



ENM Solutions Submission

DELWP Embedded Networks Review

Recommendations and Report



## **ENM Solutions**

### **Draft Recommendations Report – Long Questionnaire Response**

#### **Recommendations 1 and 2: Banning embedded networks**

##### **1. What are your thoughts about the concept of moving to an ‘approvals’ regime for exemptions?**

Moving deemed exemption-based networks to an ‘approvals’ regime has merit in that it will provide further visibility of how many Embedded Networks are within Victoria.

Elevation of the General Exemption Order (GEO) as part of an ‘approvals’ regime must ensure that the actions this ban intends to achieve are implemented to give effect to those goals. Part of the challenge will also lie in working with those smaller networks who are not as well-resourced to now meet extended obligations, rather than simply deny them an exemption which may result in a detrimental outcome for the consumer.

Significant additional resource will be required by the Essential Services Commission (ESC) to be able to support this. For context, the Australian Energy Regulator (AER) is noticeably delayed behind on publishing exemptions on their website, which doesn’t include an approval process. How this process is structured may determine its effectiveness. A streamlined online process that requires file uploads and information provision to be granted the exemption for example may be effective, while a detailed submission like that of an Individual Exemption would require significant resource from both the ESC and for those networks now required to submit applications.

##### **2. What are your thoughts on the proposed requirement to have renewable or clean energy, with benefits passed on to customers, as part of a private network?**

The requirement itself must be very clearly defined with understanding that not all private networks will have equal capability to incorporate the same level of renewable or clean energy. Within the report, this referred to ‘renewable or clean energy technologies’ which included Energy Efficiency, smart systems and demand management. Currently an Embedded Network could obtain a NABERS Rating for their energy use, contributing to the improvement of Energy

Efficiency on site and environmental impact. Would this be considered part of the Energy Efficiency benefit, or will it be defined on the integration of technology as part of this process? Defining how a benefit is assessed will also be crucial to this requirement. This may be better linked to the requirement to meet certain carbon reductions or other green/renewable targets as alluded to within the report rather than specific technologies.

Worth consideration is that within the market, there is no requirement to pass on benefits to consumers from renewable or clean energy technologies. Why should there be a requirement within Private Networks? Over time this should become self-incentivised with improvements in market access from upgrades to metering and infrastructure, driving network operators to improve their offerings and pricing for customers to prevent them going on-market/leaving the network. The alternate point of view could also be that there will be Occupiers who do not care at all about clean/renewable energy and will feel forced to engage in something that they will have 'no choice' of, in contrast to one of the aims of this review – providing consumer choice.

**3. Do you have any suggestions as to how the use or implementation of renewable or clean energy technologies can be demonstrated by anyone relying on the revised GEO or an LES licence to supply or sell electricity? If so, what are they?**

Defining what the renewable and clean energy technologies entail should make this aspect easier to convey. This could include proof of installation (invoice) submitted at the point of approval for the new exemption framework for existing installation, or submission of a formal quote along with a planned installation timeframe for future works. Those networks who register for approval, and do not submit evidence at that time – can then be followed up at the time of required transition (either twelve months or three years). Completed works could be validated by the Clean Energy Council (CEC) or similar approved installers that could also align with the Victorian Government's Energy Upgrades Program. Worth consideration is whether this would only be a one-off demonstration or would it require further assessment down the track. Ongoing monthly reporting on status of works or progress would not be reasonable for either the networks or the ESC staff to manage.

4. **Do you have any feedback about possible thresholds which could be used to assess the renewable or clean energy technologies at a site (for example, showing compliance with national or state-based renewable energy targets)? The Panel encourages stakeholders to provide suggestions on suitable options, including how to ensure renewable or clean energy technologies or options provide real benefits.**

Given the implications of this review on the potential for networks to outlay significant capital in upgrading network infrastructure that is currently legal and compliant, this review is a great example of how Government targets and requirements can change over time. Consequently, linking them to Government measures of performance or thresholds may be applicable now but could change drastically again in the future. ENM Solutions would contend that any thresholds or assessments should be independent and linked to the capabilities of each individual network to provide benefit to their Occupiers.

The real benefits to the consumer can also be quite broad. Some installations may allow a network to provide tangible price reductions for their energy, while others may not be in this position, but able to facilitate greater access to renewable/green energy. Would this access alone constitute a tangible benefit? Different again is the potential re-sale benefit to owners in these networks whose lot may increase in value from the installation of such technology. Should one of these be prioritised more than another or can this be evidenced through reporting to the ESC annually or at submission of their exemption/license how they plan to deliver a benefit to the consumer. Within the new regime where all Embedded Networks are registered with the Energy and Water Ombudsman Victoria (EWOV), customers would be able to take up any concern they have via EWOV where they believe they are not receiving a tangible benefit from renewable or clean technology at the site.

5. **Do you have any thoughts about how benefits flowing from renewable or clean energy technologies could be passed on to customers, and how this could be demonstrated?**

Communication directly to customers on how the benefits of such installations are being passed on may be the best way to require demonstration of these benefits, due to how they will vary from network to network. This could be via invoices, a customer portal or within the

suggested annual requirement of information provision to consumers detailed within the report. Currently, it is a requirement to include greenhouse gas (GHG) emissions on invoices for customers – this could become a figure pertaining to how much GHG has been reduced from technology in the building on their bill. Inclusion of the completion of a green energy or NABERS rating of their building on these invoices/information packs could also quantify the benefit customers receive from this initiative. Similarly, using an automated building management system (BMS) that can keep track of peak demand days and lead to lower demand charges. This may not reflect on every bill but could be included as a reported benefit of the technology that will pass through to customers. Provided a benefit has been communicated and can be justified when pressed, this should be sufficient. For example, if an operator has detailed the benefits that a new BMS has provided such as the above, or how the savings from solar generation have been put back into the building or use for other systems to contribute, this can be produced at any time if a complaint was brought to EWOV that no benefit was being obtained.

This could also encourage greater communication between operators and their Occupiers alongside the transparent flow of information, that can only improve all outcomes within the network.

**6. Do you have any other comments or feedback about the draft Recommendations and implementation strategies?**

When the recommendations of this report are considered holistically, the requirement to show benefits to the end consumer versus the benefits to the whole building through reductions in emissions and improvements in the cost of energy, may become redundant. If customers are given open access in every situation to market offers, it will be in the best interest of the network operators to pass on benefits to their customers to retain them within the network. Those who do not will be subject to losing their customer base which may impact profitability. The requirement to find ways of communicating the benefit of every individual advancement or initiative within the building to a tangible benefit received from each individual consumer, may not be as advantageous or as crucial as has been argued.

Without a permanent government commitment for financial support or subsidy of infrastructure works pertaining to these requirements, it will also be hard for developers to submit plans and deploy major infrastructure. For some networks this may be a significant financial uplift to meet the requirements for market access and incorporating new technology.

### **Recommendation 3: Introducing a licensing framework for new private networks**

- 7. Do you have any feedback about how the proposed LES framework could support the Panel's vision of a new competitive market of LES providers? If yes, please provide details.**

Increasing the obligations on Embedded Network Operators may go some of the way towards improving the outcomes for Occupiers at some poorly managed and under resourced Embedded Networks, with their services potentially incorporated into larger existing operators already meeting many of the increased requirements for Private Network operators. However, just because networks are with larger operators – doesn't mean that they're better run or more compliant. This trade-off must be considered when there is any market adjustment that results in decreased competition. We may also see smaller operators being impacted through attempts to address these increased requirements themselves and delivering poor outcomes for the Occupiers.

The cost of the Local Energy Service (LES) license should be considered in context with the initial comments of the panel that this may be an additional license to the already existing Retail License. Operators who may be running Private Networks extremely well and potentially holding Retail Licenses should not be disadvantaged by being required to pay an additional large licensing fee, that may be a smaller impediment to larger players in the industry.

All elements such as the technical and capacity requirements referred to as part of this license should be defined and considered in line with the transitional arrangements for required implementation within legacy networks. Similarly, that "acting in (the) best interests of consumers and show how benefits will be passed on to consumers when making agreements, including contracts for services" is defined as part of the LES licensing.

**8. Are there any other comments you would like to provide about this Recommendation or the proposed implementation strategy?**

No comment.

**Recommendations 4 and 5: Applying the new licensing framework to other types of new residential and legacy (existing) embedded networks and reviewing the broader licensing framework**

**9. Do you have any comments or feedback about the draft Recommendations and implementation strategies?**

Within the report, these recommendations suggest that the government consider extending this ban and requirements to other network configurations for industrial, commercial, and business parks. Currently the wording of this recommendation applies for the supply/sale of electricity, meaning that the license regime could be extended to networks where this may not be suitable, and there may be no 'sale of energy'.

Considering the innovation potential for smaller networks, we would urge caution for any consideration for exemption holders remaining under the GEO with these amendments being required to hold a small-scale license.

**Transitional Arrangements: GEO Amendments**

Given the potential additional requirements of networks to operate under the revisions from the GEO, the maximum amount of time should be given for this transitional arrangement to take place. Ensuring that any works required, or planned implementation, can be done effectively and with the best interests of the customer at heart, as opposed to rushing through works or processes that leave customers interests behind and impact their experience.

Rushed works without proper planning can often result in costly projects down the track that may need to go backwards before moving ahead and revision of wiring, infrastructure and power requirements that could further negatively impact customers and result in longer implementation timelines. ENM Solutions supports the proposed 12-month transition for new GEO applications to be made and suggests 18 months for networks to meet the increased



requirements under enforcement. This transitional timeline should also be conditional on information pertaining to the application process being freely available, and the information required for applications available well before the timeline for submissions commences.

### **Transitional Arrangements: LES Licensing Regime**

With the significant amendments proposed for the GEO to cover consumer rights and protections, we believe the timeline for the LES regime with three years from date of implementation to comply is reasonable. One part of this timeline is the ability of the operators to detail how the licensing requirements will look in their business, put together their application and finally (perhaps most importantly) their ability to deliver them in practice. The other side to this is the availability of qualified service providers to deliver a huge influx of clean/renewable energy technology, and the availability of the raw materials and technology needed to deliver this infrastructure. Already there are shortages in availability of the technology and infrastructure within the open market, and the introduction of a mandated requirement for this sector will only contribute to that.

### **Recommendation 6: Consumer protections**

#### **10. Do you have any comments or feedback about the draft Recommendation and implementation strategy?**

ENM Solutions supports the provision of equivalent protections for off-market customers to those of on-market customers, in particular the access to automatic concessions on their bills. The proposed inclusion of guaranteed service level payments for outages should be clearly outlined to define how and when this would apply. We would also support the annual provision of information to customers within private networks, as a means of information disclosure and communicating benefits of the network and technology on site more broadly to consumers.



## **Recommendation 7: Enhancing the ESC's enforcement powers**

### **11. Do you have any comments or feedback about the draft Recommendation and implementation strategy?**

Bringing the enforcement powers of the ESC in line with those of the AER is an important aspect of these recommendations by ensuring that regulations and investigations can be followed through by the relevant body. During the industry consultation sessions, we believe that there has been clear communication to this panel that a lack of enforcement for existing regulations is responsible for a large portion of the issues being faced. Enabling broader penalties than simply de-registering a network should also allow for action to be taken which will not negatively impact consumer outcomes. Pairing this with an increase in the jurisdiction of EWOV should ensure that any persisting issues occurring in Embedded Networks are able to be addressed and resolved.

However, we would question only the LES Licensee being the party to bear any penalties resulting from enforcement. It may be more appropriate to identify a selection of penalties where the Owners Corporation can be impacted, ensuring that they take a vested interest in ensuring their Occupiers/owners are serviced correctly. In some cases that this panel has recommended, if an OC is directing an Operator to perform their services in a certain way with the profits being fed back to the OC – they may have an interest in breaching regulations for profit and hold no responsibility for the outcome.

## **Recommendations 8 and 9: Access to competitive retail offers**

### **12. Do you have any general feedback about the draft Recommendations and implementation strategies?**

ENM solutions supports the Power of Choice legislation that commenced from 1 December 2017 and its intention to allow open retail competition for all customers within Embedded Networks.

The proposed requirement for periodic reporting to the ESC on customer numbers and metering is not required. Customer numbers are reflected in the current ESC registration/exemption framework (and could be included within the proposed LES registration and revised GEO exemption applications to include metering) with the Embedded Network Manager (ENM) has visibility of current metering installations.

Through compulsory membership of EWOV, there will be an enforcement regime and complaints process available to all embedded network customers, meaning that any networks who do not comply will be able to be identified and penalised as any instance occurs that prevents a customer from going on-market. Similarly, any infrastructure installed on site should be able to be identified with existing meter photos and invoices for work completed – again something that the investigative powers of the ESC should enable to be sourced for any contribution towards metering upgrades.

### **13. What do you think would be a reasonable timeframe or triggers for required upgrades or changes to metering and/or other internal infrastructure? Why do you hold this view?**

There are already trigger events for customers wanting to go On-Market defined under the Power Of Choice regulations. Combining a selection of trigger events for specific customers may be more manageable than for a network as a whole.

Considering a meter used for invoicing purposes must be NMI compliant, and that meters generally have a 5–15-year lifespan; defining a end-of-life date for all meters installed pre 1 December 2018 may be appropriate.

**14. Do you have any suggestions about appropriate and reasonable approaches to facilitate the upgrade or change of metering and/or internal infrastructure?**

No comment.

**15. Do you have information you can provide to the Panel about the type of metering and/or internal infrastructure change or upgrade required to enable easy transfer? Please provide any information/evidence you consider will be useful.**

No comment.

**16. Do you have information you can provide to the Panel about the financial and/or commercial arrangements which might be plausible to enable appropriate upgrades or changes within a reasonable timeframe? Please provide any information you think will be useful.**

While the individual meter has been put forward as the major barrier to the customer, the key point to note is that the upgrades required to the switchboards are the primary barrier to operators/owners upgrading metering in bulk. If 50% or more of the existing metering is altered, all metering must be upgraded. While \$400.00 may seem expensive, switchboard works can be in the one hundred to two-hundred-thousand-dollar price range. While it may be appropriate to look at transition for individual customer meters, the underlying issue for legacy embedded networks holding this back will be their ability to upgrade switchboards while potentially also installing new technology. Consideration by the Victorian Government to subsidise this cost may be the most appropriate way to help address this transitional block. This will also result in a decreased cost passed onto the customers of these networks from these works and allow for private resolution of the remaining metering issues for those customers wishing to leave networks.

**17. Are there any additional options which may support or facilitate the required changes?**

No comment.

**18. Are there any other comments you would like to provide about these Recommendations?**

The cost of potential switchboard and metering upgrades could be significant and will be site specific based on the age and structure of the building. Many Owners Corporations (and Single owners for Shopping Centres and the like) may not have capital to invest in complying with these proposed changes. Coupled with the additional cost of complying with incorporating renewable or clean energy technologies, it is not practical and, in some instances, not possible.

A special levy of Owners within an Owners Corporation may be required, and in this instance may put undue pressure on individuals that may not have the means.

In all new developments post 1 December 2017, all Occupiers within an embedded network can move to a retailer of choice without the requirement to replace the meter. With that in mind, these regulations would negatively affect most developments pre commencement of Power Of Choice.

**Recommendation 10: Information disclosure requirements**

**19. Do you have any general feedback about the draft Recommendation and implementation strategy?**

ENM Solutions is supportive of the requirement for increased information provision and disclosure. Caution should be taken when bombarding customers with regular communication, but it is important for customers to be aware of their network configuration, their rights and the steps and processes involved in leaving the network to go on-market.

We note however that this may be hard to enforce, and like the recent documentation released by the ESC for Network Operators – may be something that could be templated for use Networks Operators.

Owners within Embedded Networks already have the right to request information about the commercial arrangements their building is party to and may not be aware of their existing right to information. Occupiers within the building can also reach out to their owner with any concerns to request further information.

**20. Do you have any thoughts about whether a fee-for-service approach is appropriate?**

The fee-for-service model is a good one; however, any hard and fast rule on this could stifle investment by some operators in renewable or clean energy technologies, infrastructure and metering.

**21. Do you think there should be limitations on who can own pivotal or critical essential infrastructure in residential private networks? If so, why? If not, why not?**

No. As it stands the Owners Corporations and Body Corporates are responsible for the poles and wires within an Embedded Network. Other infrastructure, such as metering and switchboards, in some instances come under this but may be installed on a lease or rental arrangement.

**22. We do not the proposed "Embedded Network Service Provider: (ENSP) role proposed by the AEMC. Are there any other comments you would like to provide about this Recommendation?**

No comment.

**Recommendations 11 and 12: Planning and building requirements**

**23. Do you have any general feedback about the draft Recommendations and implementation strategies?**

Tying construction arrangements to transient government policies and targets may not be appropriate for longer term planning of construction and network configuration. For instance, it could result in unachievable expectations for buildings and create further issues down the road.

ENM Solutions supports the proposed disclosure requirements for prospective purchasers; however, this should not imply that the bundled services should be in the best interest of prospective Owners and Occupants if maximum pricing, such as the VDO, is enforced.

**24. Do you have any suggestions about what the changes could look like and how they could be implemented?**

No comment.

**25. Are there any other comments you would like to provide about these Recommendations?**

No comment.

### **Recommendation 13: Bundled services and other fees and charges**

**26. Do you have any general feedback about the draft Recommendation and implementation strategy?**

ENM Solutions supports the enforcement of regulation around bundled energy services. The Victorian Energy Retail Code already outlines maximum pricing and formulae for how to calculate gas bulk hot water, which this review is clearly identifying has not been enforced. Further clarity around on-selling utilities generally can only improve outcomes for customers and provide better guidance for operators looking to deliver these fairly and accurately.

The recommendations around information provision for tariffs, fees and charges being available online are suited to those operators who are established to do so. If small Embedded Networks are being run by OC's and not third-party operators with requirement to publish this information – how would this provision of publicly available rates be expected to be managed?

**27. Do you have any thoughts or suggestions about how bundled services (including bulk hot water, bulk heating/cooling and unmetered gas cooktops) could be appropriately regulated? Please provide any details you think would be helpful.**

ENM Solutions supports the improvement in the enforcement powers of the ESC, which will be important to ensure any update to the regulations around bundled services can be followed through. Clearly defined "bundled services" will be required before defining how it can appropriately be regulated.

As discussed earlier in our submission, Bulk Hot Water does have some regulation – yet this has not been effectively enforced.

**28. Are there any other comments you would like to provide about this Recommendation?**

ENM Solutions has had experience with various utilities under the “bundled services” banner and would be happy to be involved in defining these.

**Recommendation 14: Mitigating disruption of supply due to failure of an embedded network**

**29. Do you have any comments or feedback about the draft Recommendation and implementation strategy?**

Currently the proposed mechanism allowing the ESC to have the ‘power to appoint’ appears open to interpretation and subject to criticism and debate. Without a clear mechanism to determine who is appointed, this will be open to possible conflicts of interest.

This “alternative provider” could be paid for their “services” through the fee-for-service model by the ESC for a given period, say three months, before handing to a new provider, being tendered out or dismantling the network.

**Recommendation 15: Giving voice to energy consumers in private networks**

**30. Do you have any suggestions about the best way to establish a mechanism to ensure that the voices of private network consumers are heard in policy and regulatory development?**

EWOV is currently a path for Private Network consumers to voice their concerns and be heard in policy and regulatory development. These consumers could be given forms or feedback surveys to complete as part of regular reporting, noting also that these concerns and issues have been presented by EWOV in submission to this review already.

Similar to those concerns presented by EWOV, only those who are actively driven to express their viewpoints or encouraged to submit based on negative experiences, will do so.

The reality is, this results in a completely biased and statistically flawed population sample from which to understand the true incidence of such issues within the industry for the end consumer.



EWOV's own submission indicated that there are at least 138,028 Embedded Network customers with access to their services, noting that this is only half of the Embedded Networks registered with the ESC. Any process that relies upon feedback from a sample of drastically less than 1% of that population (88 consumer respondents) cannot be described as anything other than a complete failure upon the part of the system to have the voice of these customers heard and their experiences understood to inform decision making. From EWOV's own report, the instance of complaints from Embedded Networks, while growing over the last two years, still represents less than 1% of that customer base. Neither could be identified as adequate mechanisms to capture the voice of Private Network consumers.

Should the ESC recommendation for all Private Networks to apply for and receive an exemption come to fruition, they may be best positioned to survey and source feedback from Private Network customers. With records of the location and details of each network, direct mail and survey campaigns will obtain a more accurate representation of the consumer experience (including ability to undertake random sampling). The inclusion of QR Codes to complete online surveys instead of hard copy forms is now an easy and cost-effective way to remove barriers to completion, alongside return paid envelopes. This is not dissimilar to the widespread awareness campaign pertaining the Victorian Default Offer that was undertaken by the Victorian Government in 2020, utilising then even further information data for targeted communication and engagement. Without this type of access to Embedded Networks, many Owners Corporations and Operators are members of Strata groups who could be invited in to support the process and invite engagement with the embedded networks who are members of their community.

**31. Do you have any other comments or feedback about the draft Recommendation and implementation strategy?**

No comment.

## **Recommendation 16: Transitional arrangements**

### **32. Do you have any feedback about the draft recommendation and implementation strategy?**

Given the significant infrastructure upgrade and potential for investment for networks adapting to these proposed requirements, the mechanisms behind these need to be confirmed before any timeframe can be implemented.

The timeline for works being completed, availability of sufficiently qualified business, and the availability of the technology and infrastructure itself, are all major issues that can impact a transitional timeframe. This cannot be better highlighted than the recent issues flagged by EWOV in being unable to assist solar customers who have fallen victim to poor installations, even by those currently accredited to do so. A selection of single residential customers is one issue – the failure or installation of a major solar or renewable installation within a private network will have even greater impact to those residing there.

Consequently, for the best possible benefit to the consumers in these networks, sufficient time should be allowed for decision makers to make informed decisions with the relevant information available to determine what is best for their building and customers/Occupiers.

### **33. What are your thoughts about feasible and/or reasonable timeframes for the transition? Why?**

The initial timelines proposed appear reasonable provided networks can be allowed to show evidence of their commencement on the journey towards achieving the integration of renewable technology and market access. Consideration for different stage gates may also be appropriate to handle the installation of extensive and costly infrastructure such as switchboards, building management systems, and Battery systems.

### **34. Are there any additional requirements appropriate and/or necessary for the phased transition? What are they?**

No comment.

**35. Are there any other comments you would like to provide about this Recommendation?**

For those networks who cannot financially support the integration of renewable or clean energy technology, will these networks be required to cease operating and connect to the NEM? If this is the case, who will facilitate the cost in this instance? What would be the transitional arrangement for this type of alteration to the network, where they will cease operating as a private network and connect all Occupiers directly to the NEM? Where would they fit in terms of complying to transitional arrangements?

**Request for additional comments and feedback**

**36. Do you have any comments about the potential impacts arising from the draft Recommendations and how this may affect your experience of embedded networks?  
Please provide details**

For review.

**37. Do you have any additional comments or feedback on the Draft Report or Recommendations? Please provide detail**

The recommendations of the panel are very reliant on significant uplift within the ESC to support them, even for the approvals process involved in the GEO amendments for all networks and exemptions and breakdown for different types/levels of network.