



7 July 2022

Mr Ray Williams MP
Chair
Legislative Assembly Committee on Law and Safety
NSW Parliament House
SYDNEY NSW 2000

Dear Mr Williams

Legislative Assembly Committee on Law and Safety – Embedded networks in NSW

Thank you for the opportunity to contribute to this inquiry.

The Energy & Water Ombudsman NSW (EWON) investigates and resolves complaints from customers of electricity and gas providers in NSW, which are either authorised retailers or exempt sellers.

Our comments are informed by our investigations into these complaints, and through our community outreach and stakeholder engagement activities.

We have commented on concerns that align with issues customers raise with EWON, or with our organisation's operations as they relate to this rule change.

If you would like to discuss this matter further, please contact me or Rory Campbell, Manager Policy and Research, on (02) 8218 5266.

Yours sincerely

A handwritten signature in black ink that reads "Janine Young".

Janine Young
Ombudsman
Energy & Water Ombudsman NSW

Legislative Assembly Committee on Law and Safety - Embedded networks in NSW

Background

EWON was founded in 1998 as an industry-based Ombudsman scheme to independently resolve complaints about our members. We have strong relationships in the energy sector and work with government and regulators to inform them about industry trends and issues identified through our complaint handling and community outreach program. Since our establishment in 1998, EWON has investigated complaints from customers living in residential parks and has evolved in accordance with industry and regulatory changes that have shaped the current embedded network landscape.

Our history and in-depth knowledge, combined with our customer complaints data and insights has provided us with a unique perspective on how the current framework has failed to evolve in accordance with the growth of embedded networks, resulting in significant customer detriment.

Why do we need to see change to consumer protections for embedded networks?

Energy customers in NSW have traditionally had access to consumer protections over and above that provided by general consumer law. Policy makers at the highest level have recognised that the essential nature of electricity and gas requires specific consumer protection. Fairness dictates that all customers should enjoy the same level of protection. However, customers who reside in embedded networks, rather than having an individual connection to the energy grid, miss out on many energy specific consumer protections as well as concessions and rebates.

Embedded Network residents and small businesses need to be provided with clarity, transparency, accountability and ultimately, consumer protection aligned with that of mass market energy residential and small business customers.

The current embedded network landscape

When the National Energy Consumer Framework (NECF) was introduced in NSW in 2013, the prevailing Australian Energy Regulator (AER) (Retail) Exempt Selling Guideline was not aimed at capturing situations where energy retailers were selling energy for profit to residential and small business customers residing in embedded networks.

The exemption framework was designed to recognise the wide variety of supply arrangements that existed at that point in time. It provided the AER with flexibility to apply obligations to exempt sellers that protected the interests of the exempt seller's customers and at the same time, were appropriate to the seller's individual circumstances. This typically applied to situations including residential park operators and landlords (lodging/rooming/boarded houses) who on-sold electricity to residents as an incidental part of their business¹.

Since the introduction of the exemption framework in 2013 we have witnessed rapid growth of the embedded network industry, and with it, an increase in business models that fall within the exempt selling framework. As the embedded network industry has grown, the regulatory system has become unwieldy. The current national exemption framework is no longer applied just to entities who are on-selling energy as an incidental part of their business.

¹ The Hon. John Ajaka, Second Reading Speech, National Energy Retail Law (Adoption) Bill 2012 p12,629



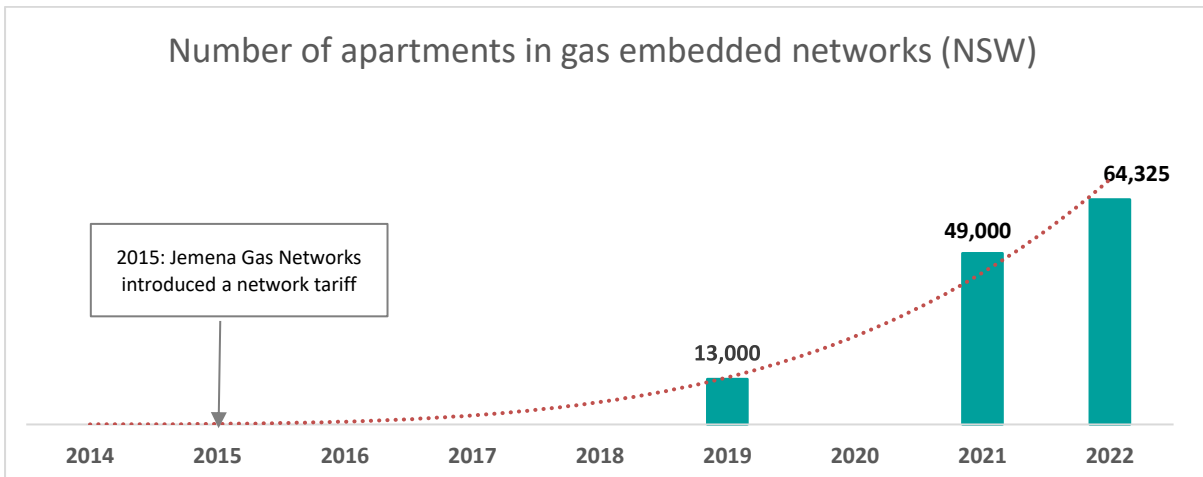
Overview of Growth and Reform

- As early as 2011 the AER noted the growth of on-selling energy within high density residential developments, such as apartment buildings. The AER also noted that it considered exempt selling is often not in the long-term interests of customers and it did not want on-selling to be a motivating factor for developers in deciding how developments are structured².
- In 2014, two years after the implementation of the exemption framework, there were approximately 500 network exemptions registered with the AER. EWON was then in a unique position to note the increasing number of customers who were living in embedded networks - because exempt customers in NSW had the right to make a complaint to the Ombudsman, despite there not being a requirement on the exempt entities to be EWON members.
- EWON's 2016 Rising Inequality in the Energy Market: Safeguarding Consumer Protection Report, expressed our concern about the growing number of embedded networks within new residential developments and the problems created by the growing number of customers missing out on energy specific consumer protections. In the same year, the Council of Australian Governments (COAG) Energy Council requested the Australian Energy Market Commission (AEMC) undertake a review of the regulatory arrangements for embedded networks.
- In 2017 the AEMC found that the regulatory framework for embedded networks was no longer fit for purpose³.
- EWON continued to cite the critical need for electricity, gas and hot water provision in embedded networks to be seen as an essential service. Further, that stronger NSW regulation needed to be provided with energy specific consumer protections that are equivalent to those which customers living outside of an embedded network receive.
- In 2018 the AER amended two of its guidelines to include the requirement for exempt sellers and networks, selling and supplying to residential customers, to join an Ombudsman scheme. At that time there were 2,500 network exemptions registered nationally with the AER. There are more than 6,155 current network exemptions nationally registered with the AER - 25.2% of these are registered in New South Wales⁴. The proliferation of high-density residential developments with embedded networks is nation-wide and is increasing rapidly.
- Further, there is increasing NSW wide embedded network provision of centralised hot water, where customers are paying their energy provider for hot water by the litre rather than the energy used to heat the water. The latter is the traditional model which comes with some consumer protection. As a result, there is a growing number of customers falling into an unprotected consumer group, due to gaps in the current regulatory framework for embedded networks.
- The graph below highlights the growing number of hot water embedded networks in NSW:

² AER, Exempt selling guideline, Version 1, December 2011, p7

³ AEMC, Final Report, Review of regulatory arrangements for embedded networks, pp32-50

⁴ [AER Public register of network exemptions](#)



(EWON only has figures as indicated)

An opportunity for the NSW Government to take action

The overall growth of the embedded network industry is not being driven by consumer demand – it has become a profitable business model. The benefits of embedded networks are geared towards offsetting building costs for developers and to lock in a long-term revenue stream for a service provider that continues long after the developer has completed the sale of the development.

This business model has been successful due to sustained growth in Australian property prices and the proliferation of high-density residential developments, without any consideration of the energy impacts on residents – owners and tenants.

Authorised energy retailers have entered this energy market sector evidencing that the embedded network industry is now driven by the core business of selling energy for profit.

This creates an imbalance between the National Energy Retail Law (NERL) policy principles and the application of the current embedded network framework. It also increasingly leaves consumers with inequitable consumer protections, due to gaps in the current legislative framework.

There is now an opportunity for the NSW Government to review the regulatory problems and to drive solutions that will address the inequitable consumer protections faced by customers in embedded networks. Our submission sets out the current problems and issues with embedded networks and proposes solutions that the NSW Government can take to ensure that all consumers enjoy the same level of protections for essential services.

Call for NSW Government Actions

The following table summarises the problems and issues with embedded networks and the current regulatory framework at a national and state level. Following the table, each call to action is supported by background information. The table includes hyperlinks to each one.

Framework	Problem/issue	Current status	Calls to Action
National	Exemption framework found to be not fit for purpose and the subsequent reforms have been stalled	AEMC has a package of proposed law and rule changes – stalled at national government level	Call to Action 1 The NSW state government (NSWG) should engage with other state governments to fast track the AEMC reform package OR



Framework	Problem/issue	Current status	Calls to Action
			<p>if this is not possible,</p> <p>The NSWG should introduce a NSW specific set of legislative reforms which address the gaps identified in AEMC reviews</p>
National	Authorised retailers on-selling within embedded networks (NECF does not fit this scenario)	AEMC has a package of proposed law and rule changes – stalled at Australian Government level	<p>Call to Action - 2</p> <p>The NSWG should engage with other state governments to fast track the AEMC reform package</p> <p>OR if this is not possible,</p> <p>The NSWG should introduce a NSW specific set of legislative reforms which address the gaps identified in AEMC reviews</p>
National	The DMO does not currently apply to off-market customers with an authorised retailer	The Australian Government proposed to consult on how best to extend price cap protection provided by the DMO to customers in embedded networks	<p>Call to Action - 3</p> <p>The NSWG should engage with the Australian Government to fast-track further changes to the <i>Competition and Consumer (Industry Code – Electricity Retail) Regulations 2019</i> to ensure embedded network customers of authorised retailers are covered by a price cap</p>
National	The role played by energy companies that specialise in embedded networks as ‘billing agents’	No reforms currently proposed	<p>Call to Action – 4</p> <p>EWON has asked the AER to create a specific register for those involved in the ‘activity’ of selling energy, including billing agents, with a requirement to join an Ombudsman Scheme.</p> <p>OR</p> <p>To expand the definition of ‘Selling energy’ in the NERL to include billing agents.</p> <p>The NSWG should support this call for action.</p>
National	Fragmentation of energy services (air-conditioning and hot water) – the definition of ‘energy’ in the NERL	No reforms currently proposed	<p>Call to Action - 5</p> <p>The NSWG should support expanding the definition of electricity and gas under the National Energy Retail Law or National Gas Law.</p>



Framework	Problem/issue	Current status	Calls to Action
State (NSW)	Growth of gas embedded networks (including centralised hot water services) that are not regulated by NECF	NSWG recognises this issue and has proactively consulted with stakeholders on it No reforms currently proposed	<i>As above, OR</i> the creation of a separate class of exemption by the AER that requires customers be billed by energy providers for the energy used to heat water, not the number of litres of hot water used
State (NSW)	EAPA/Rebates	NSWG recognises issues and is proactively reviewing and consulting on solutions	Call to Action - 6 The NSWG should ensure that all eligible NSW customers have equal access to rebates and EAPA, without onerous and overly administrative application processes i.e. barriers to obtaining this assistance
State (NSW)	Residential customers in embedded networks receiving inequitable consumer protections from licenced network providers, they are still not covered by deemed connection contracts	Some licenced network providers seek to increase charges on embedded network customers	Call to Action - 7 The NSW Government should monitor ongoing embedded network tariff changes including network tariffs if they are introduced for parent connection points for embedded networks, and take steps to ensure appropriate consumer protections are in place to protect embedded network residents. <i>OR</i> , If network tariffs are introduced for parent connection points for embedded networks, the AER should extend provisions within the deemed standard connection contract to customers within an embedded network, not to just the parent connection point
State (NSW)	Residential (Land Lease) Communities have no choice regarding energy retailers or access to affordability support	A final report of the review of the Act has been released – however, the recommendations are that more work be done on the electricity provisions of the Act	Call to Action - 8 NSWG should fast track the reform of the electricity charging provisions of the Act to deliver certainty to residents of land lease communities and operators
State (NSW)	Small businesses remain largely unprotected	Only some of provisions of Exempt Selling	Call to Action - 9 NSWG should support the AER in expanding the protections that apply to



Framework	Problem/issue	Current status	Calls to Action
		Guidelines apply to small businesses	small business customers under the NECF framework to small businesses operating within an embedded network and the exemption framework.
State (NSW)	Information disclosure about embedded networks	Landlords or agents must include details of electricity or gas supply through an embedded network in residential tenancy agreements GAP in consumer protections for prospective owners	Call to Action – 10 NSWG should make it mandatory for developers and real estate agents to provide clear information to customers about embedded networks and the requirement to open multiple accounts prior to the sale/lease of a property and again prior to contracts being signed
State (NSW)	Strata Corporations Management Act – no regulation of embedded network contracts by developers	A final report of the review of Strata Act has been released	Call to Action – 11 NSWG should fast track reforms prohibiting long term contracts agreed to by developers
State (NSW)	There is no Retailer of Last Resort (RoLR) arrangement for customers within embedded networks to ensure automatic transfer to an alternative retailer for ongoing supply if an exempt seller collapses	No reforms currently proposed	Call to Action - 12 NSWG should consider and implement a process to protect customers in embedded networks in the event of a RoLR for an embedded network operator and should consider further protections for customers that live in an embedded network

Table 1 – Overview of current problems/issues with embedded networks and a summary of EWON’s Calls to Action.

Federal Regulatory Problems

Exemption framework found to be not fit for purpose and the subsequent reforms are stalled.

In 2017 the AEMC conducted a review of the regulatory arrangements for embedded networks at the COAG Energy Council’s request. The AEMC concluded that the regulatory framework for embedded networks was becoming increasingly complex, giving rise to regulatory gaps, and was no longer fit for purpose given the growth of embedded networks as a business model and because



most embedded network customers are not able to access retail competition or important consumer protections⁵.

In June 2019 the AEMC published its final recommendations for updating the regulatory framework for embedded networks. It includes proposed changes to the National Electricity Rules (NER) and National Energy Retail Rules (NERR), and recommendations for the COAG Energy Council regarding changes to the National Electricity Law (NEL) and National Energy Retail Law (NERL).

Under the proposed framework, embedded network service providers will be required to register with the Australian Energy Market Operator (AEMO), and electricity on-sellers will be required to obtain an off-market retailer authorisation from the AER. The rationale behind the proposed new framework is that requiring on-sellers to obtain an authorisation will allow consumer protections for embedded network customers to be closely aligned with those of mass market customers under the NERL and NERR. The AEMC anticipated that the regulatory changes would commence from mid-2020, with a lengthy transition period including that of legacy embedded networks currently subject to registrable exemptions.

The AEMC draft report found that:

- Problems exist with the two-tiered framework created under NECF (exemptions and authorisations), such as:
 - substantially different obligations in providing network and retail services between those entities supplying embedded network customers and those supplying standard supply customers
 - differences in consumer protections for those customers within an embedded network and standard supply customers
 - differences in compliance obligations such as reporting, and enforcement consequences for registered exempt network service providers/exempt sellers⁶
- Customers in embedded networks faced difficulties achieving equivalent access to competition
- The NECF framework resulted in difficulties achieving appropriate consumer protections, such as:
 - Exempt network conditions, while they may mirror those contained in the NERL, do not have the same legal status as the rules
 - The AER considers it does not have the powers it needs to enforce exempt network conditions
 - The NERL and NERR cannot be applied to embedded network customers supplied by an authorised retailer because they rely on a tri-partite Distribution Network Service Provider-retailer-customer relationship that does not exist for embedded networks
 - There are cases of embedded network customers being disappointed or frustrated because their exempt seller does not provide the same level of service they would get from an authorised retailer, or their exempt network service provider does not provide the same reliability of supply they expect from a local network service provider
 - Smaller and more vulnerable consumers who are most affected by the gaps in consumer protections⁷

⁵ AEMC (n4) pp32-50

⁶ AEMC, Draft Report, *Review of regulatory arrangements for embedded networks*, p36

⁷ *Ibid* p45



In its final report the AEMC noted that the issues that had been identified remain worthy of changes to the law and rules as it is in the long-term interest of consumers for embedded network customers to be afforded:

- the right to choose a retailer in the same way as comparable retail customers in the same jurisdiction do
- customer protections afforded to retail customers under the NERL and NERR⁸.

Since the release of the draft report and recommendations there has been no progression to implement the suggested changes as it has stalled at a national level. The changes would address many of the consumer issues customers living in embedded network experience.

Call to Action - 1

The NSW government should engage with other state governments to fast track the AEMC reform package, or if this is not possible, should introduce a NSW specific set of legislative reforms to address the gaps identified in the AEMC reviews.

Authorised retailers on-selling within embedded networks.

EWON's [2020-2021 Annual Report](#) reported that the number of complaints about authorised energy retailers from customers living in embedded networks continues to rise. This corresponds with a decline in the number of complaints about exempt sellers. This was a continuation of the 2019-2020 reporting period. EWON's monitoring and analysis of complaints suggests these trends reflect an industry-wide change to the way energy is being on-sold to residential and small business customers in embedded networks. As new developments with embedded networks are completed and network exemptions registered, authorised energy retailers are increasingly taking up embedded network market share. This means a retail exemption is not needed.

This leaves embedded network customers billed by an authorised retailer without adequate consumer protections because the NECF was written around the obligations of a Financially Responsible Market Participant (FRMP). There is a specific lack of protections of standing offers and guaranteed electricity supply by designated retailers, which aren't available in embedded networks serviced by an authorised retailer.

Call to Action - 2

EWON has renewed its call for governments to decide on the Australian Energy Market Commission's (AEMC) recommendations for updating the regulatory framework to include embedded networks. EWON's submissions on this issue propose that the AER more closely monitors the impacts on consumers – EWON was pleased it included embedded networks in its compliance and enforcement priorities for 2021/2022.

The NSW government should engage with other state governments to fast track the AEMC reform package, or if this is not possible, should introduce a NSW specific set of legislative reforms to address the gaps identified by the AEMC reviews.

⁸ AEMC (n4), p32



The Default Market Offer (DMO) does not currently apply to off-market customers with an authorised retailer.

The majority of embedded network customers (living in residential complexes) are now on-sold electricity by an authorised energy retailer, rather than an exempt seller. This means that the rules contained in the AER's exempt selling guideline do not apply to the customer contracts or billing within these networks. This includes a condition that caps the price charged to embedded network customers:

'An exempt person must not charge the exempt customer tariffs higher than the standing offer price that would be charged by the relevant local area retailer for new connections, if the local area retailer were to supply that quantity, or estimated quantity, of energy directly to the premises of the exempt customer'⁹

While some of the laws and rules contained in NECF are extended to embedded network customers that are on-sold to by an authorised retailer, the Default Market Offer (DMO)¹⁰ does not apply to embedded network customers.

This means that embedded network customers on-sold to by an authorised energy retailer:

- do not have practical access to retail competition
- do not receive protection in the form of a price cap

These circumstances leave customers in embedded networks vulnerable to paying more for the electricity, while receiving fewer consumer protections or being able to switch retailers.

In January 2022, the Department of Industry, Science, Energy and Resources released a consultation paper on its proposal to consult on how best to extend price cap protection provided by the DMO to customers in embedded networks. EWON provided a [submission](#) supporting the extension of the DMO to embedded network customers, however, it also noted concerns that embedded network consumers may not have these protections from 1 July 2022 and potentially not until the next review of the Code in two years.

In March 2022 the outcomes of the review were reported¹¹. The department will consult further with stakeholders on how best to extend price cap protection provided by the DMO to customers in embedded networks. This consultation will include examining compliance issues and costs. The AER will then consult on how to implement changes in its DMO determination process, with regulatory changes implemented subsequently.

The department proposes to implement agreed changes prior to DMO 2023-2024 after working with the ACCC and the AER to undertake consultation throughout 2022.

Call to Action - 3

The NSW government should engage with the Federal Department of Industry, Science, Energy and Resources to ensure that the proposed work on extending the DMO to embedded network customers is fast tracked.

⁹ Condition 7, Appendix A-2: Core exemption conditions, AER (Retail) Exempt Selling Guideline, Version 5, March 2018

¹⁰ *Competition and Consumer (Industry Code – Electricity Retail) Regulations 2019*

¹¹ <https://www.energy.gov.au/government-priorities/energy-programs/price-safety-net>



The role played by energy companies that specialise in embedded networks as ‘billing agents.’

A key unresolved issue is that of for-profit energy companies structuring their business so that they can operate as an unregulated agent in embedded networks rather than applying for a retail energy authorisation. The role is played by specialist embedded network billing agents, and the growth of this business model has acted as an important catalyst for the weakening of the current retail exemption framework.

The rapid growth of embedded networks from 2012 coincided with an equally rapid growth in the number of companies with a core business of providing retail services to customers living in them. The current exempt selling guideline explains that entities must only obtain an authorisation or exemption if it purchases the energy at the parent connection point for the embedded network. EWON has seen multiple examples of energy businesses that have structured their contractual agreements with strata corporations so they can operate as a billing agent under the AER guideline, while maintaining full control over the energy retail services provided to their customers. This means entities controlling the energy services in a building have avoided the requirement to obtain an authorisation or exemption for its activities. This business structure also places the regulatory burden of being the registered exempt seller and network onto the strata corporation which generally comprises volunteer committee members whose understanding of energy is limited – while also being the customers.

Even though many of the ‘agents’ that first operated in the NSW embedded network sector have now obtained authorisations from the AER, EWON still sees examples of exemption holders that control multiple sites without applying for an authorisation and the ongoing risks to consumers arising from billing agents controlling retail services within embedded networks remains. This is summarised in the below table:

Function/role	Exempt retailer (registered) responsibilities	Embedded network billing agent responsibilities
Determines energy pricing	x	✓
Scheduling charges and fees	x	✓
Billing	x	✓
Opening and closing accounts	x	✓
Determining customer contract terms and conditions	x	✓
Payment methods	x	✓
Customer service and complaint handling	x	✓
Debt collection and customer hardship	x	✓
Disconnections and reconnections (including for non-payment)	x	✓
Purchases energy at parent connection point*	✓	x
Legal responsibility for compliance	✓	x

Table 2: A typical relationship between exempt retailers and their billing agent



* The billing agent is often responsible for negotiating the purchase of energy at the parent connection point, and managing the contract, but does so in the name of the exempt retailer.

This will continue to affect customers living in embedded networks unless amendments are made to the NERL expanding the definition of 'selling energy' to include the entity that provides the majority of retail services to the consumer.

Call to Action - 4

The definition of 'selling energy' under the National Energy Retail Law (NERL) should be updated to include an entity that provides the majority of retail services to a small residential customer.

As an alternative the AER should create a specific register for those involved in the 'activity' of selling energy, including billing agents, with the requirement to join an Ombudsman Scheme.

Fragmentation of energy services (air-conditioning and hot water) – the definition of 'energy' in the NERL.

The rise of embedded networks has seen a corresponding rise in separate billing for services such as centralised air-conditioning (thermal energy or chilled water) and centralised hot water. These services, despite their main input costs being energy, are treated by the exemption framework as being outside the National Energy Consumer Framework.

Even if services such as centralised air-conditioning and hot water are not currently legally defined as being energy services, these services clearly meet the AER's definition of being essential – as heating and cooling services. These services should attract the same level of consumer protections as customers connected to the grid using gas/electricity for heating and electric cooling. Critically, customers living in embedded networks often do not have a choice about whether to open accounts for these services. The accounts are interlinked with the general supply of electricity and gas, and their imposed embedded network provider also manages the account for the customer's energy supply.

The AER is currently reviewing the retailer authorisation framework and, in its issues paper, defines 'essentiality' in energy as "the provision of vital daily needs in modern life such as lighting, heating, cooling, refrigeration and the operation of appliances and electronics."

Under this definition, customers required to open separate accounts for air-conditioning and hot water services should be entitled to the same consumer protections that apply to the billing and provision of energy services. This sentiment is reflected in the importance the wider community, and energy industry, give to air conditioning and hot water appliances. Air conditioning (heating/cooling) and hot water (heating) are often quoted as in the top two contributors to the household energy budget¹². On one network member's websites hot water is described as making up 37% of the total energy consumption, while heating and cooling (like air-conditioning) makes up 22% of the household's energy consumption¹³.

As centralised hot water and air-conditioning services provided to residential customers are currently deemed not to meet the definition of energy under NECF, providers and networks do not

¹² <https://twitter.com/energygovau/status/1073418478609022977>

¹³ <https://www.ausgrid.com.au/energytips>



need to register these services and there is no transparency on the number of customers engaged with these services or the prices they are paying.

This can be addressed if a new class exemption is created which requires embedded network operators on-selling gas (and measured with a hot water meter) to register for an exemption. The AER recently made a draft determination for version 6 of the Exempt Selling Guideline and advised the sale of bulk chilled or hot water is unlikely to constitute the sale of energy for the purposes of the Retail Law, and therefore class exemptions cannot be created for these kinds of services.

While EWON understands that embedded network operators are billing customers for the hot water used (\$/L) rather than the gas consumed (\$/MJ or kWh), it does not consider this to be an accurate representation of the service provided to customers. Based on complaints investigated by EWON, there are no indicators/supporting information that hot water is a bundled product (water + energy) which is separate from the sale of energy. Further, there is no evidence that the embedded network operator is buying the water that is used in the centralised hot water system – which means customers are simply paying for the energy used to heat the water.

Hot water and air-conditioning are essential services, and customers of gas embedded networks should benefit from the same consumer protections that other retail energy customers are entitled to, including:

- rights to access energy services and obligations to offer supply
- informed consent requirements
- dispute resolution procedures
- minimum contractual standards
- minimum requirements for billing, tariff, and payment
- protections for customers at risk of financial vulnerability
- protections for disconnection and reconnection.

Refer to [Case Study 1](#) and [Case Study 2](#) which highlight issues faced by consumers as a result of the fragmentation of energy services.

Call to Action - 5

The definition of 'electricity' and 'gas' under the National Energy Retail Law (NERL) should be updated to include the sale of other products retailed by embedded network operators/energy retailers, including hot water and air conditioning and should be billed as per the underlying energy source used to heat/cool the product, not billed per litre

State Regulatory Problems

Gas embedded networks with centralised hot water services unregulated by NECF

In the past, most hot water meters in gas embedded networks measured the gas (energy) used to heat the water used by each customer. Customer's charges were and still are based on the price of gas used by the system. In NSW, gas and hot water embedded networks are frequently designed to provide the following services to customers:

- an unmetered gas supply (referred to as a 'cooktop service')
- a hot water heating service (where the energy consumption is measured with a hot water meter.
- The gas distributor, Jemena Gas Networks, and its predecessors, supplied gas to apartment buildings using hot water meters to measure energy consumption for decades. The AEMO Gas Retail Market Procedures (NSW and ACT) embeds an equally long-standing industry



practice of using the flow through a hot water meter to measure the energy consumption of an on-market energy customer. The Gas Retail Market Procedures include hot water meters in the definition of a meter, and therefore incorporate hot water meters into a customer's gas delivery point. The procedures also provide networks and retailers with a methodology for using a hot water meter to measure energy consumption.¹⁴

In NSW, in accordance with the above, there are over 250,000 retail gas customers whose:

- gas consumption is measured using a hot water meter owned, maintained and operated by Jemena.
- hot water meter forms part of the gas delivery point as per the Gas Retail Market Procedures and they are allocated a meter installation reference number (MIRN).
- energy consumption is calculated using a methodology set by the Gas Retail Market Procedures and based on the flow of water through the hot water meter.

As a result, these customers:

- are billed for their energy consumption by an authorised energy retailer and receive the full set of NECF consumer protections.

In 2015 Jemena Gas Networks introduced a boundary meter network tariff. This saw significant growth in gas embedded networks, including bulk hot water services, in NSW and the introduction of the practise of using meters to measure the volume of cold water used in the bulk hot water system. As a result, customers are now being billed for hot water on a cents per litre basis rather than for the energy used to heat the water. These customers do not receive the consumer protections that they would if they were being charged for the energy used to heat their hot water.

As of June 2022 there are now over 64,325 customers in gas embedded networks being billed for an unmetered gas supply and metred hot water – and this number will continue to increase. It should be noted that in many embedded networks, this also applies to the sale of chilled water – used for air conditioning.

In its draft paper the AER noted that the sale of bulk chilled or hot water is unlikely to constitute the sale of energy for the purposes of the retail law as it considers that bulk chilled and hot water is a manufactured / bundled product.

EWON is not suggesting that hot water 'equals' energy however, it is equally not factual to state that gas embedded networks in NSW are legitimately selling hot water as a manufactured / bundled product. These energy providers are on-selling gas or electricity but instead of measuring it by the kilowatt or kilojoule used are instead applying a price to the litres of water which pass through the hot water meter to apply an unregulated gas /electricity recovery cost (plus profit) labelled as cents per litre of hot water used. The practice of billing customers for litres of hot water used is arguably, an exercise in regulatory arbitrage and does not reflect the actual service provided to these customers – the on-sale of gas or electricity. Significantly, the entities charging by litre of hot water consumed are energy retailers and not licenced water providers.

Further, it is difficult to accept that hot water is a bundled product (water + energy) that is separate from the sale of energy. EWON has seen no evidence that the embedded network operator/energy retailer is buying or selling the water that is used in the centralised hot water system.

¹⁴ [Retail Market Procedures \(NSW and ACT\)](#)



Further information supporting this includes:

- In NSW, accounts with the licenced water provider are opened with the transfer of property titles, and new connections form part of the development approval process. Therefore, only individuals and businesses that own a property or an owner's corporation will hold a water account with the licenced water provider.
- For example, the Sydney Water Multi-level individual metering guide outlines how the use of centralised hot water systems within residential buildings is charged to owner's corporations. This document explains that the owner's corporation is charged for the total amount of water used in the centralised hot water system and these charges are typically then apportioned to individual owners through strata levies.
- This means only an owner's corporation could be on-selling the water used in the centralised hot water system.

EWON knows that many residents living in embedded networks are required to open a gas account and pay for water heating services. It also knows that water heating services in embedded networks are managed by for-profit energy companies. Due to basic structure of retail services from licenced water providers, it is unlikely the charges include the cost of the water used in the system.

Call to Action - 5

The definition of "electricity" and "gas" under the National Energy Retail Law (NERL) should be updated to include the sale of hot water and air conditioning to be billed as per the underlying energy source. Or;

The AER should create a registerable class exemption for gas on-selling when its purpose is to heat water. This exemption class would need to apply in situations where the residential customer's energy consumption is measured by a hot water meter, consistent with the current Gas Retail Market Procedures. To encourage innovation for exemption holders and to ensure consistency with the current wording of the Gas Retail Market Procedures, the exemption class could be silent on how the hot water is billed to customers. This would allow for different metering technologies, products and services to be captured without further need to expand or change the definition in the future.

Rebates and EAPA

EWON has always held that EAPA should be expanded on a permanent basis to all customers in NSW who hold an energy account. This should apply to customers of authorised retailers operating an embedded network and to customers of exempt sellers operating embedded networks.

Residential customers living in an embedded network are disadvantaged by:

- NECF protections for those experiencing financial vulnerability are not fully extended to embedded network residential customers
- there is no access to financial assistance through EAPA vouchers, which assist those experiencing financial vulnerability
- administrative hurdles and less support through the application process - different, more time consuming and confusing application process to obtain NSW Government rebates. This differs to customers that are billed by an authorised energy retailer, who receive assistance from their retailer in receiving these rebates
- not receiving NSW Government rebates directly to their energy bills, as this is paid directly into the bank account of the residential customer. This differs to customers that are billed by an authorised energy retailer, who receive this directly on their energy bill.



During 2020 and 2021 as part of the NSW Government's COVID-19 response, EAPA was temporarily extended to customers of authorised energy retailers operating embedded networks. Residents could contact Energy NSW to find out when EAPA was able to be applied to their account.

We acknowledge that NSW Office of Energy and Climate Change indicated that a future work stream will address this inequity. EWON looks forward to consultation on this important reform.

Refer to [Case Study 4](#) which shows that anyone can experience financial vulnerability and that retailers should provide additional information about the availability of financial assistance such as rebates. It also highlights that availability of EAPA would have significantly benefitted the customer.

Call to Action - 6

The NSW Government should ensure that all customers in NSW receive equal assistance through rebates and EAPA, without additional barriers in place to obtain assistance, and that customers be able to have rebates applied directly to their energy bills.

Residential customers in embedded networks receive inequitable (or reduced / limited) consumer protections

The current regulatory embedded network framework means residents are not direct customers of the local distributor - they do not have a direct property supply. This stops at the parent connection point - the start of the embedded network. As the embedded network operator is responsible for the distribution of supply and owns the infrastructure within the embedded network, it is effectively the distributor, without any of the regulatory obligations imposed on local distributors. The local distributors responsibilities and consumer protections set out in the deemed customer connection contracts are not applicable to embedded network customers.

Network tariff reform

On 30 September 2019, Ausgrid submitted a proposal to the AER to approve an amendment to its Tariff Structure Statement to include new network tariffs to apply to certain embedded network customers. The tariffs were designed to apply to the parent connection point of embedded networks with residential customers. These proposed tariffs will likely increase the average cost of energy for residential embedded network customers in affected distribution areas.

While in this instance, the AER did not approve the proposal to amend the Tariff Structure Statement for the 2019-24 period¹⁵, it is likely that embedded network tariffs will be a consideration of all distributor's future 5-yearly Tariff Structure Statement review process.

Ausgrid, in proposing the new embedded network tariff noted that:

- there are multiple energy users behind each parent connection point such as residential or small businesses.
- the cost of running the distribution network is not shared equitably between customers within an embedded network and those directly connected to the network. Therefore, customers connected to the grid are cross-subsiding embedded networks under the current tariff arrangements

¹⁵ The AER decision was not based on the merits of the proposed tariffs, however, was due to the timing of the proposed amendments and Ausgrid's failure to satisfy the requirements of clause 6.18.1B of the *National Electricity Rules*



- the tariff would not result in an increase in revenue, however, to ensure a fair contribution to funding network costs, considering multiple energy users behind the parent connection point¹⁶

Problems with the proposed embedded network tariffs

The proposed network tariffs fail to recognise that:

- embedded network customers are not covered by the network's deemed standard connection contract and therefore are not recognised as a network customer.
- when there is a network incident that affects the parent connection point, and therefore the supply of the embedded network customer
 - the embedded network customer has no avenue to individually make a complaint to the distributor and they are not covered by the networks guaranteed service levels (GSL)
 - the embedded network customer is not protected by the life support requirements placed on the distributor under the NERR. This could disadvantage them during an unplanned outage and this distributors reconnection prioritisation.
- they provide a straightforward economic solution for equitable sharing of network costs however, fails to acknowledge the inequitable rights and costs imposed on a customer by the embedded network operator.

Refer to [Case Study 3](#) embedded network customers are unable to claim food spoilage following a power outage.

Call to Action - 7

If network tariffs are introduced for parent connection points for embedded networks, the AER should extend provisions within the deemed standard connection contract to customers within an embedded network, not to just the parent connection point.

- ***this could include network guaranteed service levels, where a power outage is attributable to a network issue; or***
- ***an individual embedded network customer being able to lodge a claim, directly with a distributor.***

The NSW Government should monitor ongoing embedded network tariff changes including network tariffs if they are introduced for parent connection points for embedded networks and take steps to ensure appropriate consumer protections are in place to protect embedded network residents.

Residential (Land Lease) Communities

Many customers living in residential parks face energy affordability issues and have no choice of energy retailer or affordability support. When electricity is supplied by a park operator, the Residential (Land Lease) Communities Act 2013 places restrictions on how and what an operator can charge a homeowner for the utilities they consume. The Residential (Land Lease) Communities Regulation 2015 also limits the maximum service availability charge that an operator can charge based on the quality of the electricity supply.

¹⁶Ausgrid Tariff Structure Statement - Amended September 2019 - Appendix B – *Explanatory notes to the amendment*, page 4



Two developments have affected the operation of consumer protections in the Residential (Land Lease) Communities Act:

- In 2018, the Supreme Court of NSW interpreted section 77(3) of the Act to mean an operator is not entitled to charge a homeowner more than it has been charged by the energy provider for the electricity consumed by the homeowner. This decision capped the price residential park energy customers could be charged for energy use, but also caused confusion about how energy charges should be regulated.
- After this decision, some residential park operators decided to hand over on-selling electricity within the park to authorised energy retailers. Residents were asked to open an electricity account with the appointed energy retailer, rather than pay their bills directly to the park operator. This meant that electricity charges for these customers were no longer covered by the Residential (Land Lease) Communities Act and were instead required to open a market retail contract. This resulted in an increase in electricity charges for these customers and in a significant change in consumer protections:
 - Some of the rules in the NERL and NERR only apply to a retailer that is the FRMP for the customers connection point or NMI. As customers in an embedded network are off-market, there is no FRMP for their connection point and it is unclear how the rules and laws operate when an authorised retailer is selling in an embedded network
 - There is no obligation for authorised retailers to offer off-market customers a contract that is benchmarked against the Default Market Offer
 - the conditions related to pricing in the *AER's Exempt Selling (Retail) Guideline* do not apply to an authorised retailer - even when on-selling in an embedded network.
 - Clause 6(3)(c) of the *Competition and Consumer (Industry Code—Electricity Retail) Regulations 2019* (Cth) excludes embedded networks from the definition of a 'small customer'.

EWON has actively engaged with stakeholders to address the consumer issues raised through complaints since the 2018 court decision, and we have added information for consumers about their rights if an authorised energy retailer takes selling electricity in their community¹⁷.

The NSW government in its current review of the Residential (Land Lease) Communities Act 2013, has a separate stream devoted to energy charging. EWON's submission to the review focused particularly on the strengths and weaknesses of the potential future approaches for energy charging in residential parks. There was further consultation on an appropriate charging method, however this is yet to be implemented.

Call to Action - 8

The NSW Government should fast track reforms of the electricity charging provisions of the Residential (Land Lease) Communities Act 2013 to deliver certainty to residents of land lease communities and operators.

¹⁷ <https://www.ewon.com.au/page/customer-resources/living-in-an-embedded-network/the-rules-for-energy-billing-in-residential-parks>



Small businesses remain largely unprotected

Many of the conditions in the Exempt Selling Guidelines apply to both small business and residential customers however, the dispute resolution requirements, including the requirement to join EWON, do not.

This creates inconsistencies in the options available for small businesses. The NSW *Electricity Supply Act 1995* gives all residential and small business customers the right to complain to EWON, but because operators are not required to be EWON members, its dispute resolution powers are limited to, at best, negotiating an outcome if the operator is open to engaging with EWON.

EWON cannot compel operators to work with it, provide information or comply with its decisions. EWON engages with them to assist customers, but for many complaints, it is unable to achieve a fair and reasonable outcome, as it does for small business customers of EWON members who operate outside the embedded network regime.

An additional complication in embedded networks is not all customers in the one building being extended the same consumer protections. Many embedded networks are built with a mix of residential and commercial properties, usually an apartment complex with shops on the ground floor. In these networks, residential customers enjoy higher standards of consumer protection than the small businesses.

Many small businesses in an embedded network lease shops from a shopping centre where the landlord is also the energy provider. This adds additional complexity to disputes and may further weaken consumer protections as a customer may be fearful of repercussions of their lease agreement, should they dispute or have difficulty paying their energy bills.

Call to Action - 9

Protections that apply to small business customers under the NECF framework should be extended to small businesses operating within an embedded network. The NSW government should support the AER in extending the provisions in the NECF framework to apply to the exemption framework.

Information disclosure about embedded networks at the point of sale or tenancy application

EWONs engagement with customers indicates there is still not enough information available to home buyers and prospective tenants about embedded networks. Customers often complain to EWON that they had not been aware that embedded networks existed until they found their new home was part of one. They also tell EWON that they were not given adequate information from their real estate agent about opening energy, hot water or air conditioning accounts with the embedded network operator.

EWON welcomed the March 2020 development requiring that landlords or agents include details of electricity or gas supply through an embedded network in residential tenancy agreements. Unfortunately, many tenants are not aware of what this means or that they may require multiple accounts. Further, this inclusion does not extend to the selling of centralised hot water within embedded networks and how residents are charged for hot water.

Refer to [Case Study 5](#) customers purchasing property often do not know that it is part of an embedded network.



Call to Action - 10

The NSW Government should make it mandatory for developers and real estate agents to provide clear information to customers about embedded networks and the requirement to open multiple accounts prior to the sale of a property and again prior to contracts being signed. Further, that real estate agents be required to provide clear information to tenants about embedded networks including centralised hot water, prior to leases being entered into.

Strata review

Section 132A was inserted into the *Strata Schemes Management Act 2015* in 2018 (and commenced on 1 October 2019) to address concerns that strata schemes were being locked into unfair long-term utility supply contracts. It included term limits on contracts for electricity, gas or other utilities and requires these contracts to be considered at AGMs.

Electricity embedded networks were exempted from these provisions, as the Australian Energy Market Commission (AEMC) was undertaking a review of the regulation of embedded networks. The Government did not wish to pre-empt the findings of this review and impose controls that were contrary to its recommendations, which have now been handed down.

In November 2020 the NSW Government released a discussion paper on the continued exclusion of embedded networks from time limits on contracts. EWON submitted to the review that the exemption for embedded networks under Section 132A should be removed and the protections for other utility provision should be extended to energy.

The 2021 [Report on the statutory review of the *Strata Schemes Development Act 2015* and *Strata Schemes Management Act 2015*](#), recommended extending the application of section 132A of the Management Act to contracts for the supply of electricity through an embedded network¹⁸.

Refer to [Case Study 6](#) which highlights issues that occur when a developer negotiated a long-term energy contract prior to the establishment of a building's owner's corporation.

When this occurs owners and residents are bound into long term utility contracts through upfront agreements made by developers. Such contracts can be beneficial providing cheap energy and innovative services. They can also cause significant detriment to owners and residents.

Call to Action - 11

The NSW government should implement the recommendation in the 2021 Report on the statutory review of the *Strata Schemes Development Act 2015* and *Strata Schemes Management Act 2015*, to extend the application of section 132A of the Management Act to contracts for the supply of electricity through an embedded network.

Retailer of Last Resort for embedded networks

Through the Retailer of Last Resort (RoLR) scheme, the National Energy Retail Law (NERL) contains protections for customers of authorised retailers in the event of retailer insolvency. Customers are transferred to the RoLR, that has mandatory basic retailing responsibility usually across the entire distribution network area.

Embedded networks should also have some form of RoLR arrangement. For many embedded networks in New South Wales, exempt sellers are residential park owners or strata schemes with



limited knowledge about energy market arrangements. Without a RoLR arrangement there is no provision for automatic transfer to an alternative retailer for ongoing supply for customers in embedded networks.

There are two issues that may occur to customers residing in an embedded network in the event of a RoLR:

- 1) If an exempt seller collapses, it is most appropriate for the retailer at the parent connection to become the RoLR as this would minimise any financial risks to that retailer. It should be noted that while this ensures continuity of electricity supply, pricing of RoLR contracts for residential park customers need special consideration. These customers currently receive price protection under NSW legislation.
- 2) Issues may arise for a small number of customers that reside in an embedded network however, have transferred away to a retailer of their choice. In these circumstances, an embedded network customer would receive a bill for usage only from the authorised retailer and a bill from the embedded network operator for supply charge. In the event of a RoLR, these customers face issues with not having a specific usage only contract with the new retailer, incurring additional supply charges and being further financially disadvantaged.

Call to Action - 12

The NSW Government should consider and implement a process to protect customers in embedded networks in the event of a RoLR for an embedded network operator and to consider further protections for customers that live in an embedded network and are billed for energy usage only by an authorised energy retailer.

Additional Reading

EWON has published numerous articles and submissions regarding some of the issues faced with embedded networks.

1. EWON Spotlight On – [Embedded networks – it's time for change](#)
2. EWON Spotlight On – [Hot water embedded networks](#)
3. EWON Submission – [AEMC Review of regulatory arrangements for embedded networks – consultation paper](#)
4. EWON Submission – [AEMC Review of regulatory arrangements for embedded networks – Draft Report](#)

Enquiries

Enquiries about this submission should be directed to Janine Young, Ombudsman on (02) 8218 5256 or Rory Campbell, Manager Policy and Research, on (02) 8218 5266.



Case Studies

Case Study 1

A customer complains about the billing of a metered centralised air conditioning service

A customer contacted EWON through an interpreter. They had recently moved out of an apartment in a residential complex established as an embedded network. The customer contacted EWON about a bill for \$1,753.76 for air conditioning services they received for the billing period 17 July 2018 to 31 March 2019. The customer contacted the embedded network retailer and was told that the bill was based on actual meter data. The customer disputed using over \$200 a month for air-conditioning.

The retailer advised EWON that the disputed bill related to centralised services, including air conditioning and potable hot water heating services. The retailer noted that both the air conditioning service and hot water services were metered to enable the customer's bills to account for the amount of gas or electricity used for the heating and cooling. The retailer reviewed the customer's billing and identified that the customer was overcharged for air conditioning services by 192kWh, or approximately \$40. The retailer offered to credit the customer's account with \$50 to resolve the complaint. The customer accepted the credit as an outcome to the complaint.

Case Study 2

Customer does not qualify for consumer protections

A customer moved into an apartment with an embedded network and opened an energy account. Four months later, his hot water service was disconnected without notice. He contacted the embedded network retailer who said that he had not opened an account for gas and hot water at the same time as his energy account, and therefore no bills had been issued for 15 months.

The customer opened a gas and hot water account, was reconnected, and received a back bill for hot water usage for \$1,230.66. The customer contacted the embedded network retailer and was told that the bill must be paid within two weeks. The customer complained to EWON that he did not understand how the usage had been calculated or understand why the bill was delayed for 15 months.

EWON contacted the embedded network retailer and it noted that there is no specific regulation for backbilling of a hot water service. As a good will gesture, it offered to provide the customer with a \$464.35 credit to the account, reducing the balance owed to \$766.31. EWON advised the customer of this outcome in writing – again EWON was unable to determine if this was a fair and reasonable outcome.

Case Study 3

Embedded network customer unable to claim compensation for losses after 8-day power failure

In July 2020, a customer complained to EWON that he had experienced a power outage due to a transformer failure within the broader electricity network, which affected many customers in the area. The outage lasted eight days. The customer contacted the licensed network provider and requested it provide an electricity generator for his residential building so that residents could run some appliances. The network's customer service representative told the customer he could submit a claim to the network for compensation for food wastage if the outage lasted several days. After the power was restored, the customer submitted a claim to the licensed network



provider. The claim was declined because the customer lived in an embedded network. EWON advised the customer that as he was not covered by a customer connection contract with the licensed network provider, he could only make a claim to his embedded network operator.

The customer returned to EWON after making the claim for losses caused by the unplanned outage to the embedded network operator. The embedded network operator had also declined the customer's claim. EWON referred the customer's complaint to the embedded network operator at a higher level. The embedded network operator advised EWON it could not take the complaint further because:

- The electricity outage was caused by the fault at the network substation and not within the embedded network, so the incident was outside the control of the embedded network.
- The embedded network operator did make a group claim on behalf of the customers within the embedded network, but the claim was declined by the licensed network provider.
- An individual claim could not be made on behalf of the customer to the licensed network provider as the incident was outside the regulated reporting period.

EWON contacted the embedded network provider to obtain more information about the handling of the customer's claim. The embedded network provider confirmed that the claim was initially rejected because the cause of the outage was an electrical storm, and the operator could not make a claim to the licensed network provider on behalf of the affected residents. This was due to the nature of the connection contract between the licensed network provider and the embedded network operator. The embedded network operator did offer to provide the customer with a credit of \$150 due to the lack of information provided in response to the customer's initial claim.

The customer complained to EWON again in November 2020. The customer advised that the network transformer that was replaced nine months earlier caught fire and caused a second electricity outage event in the building. The customer made a claim for \$400 due to food spoilage and was again referred by the embedded network operator to make the claim directly to the licensed network provider. EWON referred the matter to a higher level and the embedded network operator contacted the customer and apologised for providing incorrect information. The embedded network operator offered to include the customer's claim in the group claim it was making to the licensed network provider following the event.

EWON contacted the embedded network operator again to follow up on the outcome of the customer's claim. It advised that an explanation for the network event had not been received from the licensed network provider. The embedded network operator offered the customer a credit of \$150 due to the customer service issues he experienced following the event. It also agreed to support the customer's claim to the licensed network operator and to seek reasons for any decision. The customer accepted this outcome to the complaint about the embedded network operator.

The customer again returned to EWON when his claim to the licensed network provider was declined on the basis that he was an embedded network customer. EWON obtained the claim information from the embedded network operator and reviewed the customer contract for both the embedded network operator and the licensed network provider. EWON provided the customer with additional information and acknowledged that the customer was in a situation where they were unable to claim further for unplanned network outages.



Case Study 4

Financial vulnerability and not being provided with information about rebates

A customer moved into a property in an embedded network in November 2020. When she established an account with the retailer, she provided her pension card details but was told that they would not accept the details. She lived alone at the property and considered she only used a small amount of gas. She disputed her bills with the retailer but was not offered any assistance and was told to use less gas.

The customer had \$300 owing on her gas account and was not able to pay this amount. She did not receive any discount on her bills, was not receiving the NSW Gas rebate and tried to apply for EAPA but was unsuccessful because she lived in an embedded network.

EWON referred the matter to the retailer at a higher level to discuss an affordable payment arrangement. EWON told the customer that EAPA was not currently available to residents living in an embedded network, however she might be eligible to receive the NSW Gas rebate and provided her with details of how to apply.

Case Study 5

Customer purchased an apartment and discovered the building had an embedded network

A customer complained to EWON that they purchased a new apartment and discovered that the building had an embedded network. The customer said they had no prior knowledge of embedded networks. The customer complained that their recent monthly electricity bill was for \$160, when they had previously paid \$300 a quarter. EWON advised the customer about the regulation of embedded networks, the rights and responsibilities of embedded network customers, and the factors that may contribute to high electricity bills.

Case Study 6

Developer enters strata into long term contract which breached the exempt retail guidelines

EWON was contacted by the Secretary of the Executive Committee of an Owner's Corporation enquiring about pricing and charges by an exempt network. They explained that a developer had entered into a long-term utility management contract.

The contract between the Owner's Corporation and the utility management company carried a 10-year term with an option for the utility management company to renew the contact for a further 10 years.

EWON established that the network exemption and the retail exemption had been set up by the developer in the name of the Owner's Corporation, of which it was unaware.

EWON advised the Owner's Corporation that the energy rates that the management service was charging per the contract were above the maximum allowable under the Exempt Retail Guidelines, and that individual resident's bills would need to be reduced to below what the management service was charging the Owner's Corporation. EWON also noted that the service contract included a monthly \$10 meter reading fee for every meter in the complex (excessive when compared to meter reading fees charged by distributors and metering co-ordinators).

EWON provided the Owner's Corporation with details of the Australian Energy Regulator and the exemption framework which it was required to comply. EWON also recommended that the



Owner's Corporation seek legal advice to address the contract that the developer had entered it into with the utility service management company.