



Victoria's Embedded Network Review Draft Report

City of Melbourne Submission to the Department
of Environment, Land, Water and Planning

August 2021

Manager, Embedded Networks Review
Energy Sector Reform
Department of Environment, Land, Water and Planning (Vic)
PO Box 500 East Melbourne VIC 8002
EmbeddedNetworks.Review@delwp.vic.gov.au;

RE: Embedded Networks Review

The City of Melbourne appreciates the opportunity to provide feedback on the Draft Recommendations Report for the Embedded Networks Review. This submission builds on the previous submission the City of Melbourne made to the Embedded Networks Issues Paper and is provided on behalf of management, based on endorsed Council policy, including [Climate Change Mitigation Strategy to 2050](#)¹ and [Response to the Climate and Biodiversity Emergency](#)².

We wish to thank the Panel for considering the recommendations cited in our first submission and addressing the issues we raised in the Draft Report. In particular, we applaud the Panel for noting the potential for private networks to facilitate a range of renewable energy solutions, including renewable power purchase agreements (PPAs), which would support the realisation of zero carbon precincts.

Furthermore we agree with the Panel that well-managed private networks have the potential to generate benefits for customers, and we share the concerns raised that under the current regime many embedded network customers have not been afforded sufficient benefits or consumer protections. The City of Melbourne therefore commends the Panel on delivering a report which seeks to balance consumer benefits and protection with the imperative to enable innovation and the accelerated uptake of renewable energy.

The following feedback is provided to assist the Panel in designing the future private networks regime so that it fosters the uptake of clean energy and delivers benefits to consumers.

Local Energy Service licensing

The City of Melbourne views the existing embedded networks regulation and exemptions framework as unfit for purpose. Currently embedded networks are regulated in the shadow of other licensing frameworks, with limited opportunity for enforcement action and minimal deterrent for bad management. Ensuring fit for purpose licensing which is specific to private networks would unlock the opportunity to directly regulate these systems.

City of Melbourne supports the establishment of a licensing scheme through the proposed 'Local Energy Service' (LES). We believe such a scheme would help create a clearer regulatory environment for private network operators to navigate and better ensure the benefits are passed onto consumers. As embedded networks sell and supply electricity to customers it is appropriate to expect proponents to obtain a license from the Essential Services Commission (ESC) and be subject to similar standards as other energy sellers and suppliers. While recognising that obtaining a license has the potential to add additional administrative burden to the proponents of private networks, City of Melbourne agrees this risk is offset by the potential benefits for proponents from removing the complexity and the uncertainty in the regulatory regime.

Care should be taken in the development of the LES to ensure the licensing process is not unduly onerous and of a complexity that presents additional barriers to innovation. Any licensing regime should be flexible to the range of contexts and customers which are present in existing embedded networks.

¹ <https://www.melbourne.vic.gov.au/sitecollectiondocuments/climate-change-mitigation-strategy-2050.pdf>

² <https://www.melbourne.vic.gov.au/about-council/committees-meetings/meeting-archive/MeetingAgendaItemAttachments/886/15806/FEB20%20FMC2%20AGENDA%20ITEM%206.5.pdf>

Commercial buildings

The City of Melbourne notes that the scope of the Embedded Networks Review does not include commercial sites. While outside the scope of the review, the City of Melbourne considers that the LES licensing scheme would be relevant in the commercial sector. Maintaining the General Exemption Order and having two parallel regulatory systems for private networks with different customer groups (commercial and residential) adds unnecessary complexity and would be burdensome to private network operators. For regulatory simplicity, all private networks should be regulated under the same licensing mechanism.

Many of the commercial tenants within embedded networks are small energy users and do not typically possess a detailed understanding of the energy market. As such many are vulnerable to the same price gouging and inflating margins occurring within the residential market. Existing embedded networks often operate across mixed use settings including both commercial and residential sectors. Extending the LES licensing scheme to both customer segments would avoid creating adverse impacts on either customer group and ensure that proponents do not have to manage dual sets of regulation across a single embedded network.

The Panel's Final Report should recommend the Government undertake to regulate private networks with commercial customers under the same licensing framework as applies to residential customers.

The City of Melbourne understands the limitation of the Panel's terms of reference and recognise that the Panel has recommended a broader licensing framework review in Recommendation 5. However it is recommended that this broader review be called out more strongly and reflected in Figure 3: The timeline for transitioning to the LES licensing framework. This would send a signal to the market that there is a future potential of the scheme extending to commercial embedded networks and allows proponents to make decisions relating to LES licensing.

Provisions for renewable and clean energy technologies

The City of Melbourne strongly supports the requirements proposed in the Draft Report to allow new private networks where they foster the uptake of clean energy and can demonstrate that the benefits will be passed onto customers. Allowing private networks under such provisions would help to accelerate the uptake of renewable energy and in turn support the City of Melbourne and the Victorian Government to meet their community emissions reduction targets.

City of Melbourne further supports the Panel's more expansive interpretation and approach to renewable energy which extends beyond the consideration of 'microgrids', and allows for the inclusion of a range of renewable energy options and clean energy technologies. In the City of Melbourne's view, this interpretation opens the door to various community energy initiatives such as behind the meter solar sharing models, electric vehicle charging, energy storage solutions, and renewable energy purchasing arrangements including GreenPower and PPAs – all of which are necessary to enable the City of Melbourne and Victorian Government to realise the delivery of zero carbon precincts.

While the Panel's broad 'technology neutral' interpretation would provide flexibility for proponents of private networks and enable the development of emerging technologies and commercial opportunities to support the integration of renewable energy into the system; for the avoidance of doubt, some additional clarity and detail may also be useful for both the private network proponents and the ESC, who will be tasked with assessing compliance with LES provisions as they relate to renewable energy. In this regard, it may be helpful to distinguish 'renewable energy sources' (e.g. solar, GreenPower) from 'clean energy technologies' (e.g. batteries, electric vehicles, energy control systems).

The Panel's Final Report should clarify the definition of 'renewable or clean energy or technologies'; ensuring the definition includes, but not be limited to: solar photovoltaics, microgrids, battery storage, electric vehicles, and renewable electricity sourced from off-site generation and supplied through the GreenPower program or via power purchase agreements.

The City of Melbourne approves of the Panel's approach in adopting the principle to 'future-proof the design of the system' as this elevates the need to ensure access to energy options of both today and tomorrow.

'Clean energy technologies' such as batteries, electric vehicles, and demand response do not necessarily generate renewable energy but their application can support greater uptake and integration of renewables into the grid. In order to achieve a 100 per cent renewable grid in the future, multiple technologies are required. The LES should be conscious of not disincentivising technologies which support renewables integration by applying a blunt requirement to demonstrate renewable generation.

Separately defining technologies which support renewables, from renewable generation technologies, would create greater flexibility in the scheme to incorporate new technology options in the future. A separate mechanism would be required to demonstrate benefits of such technologies being provided to customers. Proponents would need to demonstrate cost savings (through improved energy management and demand response) or access to clean energy services previously unavailable to them such as access to electric vehicle charging or local energy storage.

In order to create a LES that is flexible to respond to new technologies and future proof the design of the system, the LES should distinguish technologies which involve renewable generation from those that support the integration of renewables.

The 'benefits' that renewable energy provides should be clearly defined so that proponents can demonstrate how these are passed onto customers. Renewable energy can provide environmental, social and economic benefits and different renewable and clean energy technologies provide them in different combinations. It is important that the LES balances these benefits and does not require a demonstration of one at the expense of others. For example whilst onsite renewable energy can provide cost benefits to consumers, GreenPower often comes at a cost premium. If the LES required the demonstration of cost benefits to consumers this would exclude GreenPower as a viable renewable energy option. This is despite the fact that this benefit was identified by consumers responding to the consultation as a benefit they were frustrated at being excluded from under current regime.

The Panel's Final Report should clearly articulate what 'benefits' need to be demonstrated as passed onto customers. Care should be taken in this design to ensure that environmental, social and economic benefits are balanced and that a requirement to demonstrate one does not come at the expense of others.

Onsite and offsite renewables and clean energy technology

As the Draft Report acknowledges, private networks can facilitate on-site renewable generation and clean energy technologies, as well as off-site renewable electricity through purchasing arrangements. Achieving the outcome of fostering renewables and clean energy technology through private networks must therefore give consideration to the differences between each approach.

The LES scheme should distinguish between on-site and off-site renewable energy pathways for LES compliance.

Onsite

The ability for a private network operator to demonstrate that they 'offer renewable or clean energy' will differ depending on the technology. Delivery of onsite renewables, battery storage, or electric vehicle charging is likely to be the easiest to demonstrate through evidence of the systems installation and connection agreements. Care should be taken to ensure the evidence requirements are not overly onerous, particularly in contexts covering multiple systems across a precinct scale.

LES evidence requirements for renewables and clean technology should seek to minimise potential administrative burden for proponents of multi-system and precinct scale private networks.

Requirements should be incorporated into the LES scheme to ensure it does not incentivise tokenistic renewables systems of a small capacity relative to the size of the private network. For example a private network of 20 customers should not be able to install a 1kw solar system and claim to be offering renewable energy benefits to their customers. The City of Melbourne would consider a kW capacity to customer ratio as an appropriate metric for determining whether the level of renewables is material, or tokenistic. A percentage of renewables relative to site load metric could also be considered, however it may be more difficult to assess.

City of Melbourne further suggests the Panel (or the ESC) could develop such thresholds through an assessment of best practice examples of where private networks have delivered benefits from onsite renewables to customers, such as the Nightingale Housing projects. Such thresholds and ratios should take account of different typologies of private network (small/medium/large apartment building, retirement village, caravan park, shopping centre) as the opportunity for onsite renewables will differ depending on the built form.

Prevent tokenistic renewable installations by setting a 'kW per customer' ratio appropriate for the size and typology of the private network.

Where onsite renewables cannot viably be accommodated in a new or legacy private network, LES proponents should be provided a pathway to satisfy the renewables requirement from offsite renewables (e.g. GreenPower).

Offsite

It can be expected that many facilities in which private networks operate will have limited capacity to install renewable generation onsite, such as high rise apartment towers which have minimal roof space relative to their electricity load and number of customers. If these facilities can demonstrate that onsite renewables are not feasible or have limited generation capacity (i.e. below threshold kW to customer ratio) then the private network operators should have the option to purchase renewable electricity through PPAs or GreenPower.

Provide LES proponents with pathways to satisfy the renewables requirement via offsite renewables.

In the case of PPAs, evidence could be supplied through the surrender of large-scale generation certificates (LGCs) or LGC supply contracts. Evidence of GreenPower purchasing could easily be demonstrated with reference to the supply contract or electricity invoice.

In respect of both forms of offsite purchasing, the regulations should be designed to prevent tokenistic levels (e.g. 5%) of renewable purchasing. The LES regime should set a minimum renewable power percentage requirement of no less than 50% of the private networks total electricity volume. The LES regime should also require compliance to be substantiated periodically, for example every 3 years, with reference to invoices or evidence of LGC surrender.

Require evidence for offsite renewable supply, set a minimum threshold renewable power percentage, and require LES proponents to periodically demonstrate compliance with reference to supply contracts, LGC surrender, and/or invoices.

Recognising that the implementation of a renewable supply solution like GreenPower will in most cases be easier to affect than the installation of an onsite renewable generation system, the City of Melbourne considers the proposed three year exemption for legacy networks to be unnecessarily generous to proponents and indeed disadvantageous to consumers. As the Panel has noted in its review, 34 per cent of consumers responding to the consultation expressed frustration about their inability to access GreenPower. Given the Panel has espoused the principle of placing benefits to consumers at the centre of its review over the business models of suppliers, it would be difficult to justify delaying GreenPower options for consumers, in these instances.

For legacy networks, consider bringing forward the demonstration of renewables exemption from 3 years to 2 years where GreenPower is used to satisfy the LES requirement.

Allowing private networks to purchase offsite renewables builds demand for innovative and large scale power purchasing solutions which would help deliver the Victorian Government's emissions targets, while enabling more affordable and stable electricity pricing for end users. Smaller private network operators have the opportunity to aggregate their facilities collectively to achieve a level of electricity demand necessary to attract competitive PPA offers from the market. The LES scheme should not restrict these opportunities for collective renewables purchasing but should ensure that the further cost benefits are passed on to customers.

The LES framework should not restrict opportunities for private network operators, or groups of operators, to aggregate multiple private networks so as to enable contracting via renewable power purchase agreements.

The City of Melbourne appreciates the opportunity to provide feedback on the future private network framework and are committed to supporting development that enables renewable energy uptake, emission reductions, and consumer benefits.

Yours sincerely,

Krista Milne

Co-Director, Climate Change and City Resilience

CoM reference: 14778596