frequency and duration of system outages;

[9] http://cfsites1.uts.edu.au/find/isf/publications/langhametal2013virtualnetmetering.pdf
[10] Craig Memery, ATA, Presentation to the Innovative Products and Services workshop, Melbourne, 12 March

- educates the customer about the difference between living with a grid connection and living with a SAPS, and associated risks; and
- documents and records that they have the EIC of the consumer, with particular emphasis on the customer understanding the above matters.

In the rare instance where a company may choose to provide a customer or community with small scale generation that includes storage as a way of going off grid, the licencing framework should only apply when services or contracts are offered to consumers that would make reconnection to the NEM difficult either due to physical limitations (e.g. customers supplied through an independent micro-grid) or contractual limitations (e.g. a contract that prohibits the customer from entering into a contract with another retailer). This is in line with the above comment that whenever an alternative energy seller acts as an essential service provider at the exclusion of other suppliers then they should be licenced.

Generally speaking, we support the views of the ATA in their ESC submission in relation to consumer protections for going off grid[11].

The off-grid situation also introduces potential for service providers to offer 'secure and reliable' service guarantees that might include monitoring of demand and supply, equipment performance and condition, provision of back-up equipment and/or provision of temporary portable supply. In principle, the 'insurance' model proposed earlier could be applied to this situation to address situations where, despite reasonable efforts to ensure a reliable system, unforeseen circumstances arise that impact on quality of service.

2.2.9 Direct Load Control

This allows a third party to intervene in the operation of energy consuming, storage or generation equipment 'behind the meter' at a consumer's premises. In principle, this can offer benefits to the electricity network, transmission system and/or other electricity generators by reducing demand at critical or costly times, or even increasing exports to assist at such times. The key consumer issue here is the extent to which their access to energy services is adversely affected, and the amount they are paid for any reductions in service. Since it is difficult for a consumer to fully imagine the possible impacts of such an arrangement, there is a clear need for consumers to be able to review their participation, and for guidelines that limit the extent of impacts imposed by direct load control.

Summary

As recognised in the issues papers, the energy market is undergoing rapid transformation. New products and services have emerged that would have been largely inconceivable five years ago, and new models will continue to emerge and challenge the existing market. It is important that the licencing and exemptions framework is flexible and adaptable to change and this should allow for

[11] http://www.esc.vic.gov.au/getattachment/0bea254d-d0b0-4365-8349-b9878122d6da/Alternative-Technology-Association-%28ATA%29.pdf

triggers for reviews. We note that the ESC expects to review this process in 5 years time, but we recommend that there be a process for triggering partial reviews as required. This could be an option for a new alternative energy seller to request a specific determination on a new product or service by the ESC/DEDJTR without having to wait until a full review is conducted.

Thank you for the opportunity to make a submission to the licencing frameworks reviews.

Please contact me (phone: 9385 8507 or email paul@mefl.com.au) if you would like further information, case studies or any clarification regarding the issues raised in this letter.

Yours sincerely

Paul Murfitt

NAGA Chair

The views represented in this submission do not necessarily represent the views of all NAGA members individually.