



Government of Western Australia
Department of Mines, Industry Regulation and Safety
Energy Policy WA

Voluntary Code – Embedded Network Services in Western Australia

Consultation Paper

Switching electricity rights on for everyone

8 May 2023



Working together for a **brighter** energy future.

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– Consultation Paper*

Switching electricity
RIGHTS
for everyone.



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Glossary

Term	Definition
the Act	<i>Electricity Industry Act 2004</i>
AES Code	A code of practice for the supply of electricity to customers by registered providers of alternative electricity services
AES framework	The proposed registration framework for alternative electricity services in Western Australia
alternative electricity service or AES	An alternative electricity service
Caravan Park Exemption Order	Electricity Industry (Caravan Park Operators) Exemption Order 2005
Commercial Tenancy Act	<i>Commercial Tenancy (Retail Shops) Act 1985</i>
Directions Report	Creating a dynamic customer protection framework for behind-the-meter electricity services, Directions Report, 13 December 2019
Disclosure Statement	Annexure A to the Voluntary Embedded Networks Code
embedded network	<p>means a <i>distribution system</i> (as defined in the Act):</p> <ol style="list-style-type: none"> that is operated by or under the control of a person (one person) – that is, is subject to a single controlling mind; that <i>supplies</i> (as defined in the Act) electricity to at least one customer who is not, or at least one premises that is not occupied by, the operator or controller referred to in (a); and that is supplied with electricity by another distribution system. <p>Note – notwithstanding (b) above, for the purposes of this Consultation Paper, the supply of electricity in a private network to green titled premises is not considered an embedded network, as this form of supply is not authorised by clause 4 of the Electricity Industry Exemption Order 2005</p>
embedded network seller	As defined in clause 2 of the Voluntary Embedded Networks Code
end-use customer or customer	A person who buys electricity for their own consumption (or consumption by their household or business); they do not sell that electricity on to someone else
Energy Ombudsman	Western Australian Energy and Water Ombudsman
Exemption Order	Electricity Industry Exemption Order 2005
Final Report	Tailoring customer protections for alternative electricity services – a registration framework, Final Recommendations Report, 5 November 2020
Prescribed AES	means an activity prescribed by regulations as an alternative electricity service once the AES framework is in place

Term	Definition
Residential Tenancies Act	<i>Residential Tenancies Act 1987</i>
Retirement Villages Act	<i>Retirement Villages Act 1992</i>
small-use electricity customers	A customer to whom electricity is sold for the purpose of consumption and who consumes not more than 160 MWh of electricity per year
Small Use Code	<u>Code of Conduct for the Supply of Electricity to Small Use Customers 2022</u>
Strata Titles Act	<i>Strata Titles Act 1985</i>
the Survey	A survey of customers, operators, service providers and other interested stakeholders of embedded networks undertaken by Energy Policy WA in November 2022
Voluntary Embedded Networks Code or Voluntary EN Code	Consultation draft of a voluntary embedded networks code of practice for the supply of electricity to customers within embedded networks.

Abbreviations

Term	Definition
AES	Alternative Electricity Service
BTM	Behind-the-meter
C-RIS	Consultation Regulatory Impact Assessment
DER	Distributed Energy Resources such as solar photovoltaic panels, batteries, electric vehicle charging infrastructure
DMIRS	Department of Mines, Industry, Regulation and Safety
ENS	Embedded Network Seller/s
ERA	Economic Regulation Authority
EV	Electric vehicle
PV	Photovoltaic

Executive summary

Following a 2019 review of the electricity licensing and exemption framework in Western Australia, Energy Policy WA is developing a framework to apply customer protection obligations on persons offering electricity services through new and emerging business models that fall outside the licensing framework, or for which the licensing framework is not fit for purpose. This framework is called the Alternative Electricity Services (AES) framework.

Energy Policy WA is now considering whether the on-supply of electricity in embedded networks should be covered by the AES framework. This would mean that a person on-supplying and on-selling electricity via an embedded network (in this Consultation Paper referred to as 'embedded network seller/s', or ENS) would be required to register as an AES provider and meet certain obligations.

In anticipation of embedded networks potentially being covered by the AES framework, Energy Policy WA proposes to introduce a voluntary code for ENS. It is envisaged the voluntary code will encourage ENS to provide a suitable level of customer protections and will operate until such time as the AES Code may come into effect for embedded networks.

The intention is for the **primary entity responsible for the on-selling of electricity** within an embedded network to be subject to obligations under the voluntary code (and subsequently the AES Code) – that is, there would be only one ENS with code obligations for any particular embedded network (although an ENS may on-sell at one or more embedded networks).

The purpose of this Consultation Paper is to share a consultation draft Voluntary Embedded Networks Code (Voluntary EN Code) with stakeholders for comment. The Voluntary EN Code contains obligations for ENS to ensure customer protections are provided to end-use customers in embedded networks. Learnings from the operation of the Voluntary EN Code will be used to refine obligations on ENS before they become mandatory via the AES Code (should embedded networks become a Prescribed AES under the forthcoming AES framework).

The Voluntary EN Code is intended to inform policy development; it will not be legally binding on participants who sign up to participate. It will also not authorise entities to undertake on-selling in embedded networks and from a regulatory perspective they will continue to operate under the existing licence exemption while the Voluntary EN Code is in effect.

The obligations contained in the Voluntary EN Code will be used as the basis for developing and refining obligations in the mandatory AES Code. Stakeholders, particularly those operating embedded networks (whether they choose to participate in the voluntary period or not), should be aware of this context when providing feedback on the Voluntary EN Code obligations.

The Voluntary EN Code has been annotated where the voluntary nature of the code has necessitated it be drafted differently to a mandatory code.

To inform this project, Energy Policy WA recently undertook a survey of embedded network customers, operators, service providers and other interested stakeholders (the Survey). The data collected indicates that there is a cohort of residential customers whose experience within an embedded network is positive (particularly financially). However, there were consistent negative themes evident from the responses such as customers not receiving essential information about their electricity supply and tariffs, a lack of information on customer bills and frustrations in raising and resolving complaints and disputes. The majority of non-residential customers who responded to the survey reported having a very negative experience within embedded networks particularly with respect to lack of information and pricing outcomes.

The Voluntary EN Code seeks to address key concerns raised in the Survey and during one-on-one stakeholder engagement, with obligations aiming at improving information transparency, both at the time of entering the property and information contained in electricity bills. It is intended to offer embedded network customers substantially equivalent (or the same types of) customer protections they would be offered were they supplied by a licensed retailer such as Synergy or Horizon Power (and who receive protections under the [Code of Conduct for the Supply of Electricity to Small Use Customers 2022](#) (Small Use Code)). It also requires safety net prices to be available, based on existing Government regulated electricity tariffs for small-use customers.

Other protections contained in the Voluntary EN Code relate to:

- access to suitable meters;
- support for residential customers experiencing financial hardship or family violence;
- robust dispute resolution procedures;
- suitable processes for disconnections, reconnections and interruptions;
- protections for residential customers who rely on life support equipment; and
- measures to facilitate a customer decarbonising their electricity supply.

Energy Policy WA is seeking feedback on all aspects of the Voluntary EN Code, including the suitability of such obligations for a mandatory AES Code under the AES framework.



1. Introduction

1.1 Context

In 2019 the Minister for Energy asked Energy Policy WA to review the regulatory framework for electricity retail licensing and exemptions and identify a preferred regulatory framework that facilitates businesses providing behind-the-meter electricity generation and storage services, while ensuring customers of those services have adequate customer protections¹.

In November 2020 Energy Policy WA published its Final Recommendations Report *Tailoring customer protections for alternative electricity services – a registration framework* (Final Report), which set out the case for a new light-handed regulatory framework to accommodate 'non-traditional' alternative electricity services (AES) and described the features of a proposed new AES framework in detail.

Energy Policy WA has permission to draft the legislative changes to the *Electricity Industry Act 2004* (the Act) necessary to create the AES framework and expects this legislation will be introduced to the Western Australian Parliament in the first half of 2023, with a view to passing Parliament by the end of 2024. Energy Policy WA will also undertake work necessary to create subsidiary regulations related to the AES framework once the legislation is in place.

The AES framework is intended to augment the electricity licensing and exemptions framework in Western Australia. It will apply customer protection obligations on persons offering electricity services through new and emerging business models that fall outside the licensing framework, or for which the licensing framework is not fit for purpose.

The intention of the AES framework is that categories of AES will be prescribed, referred to in this Consultation Paper as Prescribed AES, as the need for regulation, or improved regulation, of customer protections for that service type is identified. Obligations related to all Prescribed AES will be compiled in one enforceable code of practice, the AES Code. AES Code obligations that are to be applied to a particular Prescribed AES will be identified by regulation².

Energy Policy WA is currently looking at whether electricity supply in embedded networks should be covered by the AES framework³. This question will be the subject of a separate consultation in the form of a Consultation Regulatory Impact Statement (or C-RIS) later in 2023.

The Consultation Paper focuses on the proposed interim step, before implementation of the AES framework, of a non-binding Voluntary Embedded Network Code (Voluntary EN Code). Learnings from the operation of the Code will be used to refine obligations on embedded network sellers/operators before they become mandatory via an AES Code (should embedded network services be regulated under the AES framework).

The primary entity responsible for the **on-selling** of electricity within an embedded network is to be subject to obligations under the Voluntary EN Code. This entity is therefore referred to as the 'embedded network seller/s', or ENS. In practice, the ENS is usually also the operator of the embedded network. Due to the diversity of business models used in embedded networks, this is not always the case, or there may arguably be more than one operator of an embedded network. Nevertheless, it is Energy Policy WA's intention that there will always be a single ENS registered per each embedded network.

1 See Directions Report, 13 December 2019, [Creating a dynamic customer protection framework for behind-the-meter electricity services](#) and Final Report, 5 November 2020 [Tailoring customer protections for alternative electricity services – a registration framework](#).

2 Final Report, page 12

3 Section 3 of the paper provides further detail on embedded networks in Western Australia.

It should be noted that the scope of this Consultation Paper does not relate to:

- grid-connected customers (those who receive a bill from Synergy, Horizon Power or other licensed retailers in the contestable market);
- customers supplied by BHP or Rio Tinto in mining towns, or by the Rottnest Island Authority;
- the proposed business model of private embedded networks supplying multiple **green titled** residential communities (whether greenfields developments or brownfields conversions/meter mergers) for which electricity retail and distribution licences would be required; or
- microgrids using on-site generation and storage, with the microgrid able to operate independently (i.e. islanded from the main grid) for a period of time, for which electricity retail and distribution licences would be required. (It should be noted that this business model may incorporate aspects of the green titled embedded network model referred to above.)

The extent to which the AES framework is applied to categories of embedded networks that operate under specific licence exemptions – such as caravan parks, Aboriginal communities and/or embedded networks operating under individual licence exemptions (rather than the general on-selling exemption) – will be the subject of separate consultation. ENS operating in these categories of embedded network will be welcome to participate in the Voluntary EN Code and are encouraged to provide feedback to this Consultation Paper.

The on-supply of electricity is currently regulated by a class-based exemption under the Exemption Order. The caravan and park home sector is subject to a separate exemption order, the Electricity Industry (Caravan Park Operators) Exemption Order 2005 (Caravan Park Exemption Order). If and when embedded networks are included under the AES framework, Energy Policy WA will look to wind back or limit the scope of relevant exemptions under these Orders. Appendix A discusses the differences in customer protections between the licensed electricity retailer and the embedded network services supply models.

Deemed or specific exemptions contained in existing Exemption Orders will be reviewed for relevance if a service covered by a licence exemption becomes a Prescribed AES covered under the AES framework. A transitional period will be considered to allow service providers to move from the exemption regime to the registration framework if a particular category of service becomes a Prescribed AES.

1.2 Structure of this paper

Section 2 provides information on the new AES framework and the proposed prescription of embedded networks under the AES framework.

Section 3 provides background on embedded networks in Western Australia and the case for additional regulation of embedded networks, including discussion of the lack of data on embedded networks, the overlap in regulation with other legislative instruments and the complexities of different models of embedded networks.

Section 4 discusses the proposed ENS definition and provides worked examples of who would be considered to be the ENS in certain situations.

Section 5 discusses the various types of customer protections which an ENS may be obliged to provide to customers in embedded networks under the Voluntary EN Code (and ultimately under the mandatory AES Code).

Section 6 raises other issues Energy Policy WA has identified relating to embedded networks, which are currently out of scope. These issues are not currently reflected in the draft Voluntary EN Code, however following stakeholder feedback could be incorporated into the final version of this Code.

1.3 Embedded Networks Survey

To inform this project, Energy Policy WA completed a survey of embedded network customers, operators, service providers and other interested stakeholders (the Survey) in late 2022. Figure 1 shows the breakdown of Survey respondents. The Voluntary EN Code seeks to address key concerns raised in the Survey.

Figure 1: Respondents to embedded networks survey



The data collected from the Survey indicates that there is a cohort of residential customers who are satisfied with their experiences in embedded networks, and that the majority of residential customers in embedded networks (62 per cent) report paying electricity rates that are lower than if they were grid connected.

However, a substantial cohort of residential customers (41 per cent) reported negative experiences in embedded networks. Recurring themes included customers not receiving essential information about their electricity supply when they first moved into the property, or on their electricity bills. Many reported frustrations and barriers in trying to access this information, and in raising and resolving complaints and disputes.

Many residential customers also reported not sharing in the benefits of embedded networks, either the financial benefits or in terms of access to sustainable technology such as solar PV. 11 per cent of residential customers reported payment of higher tariffs than if they were grid connected. Some residential customers reported that prices charged/bills were confusing or did not seem to align to their actual usage or described incidences of incorrect meter reads, or poor quality metering and network infrastructure. Survey comments indicated that mistrust and suspicion of fraudulent behaviour were not uncommon.

Fewer responses to the Survey were received from non-residential customers and other types of stakeholders. Of the responses received, 21 of 29 non-residential customers reported having a very negative experience, with another three reporting a somewhat negative experience. Lack of information transparency and price were the main concerns: 10 of the 19 non-residential respondents who answered all questions on price reported paying rates that meant they were worse off than if they had been on the relevant regulated business tariff, with eight of those reporting that they paid more on both fixed and variable rates⁴. Some respondents who also

⁴ For customers on flat rate tariffs, their reported rates were compared to the L1, and the R1 was used as the comparison rate for customers on time of use tariffs.

operate similar businesses or franchises in grid connected properties commented on the higher prices they pay within embedded networks.

Other general comments from non-residential customers related to the inability to access time of use tariffs and a desire for large use customers to be able to have their own master meter connection and access the contestable electricity market.

Energy Policy WA would like to elicit more information on non-residential customer experiences in embedded networks through this Consultation Paper.

Operators of embedded networks reported that the positives of using an embedded network include the ability to broker a cheaper price for electricity at the master meter and for the operator to make a profit on the sale of electricity. A streamlined connection and disconnection process facilitating easy tenancy and occupier changeovers was also reported, along with an ability to have faults rectified quickly avoiding the need to involve Western Power.

Operators of embedded networks also claimed that they are able to provide a higher service standard than with regular grid connections, with staff available on site to resolve any issue for customers. One respondent also indicated they were able to engage with end-use customers in relation to options for renewable power to meet their carbon neutral obligations. In general, respondents reported a lack of detailed awareness of the limited current customer protections for embedded network customers. Some noted the costs of repairs and maintenance of the embedded network as a negative, as well as the administration required for reading meters and billing.

Selected Survey comments are featured throughout this Consultation Paper to highlight the individual customer experiences within embedded network supply arrangements.

1.4 Work plan and timing

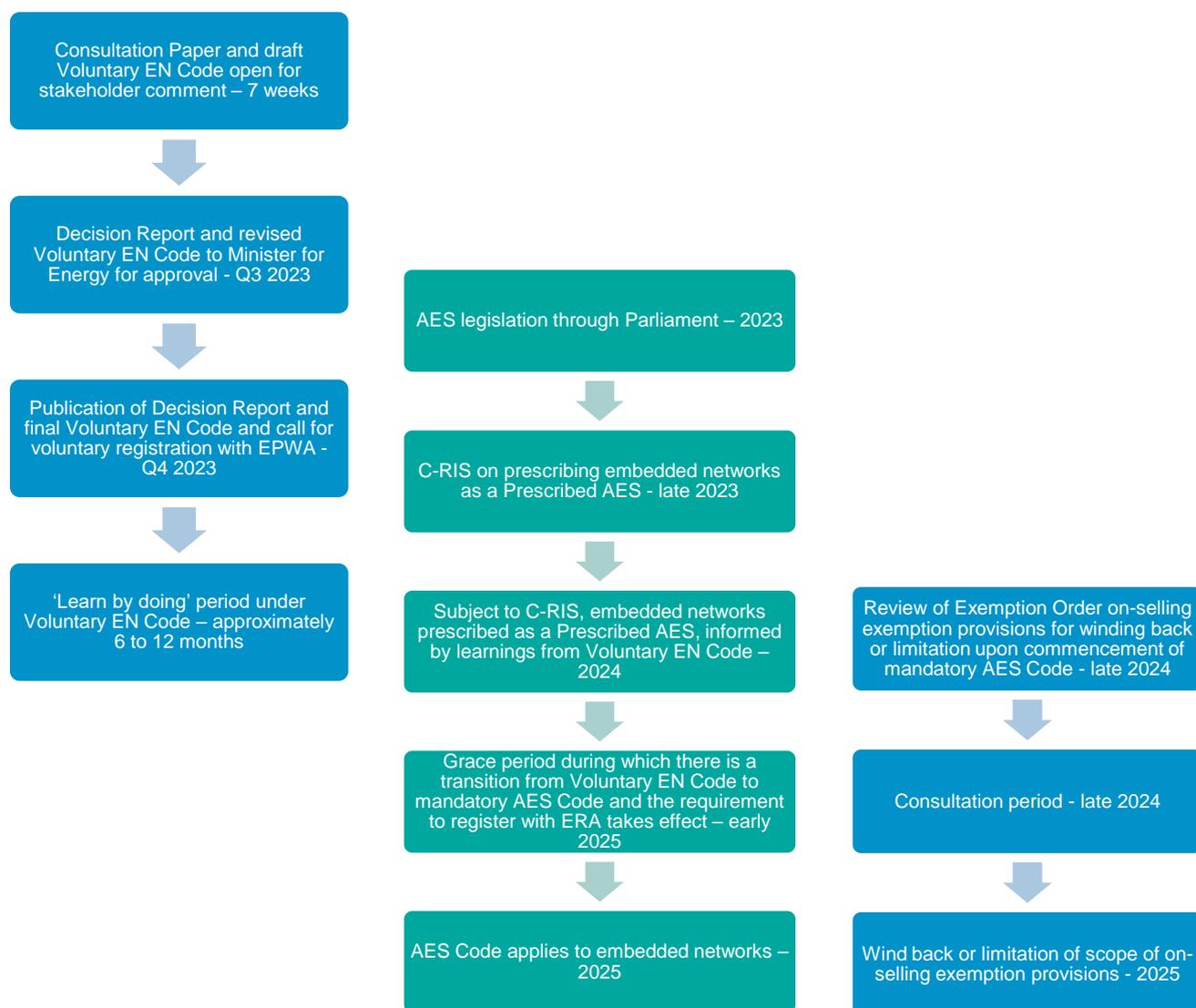
Energy Policy WA anticipates that a bill will be introduced to Parliament to give effect to the AES framework in the first half of 2023. Accompanying regulations, including the prescription of the first Prescribed AES, will be developed later in 2023 and during 2024. It is anticipated that the AES framework will come into operation in 2025.

Following receipt of submissions on this Consultation Paper and the draft Voluntary EN Code attached, Energy Policy WA will provide the Minister for Energy with a Decision Paper outlining the preferred final Voluntary EN Code to apply prior to establishment of the AES framework (accompanied by a revised Voluntary EN Code).

The Decision Paper and revised Voluntary EN Code will be published on the Energy Policy WA website and stakeholders will be notified of the anticipated date of commencement of this Code, along with an invitation to ENS to register their participation with the Voluntary EN Code.

It is anticipated that a separate consultation paper, in the form of a Consultation Regulatory Impact Assessment (known as a C-RIS), will seek further stakeholder feedback on the prescription of embedded network services as a Prescribed AES. The C-RIS will build upon and draw from the work undertaken to establish the Voluntary EN Code. Stakeholders are strongly encouraged to respond to this Consultation Paper as an opportunity to shape the mandatory AES Code to apply to embedded networks.

Figure 2: Estimated timing for prescription of embedded networks as an AES



1.5 Invitation for submissions

For this consultation, Energy Policy WA is seeking feedback from:

- end-use customers in embedded networks (both large and small-use electricity customers);
- persons who supply and/or sell electricity within embedded networks; and
- third parties which provide services within embedded networks.

Given that the AES framework is intended to be a light-handed regime and is not intended to be burdensome or add significant costs to parties in complying with these new regulations, Energy Policy WA is keen to receive feedback as to whether any features of the Voluntary EN Code or policy design may be difficult or costly to comply with and why.

The Voluntary EN Code and new AES framework are primarily intended to improve protections for small-use electricity customers⁵, however Energy Policy WA is still interested in receiving feedback from large use energy customers within embedded networks, and the ENS supplying those customers.

Energy Policy WA is seeking feedback on:

- the Voluntary EN Code (including feedback in the context of obligations in this document becoming mandatory in the future); and
- the additional questions proposed in this Consultation Paper.

If there are any other issues in relation to embedded networks on which you would like to provide feedback, Energy Policy WA would welcome hearing from you.

Energy Policy WA invites submissions on this Consultation Paper and draft Voluntary EN Code by 5pm Friday 23 June 2023. Electronic submissions are preferred and should be emailed to: EPWA-Submissions@dmirs.wa.gov.au. Alternatively, printed submissions may be posted to: Locked Bag 11, Cloisters Square, WA 6850.

Please indicate on the covering page of your submission if you wish part or all of your submission to be treated as confidential. Unless otherwise requested, submissions will be made available on the Energy Policy WA website.

Requests for information relating to the review will be treated in accordance with the *Freedom of Information Act 1992 (WA)*.



5 A small-use electricity customer is a customer to whom electricity is sold for the purpose of consumption and using no more than 160MWh of electricity per year.

2. The new AES framework

2.1 New AES framework

The Final Report indicated that an AES registration framework should apply to a person intending to provide a Prescribed AES to small-use electricity customers. For embedded networks the arrangement is intended to offer these customers broadly equivalent (or the same types of) customer protection obligations to those for customers of a licensed retailer such as Synergy or Horizon Power. The registration framework is to operate alongside the existing electricity licensing and exemption framework established under Part 2 of the Act⁶.

If a service category (such as selling electricity in embedded networks) is prescribed, service providers will need to be registered with the Economic Regulation Authority (ERA). Registration and compliance requirements under the AES framework will be the subject of further consultation at a later time.

The AES framework is not intended to be burdensome or create onerous costs for parties providing prescribed services. Many ENS may already be providing most of the customer protections proposed.

2.2 AES Code and Voluntary Embedded Networks Code

The AES Code will be mandatory for all Prescribed AES, including ENS registered as AES providers (if selling electricity in embedded networks becomes a Prescribed AES).

Before the AES framework is introduced to Parliament and formally commences, Energy Policy WA will call for participation in the Voluntary Embedded Networks Code. This Code is to be voluntary for a period of approximately six to 12 months to allow any unintended consequences to be identified and Code modifications made as part of formally considering the prescribing of embedded network services as an AES.

While the Voluntary EN Code will be limited to obligations related to embedded networks, the mandatory AES Code will be amended from time to time to include obligations related to other AES as they are prescribed⁷. Energy Policy WA anticipates that more general obligations contained in the Voluntary EN Code will likely be applicable or relevant to other types of prescribed AES.

Obligations in the Voluntary EN Code will form the basis for developing and refining mandatory AES Code obligations. Stakeholders should be aware of this context when providing feedback on Voluntary EN Code obligations.

Some obligations under consideration for the AES Code cannot be implemented in a voluntary code, such as access to dispute resolution services provided by the Energy and Water Ombudsman (Energy Ombudsman). The obligations that may change between the Voluntary EN Code and AES Code are noted in the Voluntary EN Code and discussed in more detail in section 5 of this Consultation Paper. These matters will be subject to further consultation at a later date.

⁶ Final Report, page 12

⁷ A draft code of practice for behind the meter services has already been prepared and is available on the [Energy Policy WA website](#). This draft code will be reviewed and refreshed before being incorporated into the mandatory AES Code.

Energy Policy WA will manage stakeholder requests to participate under the Voluntary EN Code, including the handling of registration of code participants and to consolidate learnings from ENS who seek to comply with code obligations. Once the AES framework has commenced and the AES Code becomes mandatory, the ERA will be responsible for registration, monitoring and compliance.

The Voluntary EN Code will operate as a learning-by-doing exercise; it will not be binding on participants and will not have a compliance and enforcement regime.

Participation in the Voluntary EN Code is encouraged even if ENS do not consider they will immediately be able to meet all code obligations. ENS will also be able to 'silently' participate by seeking to comply with code obligations without formally registering with Energy Policy WA.

The intention of the voluntary period is to test the practicality and effectiveness of the code obligations as much as possible before potential prescription of embedded network services as a Prescribed AES.

Energy Policy WA intends to set up a regular feedback mechanism for code participants during the voluntary period. These details and the final Voluntary EN Code will be published as part of the Decision Paper on the Voluntary EN Code.

Further feedback will also be sought from consumers and consumer advocates to inform the development of the AES Code.

3. Embedded networks in Western Australia

3.1 What is an embedded network?

An embedded network is a private electricity network connected to the Western Power or Horizon Power distribution network, with a 'master meter' for measuring the electricity supplied to the embedded network at that connection point. The following draft definition is intended to be inserted in the Act as part of the AES framework:

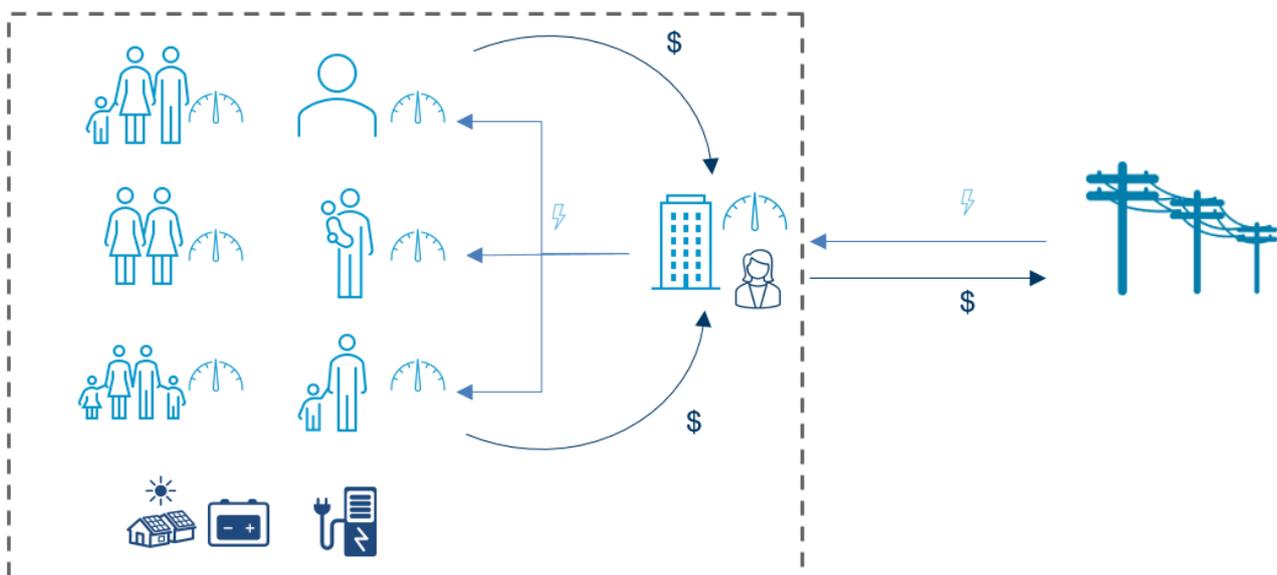
***embedded network* means a distribution system (as defined in the Act):**

- (a) that is operated by or under the control of a person (one person) – that is, is subject to a single controlling mind;**
- (b) that supplies (as defined in the Act) electricity to at least one customer who is not, or at least one premises that is not occupied by, the operator or controller referred to in (a); and**
- (c) that is supplied with electricity by another distribution system.**

Note – notwithstanding (b) above, for the purposes of this Consultation Paper, the supply of electricity in a private network to green titled premises is not considered an embedded network, as this form of supply is not authorised by clause 4 of the Electricity Industry Exemption Order 2005.

Typically, an ENS purchases electricity that is delivered through the Western Power or Horizon Power master meter (in the retail electricity market) and on-sells that electricity to end-use customers at the property. The consumption of each lot or tenancy is usually measured via its own sub-meter (noting that there is not always a sub-meter for each lot). Figure 3 below illustrates the supply of electricity within an embedded network.

Figure 3: Embedded electricity network



Within the South West Interconnected System, the aggregated load of all sub-meters or units within an embedded network is likely to be 50 MWh per year or above, allowing the ENS to purchase electricity in the contestable retail market at a significant cost saving compared to

regulated tariffs for non-contestable customers⁸. ENS only pay a single network tariff to Western Power for the master meter yet can collect a fixed daily supply charge (which may also be used to cover the costs of running the embedded network) from each sub-metered customer.

Embedded networks can be used to supply energy to residential or business end-use customers (or a mix of both). There will be some differences in the customer protections required for residential end-use customers compared to different types of business end-use customers.

3.2 Embedded network operations in Western Australia

There is a lack of data on the number of embedded networks operating in Western Australia and the number of customers supplied electricity in this manner. It is estimated that small business customers in embedded networks in Western Australia number in the thousands, and residential customers in the tens of thousands.

Energy Policy WA worked with stakeholders to build a better picture of the incidence of embedded networks in Western Australia, the different sectors in which they are commonly used, customer numbers, models of supply, and protections and prices offered to end-use customers.

There are various different business models in operation, such as:

- embedded networks owned and operated by the property owner, who is also the ENS ('landlord-managed model');
- for some strata complexes, embedded networks owned by property owners and self-managed by the strata company (or by a strata manager as an agent of the strata company) who is the ENS. Occupants may be owner-occupiers, tenants, or a mix of both ('self-managed strata model');
- embedded networks predominantly owned and operated by a third party (e.g. the property owner only retains ownership and responsibility for internal wiring, with infrastructure such as meters, solar PV panels, EV chargers and/or hot water systems owned and managed by the third party). The third party is typically the ENS in this arrangement ('professional services model' – this model is commonly found in strata complexes); and
- embedded networks where operation of the embedded network, including energy procurement, is managed by a third party but the property owner (or a property manager on their behalf) retains the on-selling relationship with occupants of the property ('hybrid model').

These business models are present in embedded networks located in shopping centres, commercial offices, retirement villages, caravan and long stay park homes, residential strata complexes and retail shops. Some representative case studies of the business models can be found in the supporting document to this Consultation Paper entitled *Case studies of business models in use in embedded networks*, available on the Energy Policy WA website.

There are commercial drivers encouraging the proliferation of embedded networks in the South West Interconnected System. As prices charged to end use customers in embedded networks often shadow regulated tariffs, there can be a significant arbitrage opportunity for the ENS on both retail and network components of electricity costs.

For greenfields projects, it may be faster and/or cheaper to install a private embedded network than for Western Power to install metering infrastructure at the site, and this may also be driving the use of the embedded network business model in Western Australia.

⁸ There is not the same economic incentive to aggregate load in Horizon Power's service area, where some tariffs for small users of energy are subsidised below cost-reflective levels. Embedded networks are far less common in Horizon Power's service area as a result of this and differences between Horizon Power and Western Power technical connection requirements.

3.3 Implications of different models of embedded networks

Table 1: Different business models commonly found in embedded networks

Business model	Common use cases	Implications
Landlord-managed	Shopping centres	Property owners control pricing and benefit sharing with tenants
	Campuses	Property owners control decisions to install Distributed Energy Resources (DER) such as solar PV and batteries and how to share benefits and costs of DER
	Airports	
	Industrial parks	Property owners able to generate profits through sale of electricity to tenants
	Retirement villages	Property owners take on financial, regulatory and compliance risk associated with the embedded network
	Long-stay caravan parks	Property owners negotiate directly with licensed retailer (or use a broker) for energy contract/s at the master meter Property owners are responsible for network repairs and maintenance Tenants usually have limited visibility of pricing and benefit sharing arrangements
Self-managed strata	Residential strata	Some property owners will be occupants, others may be investors – may result in tensions regarding how benefits are shared between lot owners and occupants
	Mixed-use strata	
	Commercial strata	Property owners collectively control pricing and benefit sharing with occupants (e.g. through tariff discounts vs. contributions to a sinking fund)
	Strata-titled retirement villages	Property owners control decisions to install DER and how to share benefits and costs of DER Property owners able to generate a margin through sale of electricity to tenants which can be channelled into a sinking fund for the property or the income stream initially dedicated to a financing agreement to cover the costs of converting a brownfields strata property to an embedded network, to avoid upfront costs to lot owners Property owners take on financial, regulatory and compliance risk associated with the embedded network Strata company/strata council must negotiate directly with retailer (or use a broker) for energy contract/s at the master meter Property owners responsible for network repairs and maintenance Tenants usually have limited visibility of pricing and benefit sharing arrangements
Professional services model	Strata titled properties, especially greenfields developments	Third party (professional services provider) controls pricing and benefit sharing through contractual agreement with property owners (which may be initially agreed with developer and novated to strata company)
	Retirement villages	Property owners have more limited control and visibility over pricing and benefit sharing (e.g. tariff discounts, contributions to sinking fund), especially if electricity charges pay for a bundle of services which can include
	Long-stay caravan parks	

Business model	Common use cases	Implications
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infrastructure installation or upgrades and do not just relate to electricity consumption

Up-front capital costs may be avoided and recovered over several years by arbitrage between electricity prices charged to occupants and the costs of procuring electricity at the master meter

Third party has control over decisions to install DER and how to share benefits and costs of DER (subject to contract with property owners)

Third party generates profit through the sale of electricity to occupants, some financial benefits may be shared with occupants and/or property owners

Third party manages the technical complexity of embedded network operations, repairs and maintenance

Third party takes on some or all of the financial, regulatory and compliance risk associated with the embedded network

Third party negotiates with retailer for the energy contract/s at the master meter

Property owners may be locked in to long-term contract with third party, and may need to replace key infrastructure (e.g. meters) if contract ends prematurely or is not renewed at end of term

Tenants usually have limited visibility of pricing and benefit sharing arrangements

Hybrid model	Seems to not be commonly used, but may be found in retirement villages and long-stay caravan parks	<p>Property owner controls pricing and benefit sharing with residents in partnership with third party (professional services provider)</p> <p>Property owner may have more limited visibility over underlying costs of electricity supply and services, especially if paying a bundled rate to the third party</p> <p>Up-front capital costs may be avoided and recovered over several years by arbitrage between electricity prices charged to residents and the costs of electricity supply</p> <p>Depending on the contractual arrangement for the site, third party or property owner has control over decisions to install DER and how to share benefits and costs of DER</p> <p>Third party generates profit through the supply of electricity to property owner, and property owner may also generate a margin through the sale of electricity to residents; some financial benefits may be shared with residents</p> <p>Third party manages technical complexity of embedded network operations, repairs and maintenance</p> <p>Third party takes on some of the financial, regulatory and compliance risk associated with the embedded network</p> <p>Third party negotiates with retailer for the energy contract/s at the master meter</p> <p>Residents usually have limited visibility of pricing and benefit sharing arrangements</p>
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Question 1

Are you aware of any significantly different business models to those described in this Consultation Paper used in embedded networks in Western Australia?

3.4 Is there evidence of a need for additional regulation?

Embedded networks can offer customers benefits such as:

- potentially lower electricity prices;
- access to energy use data via portals and apps;
- easier access to and more efficient use of solar PV and batteries, often avoiding the significant upfront costs; and
- increased convenience and flexibility, for example more streamlined connection and disconnection processes.

However, issues have been raised with Energy Policy WA anecdotally and during stakeholder consultation, as well as in results of the Survey, relating to:

- a lack of transparency and upfront disclosure of information relating to the nature of the electricity supply;
- lack of upfront disclosure of the price paid for electricity;
- a lack of information provided on electricity bills;
- poor meter reading standards and limited access to customer data;
- lack of provision for customers experiencing payment difficulties and hardship;
- limited access to and adequacy of, dispute resolution processes;
- lack of awareness of the existing (very limited) price regulation within embedded networks under the Exemption Order, including confusion as to whether business or time of use tariffs can be passed on to residential customers;
- ambiguity surrounding how benefits are shared between the ENS and the customer (for example, following installation of solar PV infrastructure, batteries and EV charging facilities or if energy trading schemes are introduced, such as peer to peer trading);
- limited or restricted sharing of financial benefits of embedded networks;
- poor understanding of embedded networks, how they work and how they differ from traditional electricity supply, amongst customers and property professionals (such as real estate agents and strata managers);
- feelings of distrust and suspicion amongst customers in embedded networks, often arising from poor access to information, lack of ability to verify amounts being charged, and poor experiences with resolving disputes;
- poor quality or unsafe infrastructure and poor quality of electricity supplies within the embedded network; and
- the complexities of any behind the meter contractual arrangements which may be in place for the embedded network.

The Survey provided significant data and commentary on customer experiences in embedded networks, reinforcing early consultation with stakeholders. For example:

“If I am aware in future that a rental property has an embedded network I will purposely refuse to rent that property and look elsewhere.”

Tenant, strata

“We have multiple problems with meters not working correctly, reading zero, reading backwards (-ve consumption) and even some meters that read identical over long periods. No one can provide answers to the vast number of queries and dissatisfied residents. The developer ignores queries and the strata manager will not respond to queries. Very suspect data is used to calculate charges for hot water. No one is engaged to monitor or maintain the embedded network which is completely unreliable and in a state of disrepair.”

Owner occupier, strata

While it is acknowledged that these issues are not present in all embedded networks, a lack of data on embedded networks makes it difficult to know whether the problems are isolated incidents or representative of systemic issues. While some of the issues are more relevant to residential customers, Energy Policy WA was able to identify clear trends in the Survey results between residential and business customers.

Figure 4: Key Survey findings: Embedded network customer experiences

Positives	Most concerning issues	Other issues
Discount electricity price	Lack of upfront disclosure on electricity supply	Benefits sharing
Profit reinvested in building	Lack of information provided on bills	Being ‘locked into’ the embedded network
Ability to benefit from renewable energy	Excessive pricing and lack of negotiation power (non-residential)	Difficulty accessing concessions
Convenience / Flexibility	Dispute resolution issues / questions unanswered	Limited understanding of embedded networks from some service providers (strata or property managers)
Access to customer support		Meter reading errors
Access to data via monitoring portal		Quality of meter and network infrastructure, inaccurate wiring (caravan park and non-residential)
		Not being able to benefit from renewable energy

These issues are discussed in further detail in section 5 where proposed Voluntary EN Code provisions are outlined.

3.5 Overlap in regulation and contractual arrangements

As embedded networks are used in a variety of property sectors, additional legislation also applies to some sectors such as the:

- *Commercial Tenancy (Retail Shops) Act 1985*;
- *Strata Titles Act 1985*;
- *Community Titles Act 2018*;
- *Residential Tenancies Act 1987*;
- *Residential Parks (Long Stay Tenants) Act 2006*;
- *Retirement Villages Act 1992*;
- National Construction Code; and
- the energy safety framework administered by the Department of Mines, Industry Regulation and Safety (DMIRS) – Building and Energy division.

Energy Policy WA will be working with relevant government agencies to test for any unintended consequences from the Voluntary EN Code, and subsequent AES framework and mandatory AES Code, and properly coordinate any necessary consequential legislation or regulation changes.

Energy Policy WA has also identified that there may be overlap in contractual terms for the supply of electricity and other contractual or legal documents, and is considering how best to deal with these overlaps. This documentation can include:

- lease agreements;
- retirement village residence contracts;
- residential park long-stay agreements;
- off the plan sale and purchase contracts for new developments;
- strata by-laws;
- sale of existing strata titled units; and
- entirely separate electricity contracts.

Stakeholder feedback on these matters is welcomed.



4. Who is the embedded network seller?

4.1 Defining the embedded network seller

Consultation with ENS and their end-use customers has informed the Energy Policy WA position in defining the ENS entity. The ENS should be the entity with the most control over prices charged to end-use customers (within regulatory limits) and holding the contract for purchasing electricity at the master meter (also having control over cost inputs), thereby carrying out the function of on-selling or retailing electricity to the end-use customer.

The ENS will be responsible for registering under the Voluntary EN Code and ensuring required customer protections are provided to customers. It is intended that each embedded network will have a single ENS, although an ENS may manage multiple embedded networks.

Energy Policy WA is aware that, under some circumstances, an entity who does not hold the contract at the master meter has the most control over the price charged to end-use customers. This is the case in the hybrid model described in section 3.3 above, where the property owner/manager retains pricing control and the relationship with end-use customers (occupants), even though another party holds the contract for the purchase of electricity at the master meter.

To allow for this scenario, it is proposed that another entity should be able to nominate as the ENS, with the agreement of the entity holding the contract for the purchase of electricity at the master meter. A nomination would be subject to approval (by the Coordinator for Energy under the Voluntary EN Code and the ERA under the AES Code). Such nominations would be the exception rather than the norm, and only approved where it is clearly demonstrated that the nominated entity is, or will be, undertaking the functions of the ENS, that is, selling electricity to end-use customers and managing the customer relationship.

The proposed ENS definition is set out in clause 2.2 of the Voluntary EN Code.

The holder of the contract for purchase of electricity at the master meter will therefore be the default ENS for all embedded networks. To nominate another entity as the ENS, parties must apply to the Coordinator of Energy for approval and provide evidence of the written agreement between the default ENS and replacement ENS. If the term of the agreement expires, is assigned or transferred, further approval would be required, and if not obtained the default ENS will resume the role.

While these approvals may seem unnecessary for a voluntary code, the requirements are included to test this process in advance of the AES framework.

2.2 Embedded Network Seller

An ENS for an Embedded Network is:

- (a) unless clause 2.2(b) applies, the person who has the contract or arrangement for the purchase of Electricity at the point or points at which the Embedded Network connects to the Grid; or
- (b) the person that has notified the Coordinator of Energy in writing that it agrees to be bound by the Code, and has been approved by the Coordinator of Energy in accordance with clause 2.3.

4.2 Distribution function within an embedded network

The ENS is usually also the operator of the embedded network. However, due to the diversity of business models in embedded networks this is not always the case, or there may arguably be more than one operator of an embedded network. There will be some ENS obligations that are related to the distribution function, such as metering activities and notification of outages. These can still be managed contractually by the ENS.

There may need to be a residual licence exemption for parties who operate distribution assets in an embedded network but who are not the ENS. For example, in a strata complex that uses the professional services model the strata company would be responsible for operating the internal wiring of the building and therefore still require a distribution licence exemption.

4.3 Embedded Network Seller examples in different situations

To assist stakeholders in determining which party will be the ENS, set out below are some ENS examples in relation to typical embedded networks operating in Western Australia. Please note that this is not an exhaustive list.

Table 2: ENS examples in different situations

Who should register as the ENS in different situations?		
Description	Control over price setting	Who should register?
<p><i>Residential apartment building, units sold off the plan by developer</i></p> <p>Developer builds apartment complex and contracts with EnergyCo to establish and manage the embedded network within the complex. This contract is novated to the strata company when the apartments are sold.</p> <p>EnergyCo holds the contract to purchase electricity at the master meter.</p> <p>EnergyCo owns infrastructure (meters, PV) on site, and contracts directly with occupants to on-sell electricity. (Professional service model)</p>	<p><i>Lot owners</i></p> <p>No control over price as this is pre-determined by the developer/ENS and licensed retailer unless the initial contract with the ENS is broken or renegotiated. Very limited options for exerting control.</p> <p><i>EnergyCo</i></p> <p>Determines the price to be paid by occupants as part of the contractual arrangement with the developer.</p> <p>At the time electricity supply and management contract is novated to strata company, owners of lots should be informed of electricity charges including infrastructure and DER ownership arrangements.</p>	<p>EnergyCo would be ENS.</p> <p>There may need to be a mechanism by which the strata company becomes the ENS by default if/when the contract ends</p>
<p><i>Residential apartment building with embedded network managed by the strata company via a strata manager</i></p> <p>Strata Manager A manages apartment complex on behalf of the strata company. It contracts out for various services, including energy brokering to assist with procurement at the master meter; a solar power purchase agreement to provide solar power to the complex; and a meter reading service provider. Strata Manager A issues electricity bills to occupants as the agent of the strata company.</p> <p>The strata company holds the contract to purchase electricity at the master meter.</p> <p>The strata company makes the decision about what to charge occupants for electricity and how PV benefit is allocated (e.g. offsets common usage). (Self-managed strata model)</p>	<p><i>Lot owners</i></p> <p>Have ultimate control over price paid by occupants. Use professional services firms to assist with management and provide advice that informs decision making.</p> <p>If not part of council of owners, should still have involvement in energy related decision making through Annual General Meeting.</p> <p><i>Strata manager</i></p> <p>May provide advice to the strata company but is not a decision-maker (acts as an agent). No control over price setting.</p>	<p>Strata company would be ENS.</p> <p>Strata company would need to make sure its contracts with service providers allow it to fulfil its obligations (e.g. meters are read at suitable intervals and bills issued by Strata Manager A meet Code requirements)</p>

Who should register as the ENS in different situations?

<p><i>Long stay caravan park</i></p> <p>Caravan park owner procures energy from a retailer at the master meter and apportsions electricity costs to tenants based on a meter reading or, if no sub-meters, based on an allocation methodology.</p> <p>(Landlord-managed model)</p>	<p><i>Caravan park owner</i></p> <p>Has control over prices paid by occupants.</p> <p><i>Occupants/park home owners</i></p> <p>No involvement in or control over price setting.</p>	<p>Caravan park owner would be the ENS</p>
<p><i>Retirement village using the hybrid model</i></p> <p>Retirement village owner has a management contract with EnergyCo to establish the embedded network and set up PV.</p> <p>EnergyCo holds the contract to purchase electricity at the master meter.</p> <p>The retirement village owner's contract with EnergyCo is such that EnergyCo operates and manages the technical aspects of the EN and EnergyCo supplies electricity to the retirement village (whether sourced from on-site solar PV or the grid). The retirement village owner pays a bundled rate for electricity supply and services.</p> <p>The retirement village owner wishes to be the on-seller as it has established relationships with its residents and is best placed to manage any electricity complaints/disputes in the first instance.</p> <p>The retirement village owner also determines what price to charge its residents (which may or may not involve a mark-up on the price paid to EnergyCo) and manages billing and other elements of the customer relationship.</p> <p>(Hybrid model)</p>	<p><i>Retirement village owner</i></p> <p>Has control over prices paid by residents.</p> <p><i>EnergyCo</i></p> <p>Determines price paid by retirement village owner during negotiation of the contract for supply of electricity and electricity services.</p> <p>Does not have control over prices paid by residents.</p> <p><i>Residents</i></p> <p>No involvement in or control over price setting.</p>	<p>While EnergyCo would be the ENS by default, ideally the retirement village owner and EnergyCo would agree to nominate the retirement village owner to be the ENS</p> <p>If so, the retirement village owner would need to make sure its contract with EnergyCo allows it to fulfil its obligations (e.g. that meters are read at suitable intervals)</p>
<p><i>Shopping centre with retail or mix of retail/commercial (property wholly owned by shopping centre manager)</i></p> <p>The shopping centre owner manages all aspects of the embedded network operation itself.</p> <p>The centre is wholly owned by the shopping centre manager, and all electricity customers are tenants only.</p> <p>The shopping centre owner holds the contract to purchase electricity at the master meter.</p> <p>(Landlord model)</p>	<p><i>Shopping centre owner</i></p> <p>Has control over prices paid by tenants. Some negotiation on electricity price may occur as part of lease negotiation with individual tenants.</p> <p><i>Tenants</i></p> <p>No control over price setting. May be able to negotiate an adjustment to prices as part of lease negotiation.</p>	<p>The shopping centre owner would be the ENS</p>

The above examples are illustrative and do not cover all possible situations. Importantly the circumstances of each embedded network must be accounted for in determining the responsible party to act as the ENS.

Where an ENS contracts out certain obligations or responsibilities to third parties, the ENS should continue to be responsible for those third parties' compliance with the Voluntary EN Code obligations. That is, the ENS should remain liable if services are contracted out to third parties.

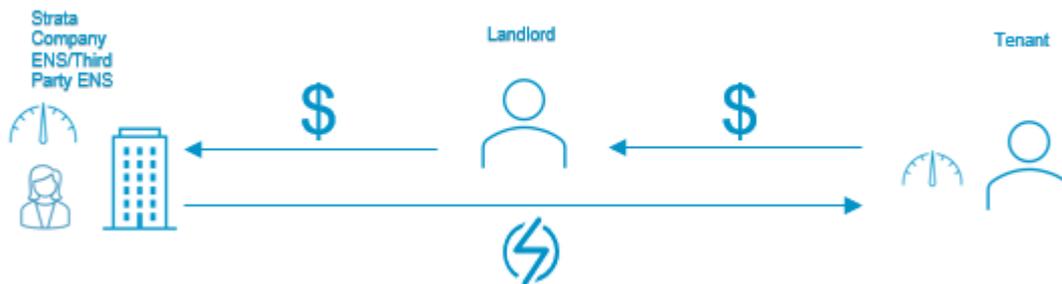
Question 2

Do you have any suggested changes to the proposed 'embedded network seller' definition?

4.4 Nested on-selling by landlords to tenants

In some situations, tenants receive electricity supplies from their landlord pursuant to a lease. When the landlord is not also the ENS for the whole property, this results in tiered or nested on-selling. In this situation, the property is usually an investment property and the customer of the ENS is the landlord (Sale 1 – first tier) however the tenant is the customer of the landlord (Sale 2 – second tier).

Figure 5: Nested on-selling between landlord and tenant



Energy Policy WA understands this situation can occur both in residential strata and in commercial or mixed use buildings where there is not a single owner of all lots within a property. Nested on-selling can also occur with electric vehicle charging stations located in embedded networks.

In these types of supply arrangements the landlord is on-selling electricity to the tenant (the end-use customer) however the landlord would not satisfy the proposed ENS definition as it does not hold the account for supply to the master meter connected to the grid. In this situation, tenants would not benefit from Code protections as the landlord would not be an ENS, which is not the intended outcome.

Energy Policy WA is working with relevant stakeholders to identify the best means to ensure customer protections flow to end use customers in nested on-selling situations, and whether different approaches are required for residential and non-residential customers in this situation. This issue will be the subject of further stakeholder consultation at a later date.

5. Proposed obligations for embedded network sellers

This section of the paper highlights the main ENS obligations in the Voluntary EN Code and notes any differences with intended obligations in the mandatory AES Code.

Some parts of the Voluntary EN Code require an ENS to have in place a policy or procedures, for example, a hardship policy, family violence policy and a disputes resolution procedure. For the AES Code, Energy Policy WA intends to develop standard form documents for these policies which ENS may adopt as their own. There will be no obligation to use the standard form documents, however any bespoke policy or procedure developed by an ENS itself must meet the minimum code requirements.

5.1 General obligations

Clause 3.1 of the Voluntary EN Code provides some basic obligations for all ENS participants.

It provides that an ENS:

- must have a written supply arrangement with each customer to which it supplies electricity; and
- is not permitted to unreasonably prevent, withhold or obstruct the supply of electricity to a customer within an embedded network.

A supply arrangement is the written contract or terms for the supply of electricity from an ENS to a customer. Survey feedback has highlighted that some customers receiving electricity supply within an embedded network are not provided with written terms detailing the supply of their electricity. Energy Policy WA considers it important that customers know what terms and conditions they are subject to, and are therefore provided with clear written terms governing their supply arrangement with the ENS, prior to electricity being supplied to them.

An ENS may satisfy this requirement in a number of ways, such as by having a formal contract signed by the parties, providing standard terms to customers upfront or making them available on a webpage and directing customers to read them prior to supply commencing.

The Voluntary AES Code does not require that the ENS have a signed written contract with its customer, or obtain acknowledgement from its customer that they have read standard terms and conditions. However, as part of a Disclosure Statement to be provided before an ENS supplies electricity to a new customer, the ENS must disclose to the customer that they have provided the

3.1 Supply of Electricity to Customers

- (a) An ENS must have a Supply Arrangement with each Customer.
- (b) An ENS must not unreasonably prevent, withhold or obstruct the supply of Electricity to a Customer within the Embedded Network.
- (c) If a person becomes an ENS in relation to a Supply Address by replacing a previous ENS, the person must, within 48 hours of becoming the ENS in relation to the Supply Address –
 - (i) notify the Customer in writing at the Supply Address that they have become the ENS in relation to the Supply Address; and
 - (ii) provide the Customer with the name and contact details for the ENS; and
 - (iii) where a Customer has informed the previous ENS that a person who resides at the Supply Address requires Life Support Equipment, request the Customer to confirm that the person who resides at the Supply Address still requires Life Support Equipment.

terms and conditions either as an attachment to the Disclosure Statement or by providing a website link to access those terms and conditions.

Section 5.2 of this paper discusses the requirement for the ENS to provide a Disclosure Statement to customers prior to commencing a supply of electricity. The Disclosure Statement, being a document specific to each customer, will also be required to clearly highlight to the customer upfront essential information relating to their electricity supply.

Energy Policy WA understands that some ENS already provide an electricity supply contract to customers or publish standard terms on their website which the customer is made aware of when they join the embedded network. However, it will not be sufficient for an ENS to simply have a supply contract or standard terms and conditions in place. A supply arrangement must comply with the obligations contained in the Voluntary EN Code. At present these are limited to obligations relating to price under clause 7.1.

If the supply arrangement does not specify variation provisions, the tariffs, fees and charges cannot be changed or varied by the ENS. If the ENS is replaced at any point, the new ENS must comply with notice requirements to customers within 48 hours of that new entity becoming the ENS for a supply address.

7.1 Information on price

- (a) An ENS must ensure that a Supply Arrangement with the Customer sets out:
 - (i) the Default Flat Rate Tariff that may be payable by the Customer; and
 - (ii) if applicable, the tariff or tariffs agreed pursuant to clause 7.3 (if the Default Flat Rate Tariff is not being paid by the Customer); and
 - (iii) any fees and charges that may be payable by the Customer; and
 - (iv) when the ENS may vary the tariffs, fees and charges; and
 - (v) an explanation of how the tariffs, fees and charges may be varied.³
- (b) An ENS may not impose any fees or charges, or vary the tariffs, fees or charges unless the Supply Arrangement contains the information in clause 7.1(a).
- (c) An ENS must give or make available to a Customer on request, at no charge, reasonable information on the ENS's tariffs, fees or charges, including any alternative tariffs that may be available to that Customer.
- (d) An ENS must give reasonable written notice to a Customer of any variation to its tariffs, fees or charges that affects the Customer.
- (e) An ENS must give at least 5 Business Days' written notice before it applies any variation of tariffs, fees or charges to the Customer.

³ For example, if the tariff is varied by shadowing changes to a regulated tariff, the tariff specified in the Disclosure Statement and Supply Arrangement might say that for example, 10% discount on Synergy's A1 tariff, so the discounted tariff will adjust when Synergy's A1 tariff changes. However, if the ENS does not intend to shadow changes to regulated tariffs and a different method is used to increase the tariff (such as CPI each quarter or an annual escalation factor), the Disclosure Statement and the Supply Arrangement must disclose this and the formula the ENS will use to escalate the tariff.

As part of ongoing stakeholder consultation and the Survey, Energy Policy WA has received feedback from customers who would qualify as contestable customers were they outside the embedded network. Energy Policy WA considers that these customers should be able to have their own separate connection point should they be willing to pay for all associated costs of obtaining that supply yet still remain located at the embedded network site (for example, a shopping centre precinct).

Clause 3.2 places an obligation on the ENS not to prohibit or prevent a customer who would otherwise be eligible to be a contestable customer (were they not within the embedded network) obtaining a supply of electricity from another supplier through a separate connection point to the grid, provided that the customer pays the costs associated with obtaining that supply. Energy Policy WA acknowledges that these costs are likely to be prohibitive in many instances.

The ENS must facilitate any reasonable works that may be necessary, at the customer's cost, including providing access to the embedded network infrastructure to facilitate the connection of the separate connection point (for example, the switchboard).

3.2 Supply through a separate connection point to the Grid

- (a) An ENS must not prevent or prohibit an Eligible Customer from obtaining a supply of Electricity from another supplier through a separate connection point to the Grid, provided that the costs of obtaining that supply are paid for by the Eligible Customer.
- (b) Where an Eligible Customer requires reasonable assistance from an ENS to obtain a supply of Electricity from another supplier through a separate connection point to the Grid, the ENS must facilitate any reasonable works that may be necessary (at the cost of the Eligible Customer) and provide access to the Embedded Network infrastructure to facilitate the connection of that separate connection point to the Grid for alternate supply.

The Voluntary EN Code will only apply to small-use electricity customers. Energy Policy WA is considering whether, under the AES framework, a similar obligation to clause 3.2 will be required for large-use customers and will undertake further consultation on this potential obligation at a later date.

Question 3

Do you have any comments on the general obligations on embedded networks sellers proposed in clauses 1, 2 and 3 of the Voluntary EN Code?

5.2 Transparency and information provision – Disclosure Statement

Energy Policy WA has received stakeholder feedback that transparency and information disclosure are key concerns for customers in embedded networks. In some situations, customers are not aware:

- that the property they occupy (whether as an owner occupier or as a tenant) is supplied electricity through an embedded network; or
- of the electricity price they will be required to pay (before they enter into a lease or purchase a property); or
- of the party with whom they have an electricity supply arrangement.

Survey feedback identified that four in ten residential customers and approximately one in four non-residential customers were not informed about the embedded network supply arrangement when they moved into the property. Due to the small sample size for non-residential customers, those results in the figures below are presented in counts.

Figure 6: Residential customer awareness of embedded network when moving into the property (523 respondents)

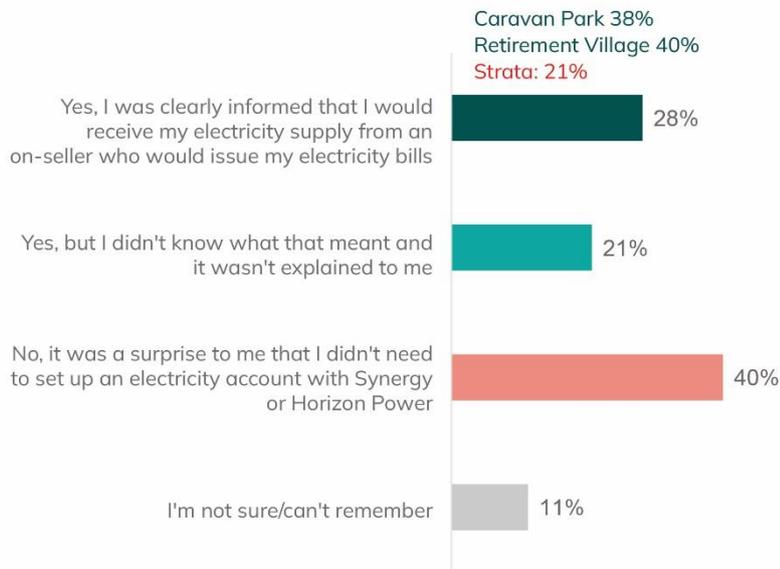
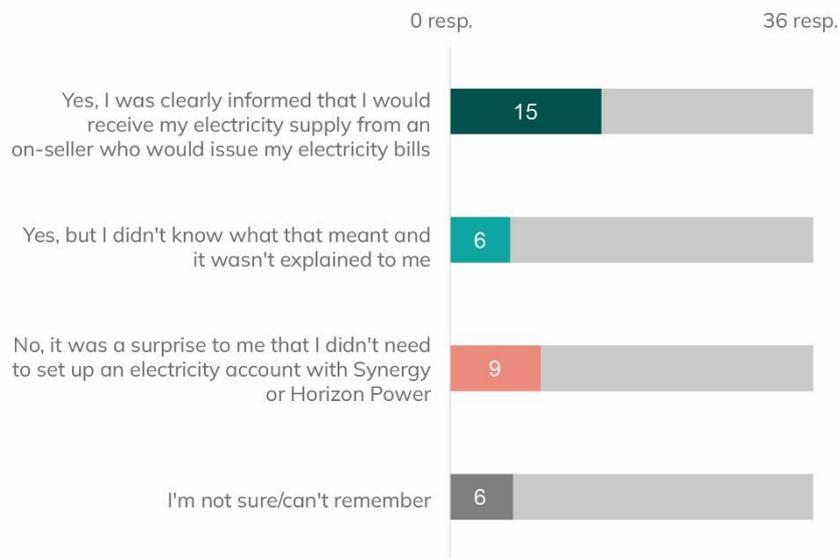


Figure 7: Non-residential customer awareness of embedded network when moving into the property (in counts, among 36 respondents)



Approximately six in ten customers, whether residential or non-residential, did not recall receiving any basic information on their energy supply when they first bought or leased the property, including information on the per-unit price for consumption and any daily supply charge.

Figure 8: Upfront embedded network information to residential customers (512 respondents)

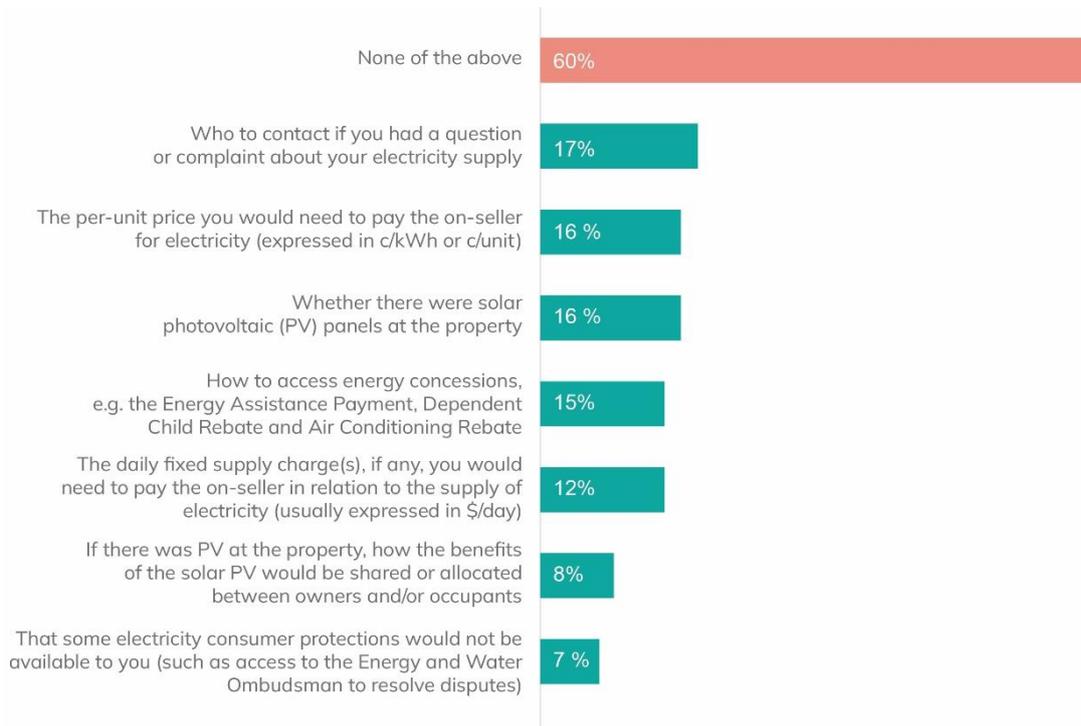
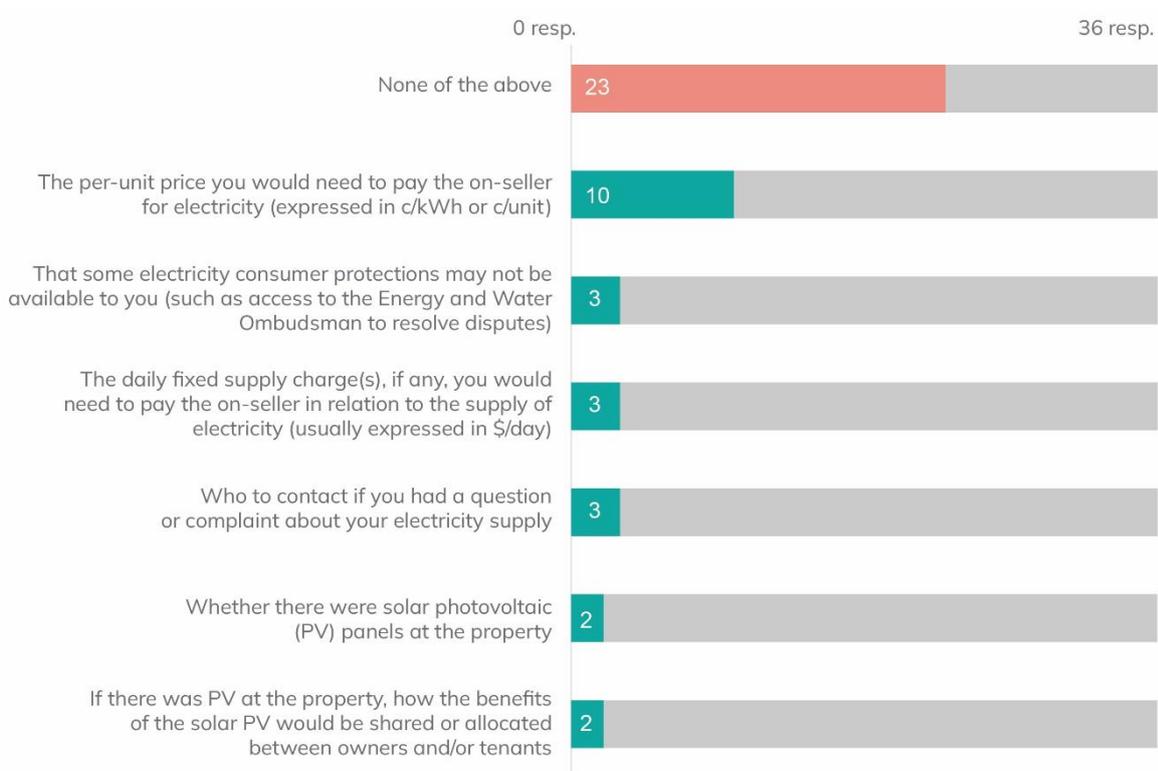


Figure 9: Upfront embedded network information to non-residential customers (in counts, among 36 respondents)



Transparency and information provision, by way of model disclosure documents or forms, can help address these deficiencies and improve customer experiences in embedded networks.

The Disclosure Statement must be provided in the format published by Energy Policy WA and is attached as Annexure A to the Voluntary EN Code. As mentioned above, the Disclosure Statement must be provided in addition to the written supply arrangement required by clause 3 of the Voluntary EN Code.

The Disclosure Statement must clearly specify the property address and names of the ENS and customer. It briefly explains to the customer what an embedded network is and what that means practically for a customer's electricity supply, for example, that there is only one ENS for a property and the ENS is obliged to comply with the Voluntary EN Code. It also informs the customer that the ENS is obliged to supply the customer with a copy of the Voluntary EN Code and that electricity bills may come directly from the ENS or via a landlord, property manager, strata manager or another third party.

For the supply of electricity, the Disclosure Statement requires the ENS to inform the customer whether electricity consumption is measured by a separate meter or not, and if not to provide details of the methodology to be used for calculating electricity consumption. It also requires the ENS to specify:

- the default flat rate tariff that is available to them (including the daily supply charge and the usage charge); and
- if a different tariff has been agreed by the parties, the details of that tariff.

Any other fees and charges payable by the Customer must be specified in the supply arrangement required by clause 3.1(a) of the Voluntary EN Code.

The Disclosure Statement also requires further information to be provided so that the customer knows how to contact the ENS, or Western Power/Horizon Power (as the operator of the primary distribution network in the case of a problem with supply to the master meter/embedded network) and which third party to contact if certain electricity services are outsourced by the ENS to third parties (for example, a third party billing provider).

Lastly, the Disclosure Statement provides information for residential customers on how they may access concessions and a statement relating to tenants who pay electricity charges directly to their landlord, highlighting that they cannot be charged a daily supply charge. As part of the Survey, Energy Policy WA received feedback from customers that they had not received information on how to access energy concessions as a customer of an embedded network.

4.1 Disclosure Statement

- (a) An ENS must provide each Customer with a written copy of a completed Disclosure Statement prior to supplying that person Electricity. If that is not possible the ENS must:
 - (i) at a minimum, as soon as possible, give information on the Default Flat Rate Tariff and the tariff that applies to the supply (if different); and
 - (ii) give the completed Disclosure Statement to the Customer by the time the Customer receives the first bill.
- (b) The completed Disclosure Statement must be provided in the format published by Energy Policy WA.
- (c) Clauses 4.2 and 4.3 do not apply to the Disclosure Statement.

“Not being advised (verbally or on my initial site lease) how to access energy concessions has deprived me of a considerable amount of money since I began residing here in Dec 2014.”

Long stay resident, caravan park

Clause 4.2 of the Voluntary EN Code provides that Energy Policy WA may publish standard form documents from time to time which ENS may use to satisfy requirements under the Voluntary EN Code to provide information to customers.

For example, Energy Policy WA may publish a model:

- Dispute Resolution Procedure;
- Family Violence Policy; or
- Hardship Policy.

This may be useful for ENS who supply smaller numbers of customers and do not have the resources to develop bespoke policies. If an ENS chooses to use a standard form document the ENS will be deemed to satisfy the Voluntary EN Code requirements for the relevant clause. ENS will not be required to use the standard form document and may satisfy the Voluntary EN Code requirements with their own documentation.

4.2 Standard Form Documents

- (a) If this Code requires an ENS to make available or provide information or a document to a Customer (other than the Disclosure Statement required to be provided by clause 4.1) then, if Energy Policy WA publishes a Standard Form Document, the ENS will be deemed to satisfy the requirement to make available or provide the information required by this Code to the Customer if it uses the relevant Standard Form Document.
- (b) Nothing in clause 4.2(a):
- (i) obliges Energy Policy WA to publish a Standard Form Document; and
 - (ii) requires an ENS to provide a Standard Form Document or restricts or limits the way an ENS may satisfy the requirement to make available or provide information to a Customer.

Question 4

Does the draft Disclosure Statement capture all information that should be disclosed to customers upfront? If not, what other information should be included?

5.3 Metering

Energy Policy WA acknowledges there are a range of meters currently in use in embedded networks in Western Australia ranging from aging and potentially inaccurate accumulation meters to modern smart meters.

Clause 5.1 of the Voluntary EN Code provides that if a property within an embedded network is metered, then this must be retained (i.e. metering should not be permitted to be removed and then not replaced).

Some customers in embedded networks are not separately metered and may be unaware as to how electricity is apportioned between the supply addresses as no method has been communicated to them. Survey responses included feedback from customers without separate metering indicating a lack of transparency about the methodology used to calculate electricity charges.

5.1 General

An ENS must ensure that each Supply Address which is supplied by the ENS has a Meter unless:

- (a) as at the date the Code is published, the Supply Address was connected to a supply of Electricity but was not separately metered; and
- (b) the Supply Address has not been separately metered at any date since the date this Code is published.

"I cannot check how much independently I used on electricity. I believe that my strata just averages all the electricity in the complex and then sends me a bill for that. Sometimes my usage is not explained i.e. if my bill is higher and I have no way of querying that. Everything is done through the strata, not an independent electricity company and I do not like that at all. I find it to not be transparent and basically I can be billed any amount they see fit and I will have to pay it."

Owner occupier, strata

Energy Policy WA is of the view that if premises are not separately metered, the method by which energy use is calculated and apportioned should be clearly communicated to customers upfront. This is covered in the Disclosure Statement included at Annexure A to the Voluntary EN Code.

"I share a meter with 3 others and they use air conditioners all the time. I have one which doesn't work"

Tenant, strata

The ENS will be obliged, at clause 5.2, to advise a customer on request of the availability of different types of meters and the associated costs of installing a different meter. Further, if an eligible customer (one who would be contestable if supplied by a licensed retailer) requests information about meters, the ENS must also advise the eligible customer of its obligation to facilitate the customer seeking its own connection to the grid, at the customer's cost (discussed above at section 5.1 of this paper).

Clause 5.3 of the Voluntary EN Code provides that if the supply address does not have an interval meter and the customer requests an interval meter be installed, the ENS must install an interval meter if the customer pays for it along with the reasonable costs of installation. Clause 5.4 obliges the ENS to test the meter within a reasonable time, upon request by a customer and limits the ENS to charging only the reasonable costs of testing the meter (and only if a meter is determined not to be faulty).

5.2 Types of Meters

An ENS must advise a Customer on request, at no charge, of the availability of different types of Meters and:

- (a) the purpose of each Meter and suitability of that Meter to the Customer's Supply Address; and
- (b) any costs the Customer would incur if the Customer wanted the Meter installed at the Customer's Supply Address; and
- (c) any installation, operation and maintenance procedures for the Meter; and
- (d) if the Customer is an Eligible Customer, the ENS must advise the Eligible Customer of the ENS's obligations under clause 3.2.

5.3 Request for Interval Meter

If a Supply Address does not have an Interval Meter and the Customer requests an Interval Meter be installed, the ENS must install an Interval Meter if the Customer pays for the Interval Meter and the reasonable costs of the installation.

5.4 Request for Meter test

If a Customer requests a test of the Meter, the ENS must test the Meter within a reasonable time. The ENS may only charge the reasonable cost of testing the Meter if the Meter test determines the Meter is not faulty.

Energy Policy WA is also aware that for some customers it is very difficult to verify their meter data even when their supply address is separately metered.

"Have no access to the actual meter, just paying whatever was sent to me.
Also strata claimed they made a mistake so increased electricity bill almost 3 times after."

Owner occupier, strata

Clause 5.5 therefore requires an ENS to provide a customer with access to their meter upon request to verify meter reads.

5.5 Access to the Meter

An ENS must provide a Customer with access to the Meter upon request by the Customer so that a Customer can verify meter reads.

Question 5

Do you have any comments on the proposed arrangements for metering outlined in clause 5 of the Voluntary EN Code?

5.4 Improving billing requirements

Other than basic information disclosure requirements under the Exemption Order (see Appendix A), there are currently no requirements on ENS to provide billing information to a customer.

Energy Policy WA is aware of large disparities in the amount and type of billing information currently provided to embedded network customers. A lack of clear information on customer bills was a recurring theme in the Survey responses.

One in four residential customers declared not receiving information on the number of units consumed over the billing period, the start and end dates for the accounting period and the due date for payment.

Some customers commented that they received a bill combining their electricity fee with other charges, such as other utilities or rent. Further, the amounts for different charges are not always separated, making it difficult for customers to determine the price paid for electricity. This type of billing arrangement appears to be more common in caravan parks.

Single line item bills, where the customer is only informed of the amount due for electricity, also appear to be commonplace. Energy Policy WA also notes with concern that 49 per cent of residential customers and 27 per cent of non-residential customers who responded to the Survey, declared receiving bills excluding the price per unit for electricity consumed. Similarly, 77 per cent of residential customers and 58 per cent of non-residential customers who responded, indicated that bills received did not show the daily supply charge rate⁹.

⁹ As residential tenants receiving electricity supply from a landlord as part of a residential lease under the *Residential Tenancies Act 1987* must not be levied with a daily supply charge this may account, in part, for this figure being so high. The Survey also found that some customers are not charged a daily supply charge at all.

Figure 10: Information provided on embedded network electricity bill (residential customers – 518 respondents)

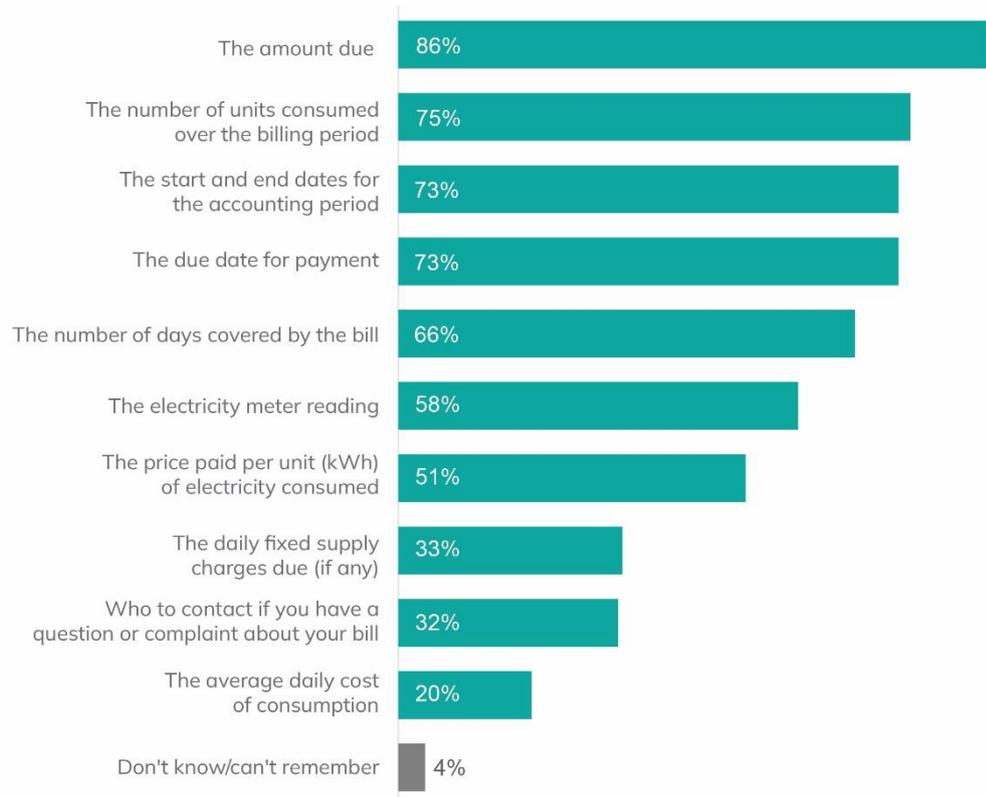
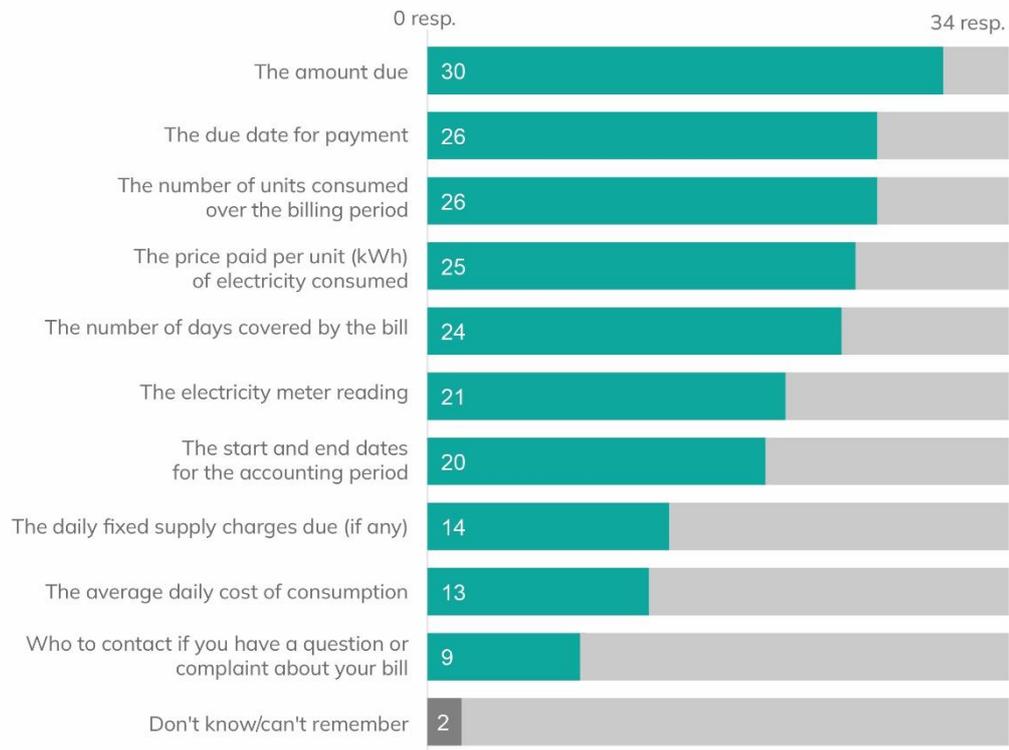


Figure 11: Information provided on embedded network electricity bill (non-residential customers – in counts, among 34 respondents)



"I cannot see the consumption details like units consumed, I just receive an amount due."

Tenant, strata

"I stay in an apartment complex. The billing is irregular, and you don't have any information and control over what is happening. Given that strata is responsible for it, there is little tenant or real estate agent can do when things do not turn out well except by putting pressure to get things fixed."

Tenant, strata

"We are given very little information on our bills and have to assume that we get no benefit from the solar panels on our roof. Because we get so little information we have no idea if we are being charged a fair amount."

Owner occupier, retirement village

Where billing is outsourced by the ENS to a third party, billing information should clearly state on each bill contact details for the ENS and indicate that bills are being provided on behalf of the ENS.

Bills are required to be issued to a customer at least once every 60 days to align with retailer billing arrangements (unless the parties agree otherwise in accordance with clause 6.1(b)). A billing period must also not exceed 100 days.

6.1 Billing Cycle

- (a) An ENS must issue a bill to a Customer at least once every 60 days unless the ENS and Customer agree otherwise in accordance with clause 6.1(b).
- (b) An ENS and a Customer may agree to a Billing Cycle with a regular recurrent period that differs from the Customer's standard Billing Cycle if:
 - (i) the ENS has obtained the Customer's Verifiable Consent; and
 - (ii) the regular recurrent period of the Billing Cycle does not exceed 100 days.

6.2 Payment

An ENS must accept payment for a bill by electronic funds transfer and must make available at least one other method of payment for a bill.

Clause 6.4 provides for billing arrangements where the supply address is separately metered, based on meter reads or estimation where the meter is unable to be read. Clause 6.5 provides for billing arrangements where the customer's supply address is not separately metered.

Customers with unmetered supply will be entitled to an explanation of the method used to determine the bill, communicated either on the bill itself or in a separate document accompanying the bill. Whether the property is separately metered must also be specified in the Disclosure Statement.

6.4 Basis of bill – metered Supply Address

- (a) An ENS must use reasonable endeavours to read the Meter and prepare the bill in accordance with the Customer's Billing Cycle.
- (b) An ENS may estimate a bill if an ENS is not able to read the Meter despite using reasonable endeavours to do so.
- (c) Where an ENS has estimated a bill, the ENS must include on the bill or in a document accompanying the bill, that the bill is based on an estimate of usage and the method the ENS used to determine the estimate.
- (d) A Customer may, at any time, request that an ENS perform a Meter reading at the Customer's cost.
- (e) An ENS must read the Meter where:
 - (i) a Customer moves out of a Supply Address; or
 - (ii) a Customer moves into a Supply Address and is being supplied from the Embedded Network, andif the Meter reading is outside of a Customer's standard Billing Cycle, the ENS may charge a reasonable fee for the Meter reading.

6.5 Basis of bill – unmetered Supply Address

Where the Supply Address is not metered, an ENS must include on the bill, or in a document accompanying the bill, an explanation of the method the ENS used to determine the bill.

ENS will be required to retain a customer's billing data for two years, consistent with arrangements for retention of telecommunications data. Clause 6.6 sets out arrangements for when a customer requests access to their billing data.

6.6 Billing Data

- (a) An ENS must retain all Billing Data for at least 2 years.
- (b) If a Customer asks for their Billing Data, the ENS must provide the information to the Customer:
 - (i) free of charge; or
 - (ii) where the Customer has previously asked for Billing Data in the last 6 months, after the Customer has paid a reasonable fee.

Clause 6.7 provides that an ENS must review a bill within a reasonable time after receiving such a request and inform the customer of the outcome of its review.

6.7 Review of bill

- (a) If a Customer requests a review of a bill, the ENS must review the bill within a reasonable time after receiving the request.
- (b) The ENS must inform the Customer of the outcome of a review of the Customer's bill as soon as practicable after it is completed.

Consistent with the Small Use Code, in circumstances of overcharging or undercharging by an ENS:

- a time limit of 12 months is allowed for the ENS to make a claim for undercharging; and
- no time limit is provided on claims by customers for repayment of amounts overcharged.
ENS will be required to use best endeavours to inform a customer within 10 business days of becoming aware of an overcharge.

An ENS must credit or repay an overcharged customer within 12 business days of a determination on this matter (reflected at clauses 6.8 and 6.9 of the Voluntary EN Code).

6.8 Undercharging

If an ENS has undercharged a Customer, the ENS may only recover the amount undercharged in the 12 months prior to the date on which the ENS notified the Customer that the undercharging had occurred.

6.9 Overcharging

- (a) If an ENS has overcharged a Customer, the ENS must use its best endeavours to inform the Customer within 10 Business Days of the ENS becoming aware of the overcharge.
- (b) An ENS must credit the Customer's account or repay the Customer the overcharged amount within 12 Business Days in accordance with any reasonable direction provided by the Customer.

Energy Policy WA considers the most important items to be included on electricity bills within embedded networks are those specified in clause 6.3 of the Voluntary EN Code (as detailed below in Table 3). The Voluntary EN Code adopts many of the billing requirements contained in clause 21 of the Small Use Code, noting that not all requirements have been adopted as they may not be relevant to embedded networks and the Voluntary EN Code is intended to be light-handed.

Table 3: Clause 6.3 of Voluntary EN Code – Contents of a bill

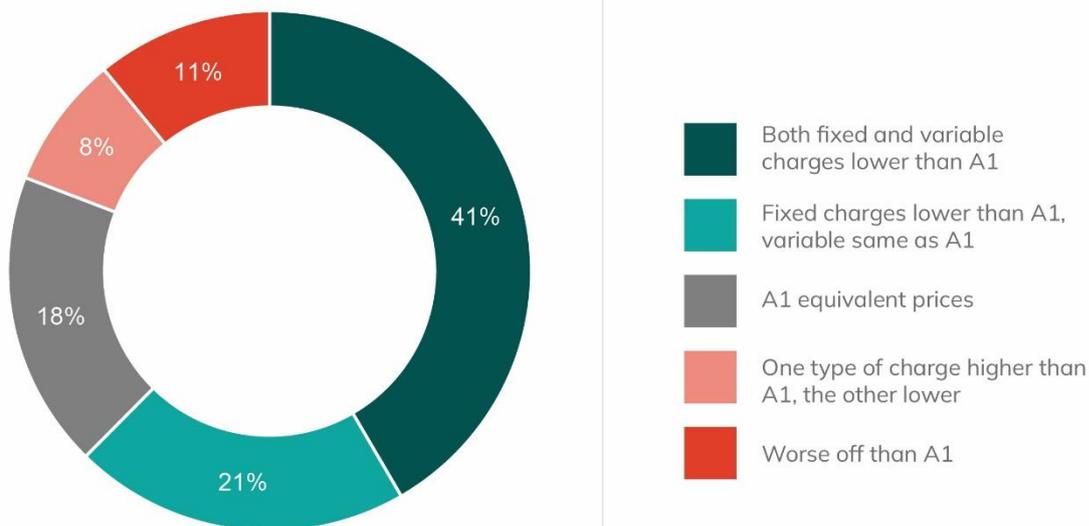
Clause	Requirement in Voluntary EN Code	Requirement in Small Use Code - Clause 21
6.3(a)	Supply Address	21(2)(a)
6.3(b)	Customer details; customer account number or unique identifier	21(2)(b)
6.3(c)	Meter identification number (if applicable)	21(2)(c)
6.3(d)	Start and end date of supply period	21(3)(a)
6.3(e)	Number of days covered by bill	21(3)(b)
6.3(f)	Consumption or estimated consumption in units, for supply period	21(3)(c)
6.3(g)	Applicable tariff, any fees and charges and total amount due	21(4)(d), (f) and (a)
6.3(h)	Sufficient information to verify calculation of electricity charges	N/A (If the customer is provided with the number of days in the supply period, the applicable tariff and units of electricity consumed in the period, a customer should be able to verify the calculation. Nevertheless, this requirement is explicit in the Voluntary EN Code due to the frequency of customer complaints about being unable to verify bills.)
6.3(i)	Amount of any arrears or credit	21(4)(e)
6.3(j)	Amount of any other fees or charges and details of the service provided in connection with those fees or charges	21(4)(f)
6.3(k)	Date by which the bill must be paid (at least seven days from the date of issue)	21(4)(o)
6.3(l)	Summary of applicable payment methods	21(4)(p)
6.3(m)	Statement advising the customer that assistance is available if the customer is experiencing problems paying the bill and a statement as to the availability of the ENS' hardship policy/family violence policy (if applicable)	21(4)(g), (h) and (i) (For residential customers, licenced retailers are also required to provide a statement that the customer may be eligible to receive concessions and how the customer may find out about eligibility for those concessions. If applicable, the licenced retailer must also show the value and the type of any concessions provided to the customer that are administered by the retailer. This is omitted from ENS bill requirements as ENS do not administer concessions, but they will need to provide information on accessing concessions in their hardship policy and the Disclosure Statement.)
6.3(n)	Details of where to direct complaints and dispute resources (phone number, email address, website link)	21(6) (For licenced retailers, the contact details for the Energy Ombudsman and the licenced distributor's 24 hour telephone number for faults and emergencies must be provided on each bill.)

Clause	Requirement in Voluntary EN Code	Requirement in Small Use Code - Clause 21
6.3(o)	Legal name of ENS, trading name, contact details	N/A (This requirement has been included in the Voluntary EN Code due to evidence of customers being unsure as to which entity supplies them with electricity.)
6.3(p)	Payment plans – the ENS must provide details of: <ul style="list-style-type: none"> • payments made under a payment plan that has not been completed; • the total amount outstanding; and • whether an additional fee may be imposed to cover costs of a late payment under a payment plan 	21(k)

5.5 Price regulation

The Survey found that, although many residential customers in embedded networks (62 per cent) reported paying electricity rates lower than the regulated (A1) tariff rates for grid connected customers, there was also a cohort that reported paying higher rates for electricity consumption (11 per cent).

Figure 12: Price paid for electricity by residential customers (307 respondents to both consumption and fixed supply charge questions) – declarative answers may not reflect actual prices paid



For non-residential customers, ten of the 19 respondents who answered all questions on price reported paying electricity charges higher than the relevant regulated business tariff, with eight of the respondents paying more on both fixed and variable rates.¹⁰ More generally non-residential

¹⁰For customers on flat rate tariffs, their reported rates were compared to the L1, and the R1 was used as the comparison rate for customers on time of use tariffs.

customers, even those with multiple tenancies and those with large electricity use, reported a lack of negotiating power with their ENS.

Figure 13: Price paid for electricity by non-residential customers (results presented in counts among 19 respondents to both consumption and fixed charge questions) – declarative answers may not reflect actual prices paid



“I can pay up to an additional \$10,000 a month compared to sites where I buy direct from Western Power.”

Tenant in large shopping centre

“We cannot get our electricity at a cheaper price by negotiating directly with suppliers. We have no negotiation ability (as a larger user I should be paying less per unit than others in our block). We cannot benefit from solar panels etc - which the landlords use to reduce their costs but don't pass onto us. There is no requirement for the landlord to disclose their 'buy in' prices.”

Tenant in small (neighbourhood) shopping centre using more than 160 MWh per year

Energy Policy WA understands there are significant arbitrage opportunities for ENS, even if customers are charged at a discount to the relevant regulated tariff. Some customers are also benchmarked to a regulated tariff not necessarily aligned to their consumption profile.

In general consumer feedback in response to the Survey indicated:

- there is a lack of upfront transparency about electricity pricing arrangements for customers within embedded networks; and
- a greater level of price regulation (than is currently provided by the Exemption Order) would be welcomed by these customers.

In response to these findings, clause 7 of the Voluntary EN Code introduces a requirement for all supply arrangements between ENS and customers to include the following minimum information:

- the default flat rate tariff that may be payable by the customer;
- the agreed tariffs (if the default flat rate tariff is not being paid by the customer);
- any fees and charges that may be payable by the Customer;
- details of when the ENS may vary the tariffs, fees and charges; and
- an explanation of how the tariffs, fees and charges may be varied.

Energy Policy WA considers the use of a default flat rate tariff capped at regulated rates will provide embedded network customers with substantially equivalent price protections as grid connected customers currently receive, while still giving embedded network customers the flexibility to negotiate other pricing structures, e.g. a time of use tariff, with the ENS if preferred.

Table 4: Proposed Default Flat Rate Tariffs for Voluntary EN Code

Default Flat Rate Tariffs		Current tariff rates 2022-23 (GST inclusive)
Residential Customer	(a) a fixed daily supply charge that is no more than the fixed charge for the residential tariff (b) a usage charge that is no more than the charge per unit for metered consumption for the residential tariff ¹¹	Tariff A1/A2 Supply charge – 107.7685 cents per day Usage charge – 30.0605 cents per unit
Non-residential Customer	(a) a fixed daily supply charge that is no more than the fixed charge for the business tariff (b) a usage charge that is no more than the charge per unit for metered consumption for the business tariff ¹²	Tariff L1/L2 Supply charge – 192.3907 cents per day Usage charge – First 1,650 units per day – 29.9391 cents per unit More than 1,650 units per day – 33.7553 cents per unit

11 Residential Tariff means Tariff A1 as described in the Energy Operators (Electricity Generation and Retail Corporation) (Charges) By-laws 2006 (WA) or Tariff A2 as described in the Energy Operators (Regional Power Corporation) (Charges) By-laws 2006, as applicable.

12 Business Tariff means Tariff L1 as described in the Energy Operators (Electricity Generation and Retail Corporation) (Charges) By-laws 2006 (WA) or Tariff L2 as described in the Energy Operators (Regional Power Corporation) (Charges) By-laws 2006, as applicable.

7.1 Information on price

- (a) An ENS must ensure that a Supply Arrangement with the Customer sets out:
 - (i) the Default Flat Rate Tariff that may be payable by the Customer; and
 - (ii) if applicable, the tariff or tariffs agreed pursuant to clause 7.3 (if the Default Flat Rate Tariff is not being paid by the Customer); and
 - (iii) any fees and charges that may be payable by the Customer; and
 - (iv) when the ENS may vary the tariffs, fees and charges; and
 - (v) an explanation of how the tariffs, fees and charges may be varied.³
- (b) An ENS may not impose any fees or charges, or vary the tariffs, fees or charges unless the Supply Arrangement contains the information in clause 7.1(a).
- (c) An ENS must give or make available to a Customer on request, at no charge, reasonable information on the ENS's tariffs, fees or charges, including any alternative tariffs that may be available to that Customer.
- (d) An ENS must give reasonable written notice to a Customer of any variation to its tariffs, fees or charges that affects the Customer.
- (e) An ENS must give at least 5 Business Days' written notice before it applies any variation of tariffs, fees or charges to the Customer.

7.2 Restrictions on price

- (a) An ENS may only:
 - (i) charge a Customer the tariffs, fees and charges that are set out in the Supply Arrangement with the Customer; and
 - (ii) escalate or amend any tariffs, fees and charges where the right to do so, and the method of the escalation or variation, is set out in the Supply Arrangement with the Customer.
- (b) An ENS must offer a Default Flat Rate Tariff to a Residential Customer:

- (i) that has a fixed daily supply charge that is no more than the fixed charge for the Residential Tariff; and
 - (ii) that has a usage charge that is no more than the charge per unit for metered consumption for the Residential Tariff.
- (c) An ENS must offer a Default Flat Rate Tariff to a Non-residential Customer:
 - (i) that has a fixed daily supply charge that is no more than the fixed charge for the Business Tariff; and
 - (ii) that has a usage charge that is no more than the applicable charge per unit for metered consumption for the Business Tariff.
 - (iii) The fixed daily supply charge must include all fees and charges in relation to the provision of electricity services other than the charge for metered consumption.

Note: this is to mirror clause 6(6) of the Exemption Order and ensure that services such as meter reads, administration of accounts and billing services cannot be charged separately over and above the fixed daily supply charge. They may be separately itemised provided, in total, they do not exceed the price cap.

7.3 Agreement for different tariff structure⁴

- (a) An ENS and a Customer may at any time agree in writing to a different tariff structure to the Default Flat Rate Tariff offered by the ENS for the supply of Electricity to the Customer.
- (b) If a different tariff structure is agreed between the ENS and the Customer under clause 7.3(a), the Customer may opt out of that tariff at any time, without penalty, and revert to the Default Flat Rate Tariff offered by the ENS.

7.4 When a change takes effect

Any change in a Customer's tariff must take effect from the next Billing Cycle, unless agreed otherwise between the Customer and the ENS.

³ For example, if the tariff is varied by shadowing changes to a regulated tariff, the tariff specified in the Disclosure Statement and Supply Arrangement might say that for example, 10% discount on Synergy's A1 tariff, so the discounted tariff will adjust when Synergy's A1 tariff changes. However, if the ENS does not intend to shadow changes to regulated tariffs and a different method is used to increase the tariff (such as CPI each quarter or an annual escalation factor), the Disclosure Statement and the Supply Arrangement must disclose this and the formula the ENS will use to escalate the tariff.

⁴ For example, a time of use tariff may be agreed.

5.6 Financial hardship

ENS are not currently required to have in place systems and processes to cater for financially disadvantaged customers, in particular, customers who are experiencing payment difficulties and financial hardship. As an example, there is currently no requirement for exempt providers to offer any form of hardship assistance or alternative payment arrangements.

Customers of embedded networks are able to access some concessions offered by the Western Australian Government through the Energy Concession Extension Scheme. This is a payment made to people holding concession cards who do not have electricity accounts with Synergy or Horizon Power, such as those who pay for their electricity use through on-selling arrangements¹³.

The proposed obligations on ENS relating to customers experiencing financial hardship are set out in clause 8 of the Voluntary EN Code, with most obligations relating to residential customers only.

However, clause 8.2 of the Voluntary EN Code provides for an ENS to act in good faith to consider any reasonable request for alternative payment arrangements made by a non-residential customer experiencing payment difficulties.

Clause 8 of the Voluntary EN Code introduces an obligation on an ENS to develop, maintain and implement a hardship policy. For the mandatory AES framework, Energy Policy WA intends to develop a standard form document which ENS may choose to adopt as its hardship policy.

8.1 Customers experiencing Financial Hardship

- (a) Where a Residential Customer has been assessed as being in Financial Hardship by a relevant consumer representative or financial counsellor, the ENS must treat that Residential Customer as experiencing Financial Hardship.
- (b) Where a Residential Customer informs the ENS that they are experiencing Financial Hardship, but this has not been confirmed by a relevant consumer representative or financial counsellor, the ENS must act in good faith to reasonably consider whether the Residential Customer is experiencing Financial Hardship and make a determination.
- (c) If a Residential Customer is experiencing Financial Hardship in accordance with clause 8.1(a) or clause 8.1(b), the ENS must inform the Residential Customer of its hardship policy.

8.2 Non-residential Customers

An ENS must in good faith consider any reasonable request for alternative payment arrangements made by a Non-residential Customer experiencing payment difficulties.

8.3 Obligation to have hardship policy

- (a) An ENS must develop, maintain and implement a hardship policy to assist Residential Customers experiencing Financial Hardship to meet their financial obligations and responsibilities to the ENS.
- (b) An ENS must comply with any obligations on the ENS in its hardship policy.

¹³ This scheme administered by RevenueWA within the Western Australian Department of Finance includes the Energy Assistance Payment – see [Energy Concession Extension Scheme \(communities.wa.gov.au\)](http://communities.wa.gov.au)

Where a residential customer has been assessed as being in financial hardship by a relevant consumer representative or financial counsellor, the ENS must treat that residential customer as experiencing financial hardship. If a customer is experiencing financial hardship an ENS must inform the residential customer of its hardship policy. A hardship policy must at a minimum comply with the requirements set out in clause 8.4 of the Voluntary EN Code.

8.4 Minimum obligations for hardship policy

A hardship policy must, at a minimum:

- (a) require the ENS to offer a Residential Customer experiencing Financial Hardship additional time to pay;
- (b) require the ENS to offer a Residential Customer experiencing Financial Hardship a Payment Plan;
- (c) require the ENS to discuss in good faith with a Residential Customer experiencing Financial Hardship a reduction or waiver of fees, charges or debt;
- (d) include:
 - (i) an overview of the assistance and Concessions available to Residential Customers; and
 - (ii) information on the availability of financial counselling services and consumer representatives;
- (e) be available on the ENS's website; and
- (f) include a statement specifying how the ENS will treat information disclosed by the Residential Customer to the ENS and information held by the ENS in relation to the Residential Customer.

8.5 Standard Form Document

A hardship policy may be a Standard Form Document.

5.7 Family violence

Energy Policy WA considers that customers supplied within embedded networks should be offered the same customer protections as those of grid connected customers under new Part 13 of the Small Use Code, which came into effect on 20 February 2023. This is reflected in clause 9 of the Voluntary EN Code.

The new Part 13 of the Small Use Code provides that retailers must develop, maintain and implement a family violence policy to assist vulnerable customers¹⁴.

Clause 9 of the Voluntary EN Code places an obligation on an ENS to develop and comply with a family violence policy to assist residential customers affected by family violence to meet their financial obligations and responsibilities to the ENS. The minimum obligations for a family violence policy are contained in clause 9.5 of the Voluntary EN Code.

Energy Policy WA considers that there is value in providing a model family violence policy for use by ENS and, for the mandatory AES framework, it is intended that this will be published as another standard form document (to be the subject of separate consultation).

ENS must ensure that the supply address of a vulnerable customer is not disconnected for a period of nine months from the date on which the retailer became aware that the customer is a vulnerable customer, except in certain specific circumstances.

Clause 9.2 of the Code provides for this limit on disconnection. Further, clause 9.3 provides that an ENS must not require written evidence of family violence from a customer.

These clauses align with the new Part 13 of the Small Use Code¹⁵.

9.1 Residential Customers affected by Family Violence

Where:

- (a) a Residential Customer advises the ENS that they are affected by Family Violence; or
- (b) the ENS has reason to believe a Residential Customer is affected by Family Violence,

the ENS must treat the Residential Customer as being affected by Family Violence and inform the Residential Customer of its Family Violence policy.

9.2 Limit on disconnection

- (a) An ENS must ensure that the Supply Address of a Residential Customer affected by Family Violence is not disconnected during the period commencing 9 months from the date on which the ENS became aware that a Residential Customer is affected by Family Violence, unless:
 - (i) the ENS is informed by the Residential Customer, or otherwise becomes aware, that the Residential Customer no longer resides at that Supply Address; or
 - (ii) the disconnection is requested by the Residential Customer; or
 - (iii) the disconnection is required for Emergency reasons; or
 - (iv) Electricity has been illegally consumed at the Supply Address.
- (b) Nothing in clause 9.2(a):
 - (i) affects a Residential Customer's responsibility to pay for Electricity supplied by the ENS to a Supply Address; or
 - (ii) affects the ability of an ENS to send bills and notices to a Residential Customer in connection with payment for the supply of Electricity or to take other steps in connection with a liability to pay for Electricity supplied by an ENS.

¹⁴ Small Use Code, Part 13, clause 91

¹⁵ Small Use Code, Part 13, clauses 92 and 93

9.3 Written evidence of Family Violence not required

An ENS must not require written evidence of Family Violence from the Residential Customer affected by Family Violence.

9.4 Obligation to have Family Violence policy

- (a) If an ENS supplies Residential Customers, it must develop, maintain and implement a Family Violence policy to assist Residential Customers affected by Family Violence to meet their financial obligations and responsibilities to the ENS.
- (b) An ENS must comply with any obligations on the ENS in its Family Violence policy.

9.5 Minimum obligations for Family Violence policy

A Family Violence policy must, at a minimum:

- (a) require the ENS to offer a Residential Customer affected by Family Violence additional time to pay;
- (b) require the ENS to offer a Residential Customer affected by Family Violence a Payment Plan;
- (c) require the ENS to discuss in good faith with a Residential Customer affected by Family Violence a reduction or waiver of fees, charges or debt;
- (d) require the ENS in respect of a Residential Customer affected by Family Violence:
 - (i) to advise the Residential Customer that the ENS must take reasonable steps to protect the Residential Customer's information if the Residential Customer requests the ENS to do so; and
 - (ii) to take reasonable steps to establish a safe method of communication with the Residential Customer and if a method of communication proposed by the Residential Customer is not reasonably practicable, to offer an alternative method of communication; and
- (iii) to keep a record of any method of communication that has been agreed between the ENS and the Residential Customer; and
- (iv) to use any agreed method of communication for the purposes of providing information required by this Code; and
- (e) include processes to ensure that a Residential Customer affected by Family Violence does not have to repeatedly refer to, or disclose, their situation when they make contact with the ENS or another person acting on behalf of the ENS; and
- (f) require the ENS to consider:
 - (i) the potential impact of debt collection on a Residential Customer affected by Family Violence who is liable for the debt; and
 - (ii) the extent to which another person may have contributed to an amount owing for Electricity supplied to the Residential Customer affected by Family Violence; and
- (g) provide that the ENS will take into account the circumstances of a Residential Customer affected by Family Violence before disconnecting the Customer's Supply Address for failure to pay a bill.

9.6 Standard Form Document

A Family Violence policy may be a Standard Form Document.

5.8 Disconnection, interruption and reconnection

Energy Policy WA is considering appropriate standards for the management of disconnections and service interruptions within embedded networks. Although Energy Policy WA understands that disconnections of embedded network customers are rarely pursued, the Voluntary EN Code puts in place a framework to ensure that, if they become more common, a suitable process is followed before a customer is disconnected.

At a minimum, Energy Policy WA wants to ensure that:

- there are limitations on the situations where ENS may disconnect customers for failure to pay bills;
- ENS have in place a process to be followed before a customer is disconnected for failure to pay a bill, which is clearly communicated to customers;
- life support customers have similar protections as grid connected customers have under the proposed new Part 11 of the Small Use Code (Life Support) and the current protections provided by the Exemption Order with regard to disconnections and interruptions;
- customers experiencing family violence have similar protections as grid connected customers have as proposed for new Part 13 of the Small Use Code (Family Violence);
- customers who would like to be disconnected, will be disconnected within a reasonable time, at the customer's request; and
- reconnection occurs in a timely manner.

With regard to interruptions, the information provision requirements in the Code are focussed on interruptions within the embedded network itself, not the main electricity grid. Where interruptions occur at the main grid level, customers can be directed to the same sources of information as grid connected customers for updates on resumption of the power supply.



Customers may be disconnected in the circumstances set out in clause 10.1 of the Voluntary EN Code. An ENS must comply with clause 10.2 before disconnecting a customer for failure to pay a bill and with clause 10.3 before disconnecting a customer for denying the ENS access to the meter. The obligations on an ENS for disconnecting or interrupting customers' supply in emergencies are described in clause 10.4. Where planned or unplanned interruptions occur, the ENS must comply with the requirements of clause 10.5.

10.1 Disconnection

An ENS may disconnect a Customer's Supply Address in the following circumstances:

- (a) if requested by the Customer; or
- (b) it is required for Emergency reasons; or
- (c) for failure to pay a bill if permitted in accordance with clause 10.2; or
- (d) for denying access to the Meter if permitted in accordance with clause 10.3; or
- (e) Electricity has been illegally consumed at the Supply Address.

10.2 Disconnection for failure to pay a bill

- (a) Before disconnecting a Customer's Supply Address for failure to pay a bill, an ENS must:
 - (i) not less than 15 Business Days from the date the bill was issued, give to the Customer a written reminder notice that includes the ENS's telephone number for billing and payment enquiries and, if the Customer is a Residential Customer, a statement as to the availability of the ENS's hardship policy and Family Violence policy; and
 - (ii) use its best endeavours to contact the Customer to advise of the proposed disconnection; and
 - (iii) not less than 20 Business Days from the date the bill was issued, give to the Customer a disconnection warning advising that the ENS may disconnect the Customer's Supply Address with at least 5 Business Days' written notice and a statement as to the availability of the ENS's complaints and dispute resolution procedure.
- (b) If the ENS has complied with the process in clause 10.2(a) and the bill is still not paid in full then, subject to clause 10.2(c), the ENS may disconnect the Customer's Supply Address in accordance with the disconnection warning provided in clause 10.2(a)(iii).

- (c) An ENS must not disconnect a Customer's Supply Address for failure to pay a bill:
 - (i) when clause 9.2 applies;
 - (ii) if Life Support Equipment is registered at a Customer's Supply Address;
 - (iii) if the Customer has agreed a Payment Plan or other payment arrangement with the ENS in respect of the bill and the Customer is adhering to its obligations to make payments under the Payment Plan or arrangement; or
 - (iv) if the Customer has complained to the ENS or an external dispute resolution body about the bill and the complaint has not been resolved.

10.3 Disconnection for denying access to Meter

- (a) Where:
 - (i) the Customer has denied access to the Meter for at least 9 consecutive months; and
 - (ii) at least once after that period:
 - (A) the ENS has provided the Customer with at least 5 Business Days' written notice of the next scheduled Meter reading at the Supply Address;
 - (B) the ENS has advised the Customer that the ENS may disconnect the Customer's Supply Address if the Customer fails to provide access to the Meter; and
 - (C) the ENS has given the Customer an opportunity to provide reasonable alternative access arrangements,
- and, if after that time the Customer is still denying access to the Meter, subject to clause 10.3(b), the ENS may disconnect the Supply Address provided that:
- (iii) the ENS has used its best endeavours to contact the Customer prior to disconnection to advise of the ENS's ability to disconnect if the Customer does not provide access to the Meter; and

- (iv) the ENS has given the Customer at least 5 Business Days' written notice of its intention to disconnect.
- (b) An ENS must not arrange for disconnection for denial of access to the Meter:
 - (i) when clause 9.2 applies; or
 - (ii) if Life Support Equipment is registered at a Customer's Supply Address; or
 - (iii) where the Customer has provided access to the Meter or is attempting to provide access to the Meter in good faith; or
 - (iv) if the Customer has complained to the ENS or an external dispute resolution body about the matter and the complaint is not resolved.

10.4 Disconnection or Interruption for Emergency

If an ENS disconnects or Interrupts a Customer's Supply Address as a result of an Emergency, the ENS must:

- (a) notify the Customer in writing as soon as practicable after the disconnection or Interruption occurs, of the reason for disconnection or Interruption, and provide an estimate of the duration of the disconnection or Interruption (if known) and a contact telephone number or email address if the Customer has any questions; and
- (b) use its best endeavours to restore the supply of Electricity to the Customer's Supply Address as soon as possible.

10.5 Planned or unplanned Interruptions

If the supply of Electricity to the Customer's Supply Address is required to be Interrupted for the Embedded Network to be repaired, maintained or for any other reason other than an Emergency, the ENS must:

- (a) if the ENS has advance notice that the Interruption is required:
 - (i) notify the Customer in writing of the Interruption at least 3 Business Days in advance of the Interruption;
 - (ii) notify the Customer in writing of the reason for the Interruption;

- (iii) notify the Customer in writing of a contact telephone number or email address if the Customer has any questions; and
- (b) if the ENS has advance notice that the Interruption is required and a person residing at the Supply Address requires Life Support Equipment, in addition to clause 10.5(a)(i) to (iii) above, the ENS must unless expressly requested by the Customer not to do so, use best endeavours to obtain acknowledgement from the Customer, or from someone else residing at the Supply Address, that the notice has been received;
- (c) if the ENS does not have advance notice that the Interruption is required and the Interruption is limited to within the Embedded Network, the ENS must:
 - (i) notify the Customer in writing of the Interruption as soon as practicable after the Interruption occurs; and
 - (ii) notify the Customer in writing of the reason for the Interruption; and
 - (iii) provide an estimate of the duration of the Interruption and a contact telephone number or email address if the Customer has any questions; and
- (d) use its best endeavours to restore the supply of Electricity to the Customer's Supply Address as soon as possible.

If a supply address has been disconnected and the customer has rectified the cause of the disconnection in accordance with clause 11.1, an ENS must arrange for reconnection of the supply address within 2 business days.

11.1 Reconnection

- (a) If an ENS has disconnected a Customer's Supply Address due to:
- (i) the Customer's failure to pay a bill, and the Customer has paid or agreed to accept an offer of a Payment Plan, or other payment arrangement with the ENS;
 - (ii) the Customer denying access to the Meter, and the Customer has subsequently provided access to the Meter; or
 - (iii) Electricity being illegally consumed at the Supply Address, and the Customer has remedied that breach, and has paid, or made an arrangement to pay, for the Electricity illegally consumed,

the ENS must arrange for reconnection of the Customer's Supply Address provided that the Customer has requested reconnection and paid any reasonable fee charged by the ENS for reconnection, if any, or agreed to an offer made by the ENS of a Payment Plan in respect of the fee.

- (b) The ENS must arrange for reconnection within 2 Business Days.

Question 6

Do you have any comments on the standards for disconnections and interruptions proposed in clause 10 of the Voluntary EN Code?

5.9 Dispute resolution and complaints handling procedure

Energy Policy WA is considering the most suitable internal dispute resolution and complaints processes within embedded networks. Responses to the Survey indicated that:

- Only a small proportion of customers declared being informed about who to contact in case of questions or complaint about their electricity supply when they first moved into the property. Both residential and non-residential customers were unable to identify a clear pathway for raising questions and complaints.
- Many residential customers made self-initiated requests to obtain access to the Energy Ombudsman to help in resolving disputes. Often they shared stories of unsuccessful attempts to raise questions and concerns with their ENS.
- Tenants reported feeling especially vulnerable in a situation of dispute over electricity supplies, being hesitant to raise the issue to their property manager or landlord for fear of termination of the rental agreement.

"I have absolutely no rights as a consumer, I have been forced to pay hundreds of dollars of bills that were proven wrong in the past because I didn't have an ombudsman to look into it for me."

Tenant strata

"It seems a bit extreme to have to go to court should any disputes not be able to be settled between the occupant and the Strata Company. Having access to the Energy Ombudsman would be much better."

Owner occupier, strata

"Honestly it feels like a scam to me. I'm a renter, and in this economy I don't feel safe asking my real estate questions about why I have so little info about my water and electricity bills. If I cause too much fuss they'll just end my lease at the end of the fixed term leaving me homeless. I don't feel I have ANY protection from being scammed."

Tenant, strata

Clause 12.1 provides that an ENS should use best endeavours to comply with AS/NZS 10002:2002 *Guidelines for complaint management in organisations* when preparing a dispute resolution and complaints procedure.

12.1 Obligation to establish complaints and dispute resolution procedure

Subject to clause 12.6, the ENS must develop, maintain and implement a complaints and dispute resolution procedure in accordance with this clause 12 using its best endeavours to comply with AS/NZS 10002:2002.

12.2 Standard complaints and dispute resolution procedure

A complaints and dispute resolution procedure must at a minimum:

- (a) set out how complaints and disputes may be lodged with the ENS by Customers; and
- (b) set out how complaints and disputes will be handled by the ENS, including specifying:
 - (i) the right of a Customer to have a complaint or dispute considered by a senior employee of the ENS if a Customer is not satisfied with the manner in which the complaint or dispute is being handled; and
 - (ii) the information that the ENS is required to provide to a Customer including to comply with the requirements in clauses 12.3 and 12.4; and
- (c) require the ENS to set out the response times for the ENS's handling of complaints or disputes; and
- (d) require the ENS to specify the method by which it will deliver a response to the Customer.

Note: in the mandatory AES Code, it is intended that this clause would also require the complaints and dispute resolution procedure to contain information about how to escalate a complaint to the Energy and Water Ombudsman.

12.3 Process for dealing with complaints and disputes

- (a) On receipt of a complaint or dispute by a Customer, an ENS must:
 - (i) acknowledge the complaint or dispute within a reasonable time in accordance with its complaints and dispute resolutions procedure; and
 - (ii) respond to the complaint or dispute by addressing the matters raised within a reasonable time.
- (b) Where a complaint or dispute is dealt with internally by an ENS, the ENS must not charge the Customer a fee unless the ENS considers, in its reasonable opinion, the complaint or dispute is vexatious.

12.4 Advice about outcome of complaints process

- (a) Unless the Customer has advised the ENS that the complaint or dispute has been resolved in a manner acceptable to the Customer, an ENS must inform the Customer of the outcome of the complaints process and the reasons for the outcome.
- (b) If an ENS receives a complaint or dispute that does not relate to its functions, the ENS must advise the Customer of the entity that the ENS reasonably considers to be the appropriate entity to deal with the complaint or dispute (if known) and refer the complaint or dispute to the entity, if possible.

Note: In the mandatory AES Code, it is intended that this clause would also require the ENS to inform the Customer that if they are not satisfied with the outcome of the complaints process, they may escalate a dispute to the Energy and Water Ombudsman.

For the mandatory AES framework, Energy Policy WA is intending to publish a standard form document with a model procedure, for use by ENS if desired. This standard form document will meet the Code requirements and will be the subject of separate consultation.

For the mandatory AES Code, Energy Policy WA is intending to require all registered ENS to also register as a member of the Energy Ombudsman scheme, allowing embedded network customers to have access to this service, in line with grid connected customers. Energy Policy WA will undertake further consultation on this matter before commencement of the AES framework.

12.5 Billing Disputes

- (a) If a complaint or dispute relates to a bill issued by or on behalf of the ENS, the ENS must reconsider the bill and inform the Customer of the outcome within a reasonable time.
- (b) If the Customer disagrees with the outcome, the ENS must inform the Customer that it may raise a dispute in accordance with its complaints and dispute resolution procedure.

12.6 Existing complaints and dispute resolution procedure

Where under a Law an ENS is required to have in place a procedure for dealing with complaints and disputes that meets the requirements of clause 12.2, then the ENS is not required to develop, maintain and implement a separate complaints and dispute resolution procedure for the purposes of this Code.

12.7 Standard Form Document

A complaints and dispute resolution procedure may be a Standard Form Document.

5.10 Use of Life Support Equipment

Energy Policy WA considers that customers using life support equipment within embedded networks should receive the same protections as grid connected customers as per Part 11 of the Small Use Code.

13.1 Requirement to record Life Support Equipment

- (a) If a Customer provides an ENS with written confirmation from an Appropriately Qualified Medical Practitioner that a person residing at the Customer's Supply Address requires Life Support Equipment, the ENS must record and keep a register of this.
- (b) An ENS must have in place a system to ensure that the details of each person residing at a Supply Address that requires Life Support Equipment are kept up to date including, at a minimum, confirming the information at least annually.

13.2 Notification of Life Support Equipment

- (a) Where an ENS is provided with confirmation in accordance with clause 13.1(a), the ENS must:
 - (i) keep a copy of the confirmation; and
 - (ii) within 48 hours of being given the confirmation –
 - (A) notify the licensed electricity retailer (if any) who supplies electricity for the Embedded Network, in writing, that a person residing at a Supply Address within the Embedded Network requires Life Support Equipment; and
 - (B) give a copy of the confirmation to the licensed electricity retailer.

- (b) Where an ENS is informed that a person residing at a Supply Address no longer requires Life Support Equipment or, after a specified date, there will be no person residing at a Supply Address who requires Life Support Equipment, the ENS must:
- (i) within 48 hours of being informed, pass on that information to the licensed electricity retailer (if any) who supplies electricity for the Embedded Network, in writing; and
 - (ii) remove the Supply Address from the register kept by the ENS.

13.3 Obligation to pass on request for medical confirmation

Where an ENS supplies Electricity to a Supply Address where a person requires Life Support Equipment, the ENS must notify the Customer in writing of a request (if relevant) by a licensed electricity retailer for written confirmation by an Appropriately Qualified Medical Practitioner that a person residing at the Supply Address requires or continues to require Life Support Equipment.

5.11 Access to electricity from renewable sources or other characteristics

Energy Policy WA understands that some customers within embedded networks may have commitments to meet carbon emission reduction targets. Feedback received from the Survey noted that it is not always simple for these customers to access electricity from low emissions sources.

“We wished to purchase certified green electricity but to do this we require all tenants of the building to also sign on for this and due to the extra cost they are not all keen (although some were interested it is unlikely to progress).”

Tenant, office building, consuming between 50 and 160 MWh per year

Renewable energy offsets can include mechanisms such as negotiating with the retailer supplying the master meter to increase electricity supply from renewable sources (i.e. a source which is capable of producing electricity which is naturally replenished) or purchasing an equivalent amount of Large-Scale Generation Certificates.

Question 7

Are the requirements in clause 14 of the Voluntary EN Code sufficient to facilitate access to electricity from renewable sources? Is anything else required, for instance additional information provision?

14.1 Request to offset

If a Customer requests an ENS to offset the carbon or associated emissions from the generation and supply of Electricity from the Grid to the Customer, the ENS must use reasonable endeavours to facilitate that request including, but not limited to:

- (a) negotiating with the licensed electricity retailer (if any) who supplies electricity for the Embedded Network for the supply of Electricity from Renewable Sources; or
- (b) purchasing an equivalent amount of LGCs.

14.2 Customer to pay reasonable costs

- (a) Where requested by the Customer in accordance with clause 14.1(b), the Customer must pay any reasonable costs incurred by the ENS directly related to offsetting the carbon or associated emissions of the relevant supply of Electricity that was requested.
- (b) Where the ENS and the Customer agree to offset the relevant supply of Electricity pursuant to this clause 14, the ENS may recover any reasonable costs incurred:
 - (i) as an additional charge itemised on the Customer's bill; or
 - (ii) as part of the tariff structure as agreed with the Customer.
- (c) If pursuant to clause 14.2(b)(ii), the Customer and the ENS have agreed to recover the costs as part of the tariff structure, however, the Customer opts out of that tariff at any time in accordance with clause 7.3(b) and reverts to the Default Flat Rate Tariff offered by the ENS, the ENS may recover those costs as an additional charge in accordance with clause 14.2(b)(i).
- (d) The costs referred to in clause 14.2(a) above are not subject to the restrictions on pricing set out in clause 7, whether they are an additional charge itemised on the

Customer's bill pursuant to clause 14.2(b)(i) or they form part of the tariff structure pursuant to clause 14.2(b)(ii).

14.3 Auditable written evidence

On request, if not provided as part of a bill, the ENS must provide to the Customer:

- (a) auditable written evidence that it has offset the carbon or associated emissions of the relevant supply of Electricity in accordance with this clause 14; and
- (b) details of the basis of any additional costs charged that are directly related to offsetting the carbon or associated emissions of the relevant supply of Electricity.

14.4 Request for Electricity with other characteristics or criteria

- (a) The ENS must, where reasonably practical and at the Customer's reasonable cost, facilitate requests from a Customer for the supply of Electricity with other characteristics or criteria.
- (b) Where the ENS receives such a request, clauses 14.1 and 14.3 will apply as if the references to offsetting the carbon or associated emissions of the relevant supply of Electricity were references to the other characteristics or criteria of the relevant supply of Electricity.

6. Issues out of scope of the Voluntary Embedded Networks Code

This section details matters relating to the supply of electricity within embedded networks where Energy Policy WA does not consider there is a clearly demonstrated need for inclusion in the Voluntary EN Code. Stakeholder views on these matters may result in additional code provisions.

6.1 Metering

Clause 5.1 of the draft Voluntary EN Code includes a broad requirement for each embedded network customer to have their own meter, with some grandfathering for existing embedded networks. Energy Policy WA is considering whether further metering requirements are necessary, including matters such as requirements for:

- higher levels of meter functionality; and/or
- increased regulation as to ownership of, and access to, meters and other energy infrastructure.

6.1.1 Functionality

Setting a minimum level of meter functionality could assist in future proofing to, over time, facilitate customers in embedded networks participating more fully in the transformation of the electricity sector. Meters with higher levels of functionality may permit, for instance:

- remote meter reading (communications enabled);
- access to more granular usage data (5 or 30 minute intervals);
- more accurate allocation of the costs and benefits of on-site DER;
- an ability to support different tariff structures;
- an ability to support participation in new and emerging services such as peer to peer trading and aggregation, where offered through the embedded network seller.

However, requiring meters with higher levels of functionality may result in increased installation costs. Energy Policy WA is considering what requirements should apply for new builds versus upgrades to existing embedded networks and for conversions of multi-master meter properties to embedded networks (known as meter merges) and whether any exemptions should be applied to these requirements.

Question 8

8.1 Should private meters installed in new embedded networks be subject to minimum standards in terms of functionality? For instance:

- meter captures and stores data in 30 minute intervals;
- meter captures and stores data in 5 minute intervals; or
- meter supports remote reading (communications enabled).

8.2 Should metering standards only be applied to new builds, or also to meter replacements and upgrades in existing embedded networks?

8.3 Should such requirements also apply to conversions to embedded network (known as meter merges)?

8.4 What exemptions might be required if metering standards are applied?

6.1.2 Ownership and access

Customers and operators of embedded networks have indicated to Energy Policy WA that some business models involve third party service providers owning sub-meters within embedded networks. Energy Policy WA is exploring whether there is a need to ensure that the core infrastructure in embedded networks (infrastructure that permits the supply of electricity as an essential service within the embedded network: that is, wiring, meters and switchboard), is treated as a part of the property, owned by the collective owners of the property and not by a third party.

This could mean privately-owned sub-meters in an embedded network may be excluded from leasing agreements or other arrangements allowing removal by a third party service provider at the end of a contract term¹⁶. It could also mean that access to and/or control of the meters cannot be limited to a particular service provider (e.g. via the use of proprietary software, by withholding access codes or passwords).

The key objective here is to ensure that ENS maintain access to meters and their functionality, noting that that other elements of electricity infrastructure (for example, DER such as solar PV, EV chargers and batteries) could still be subject to lease arrangements or power purchase arrangements, to facilitate the installation of this type of equipment without high upfront costs.

Unlike DER infrastructure, access to the meter infrastructure is required for the 'essential service' delivery of electricity to the customer. If a third party owner goes out of business or there is a change of third party provider at the end of a long contract (10 years is common) and the outgoing provider removes metering infrastructure or it is rendered unusable because software to operate meters is the property of the third party provider, this leaves customers in a precarious position.

Question 9

9.1 Should there be a requirement that, from a certain date, private meters installed in embedded networks must be owned outright by the property owner (or collective property owners if strata titled)?

9.2 Should there be a requirement that, from a certain date, private meters installed in embedded networks must meet certain requirements for access, interoperability and/or common communication standards?

9.3 Should any other types of assets in the embedded networks (e.g. DER assets) be covered by similar ownership and access requirements or is it acceptable for ownership of these other types of assets to be outsourced to reduce upfront costs to customers?

6.2 Safety

Energy Policy WA has received anecdotal evidence that in certain situations, sub-meters are allocated to an incorrect supply address, which can lead to safety issues when conducting electrical works. Survey feedback highlighted that, particularly in caravan and long stay park homes, customers have safety concerns about embedded network metering and electrical infrastructure.

¹⁶ Financing arrangements to spread the costs of infrastructure over time would still be permitted, provided the property owner ultimately owned the meter infrastructure.

“Would like to see some sort of electrical safety certification provided (vendor to pay) when property is bought/sold, to guarantee that the property is electrically safe. (Mine wasn't)”

Owner-occupier, strata

“In the case of our supply, our meters are extremely old and worn out. The whole infrastructure within this park is decrepit and in a lot of cases, dangerous with cable sometimes visible in the ground. Cable connections to a lot of these old places is too light and electricity trips constantly. Do away with embedded and supply everyone individually direct from supplier.”

Long stay resident, caravan park

Energy Policy WA is seeking stakeholder feedback regarding the need for additional electrical safety regulation and monitoring of embedded networks.

Question 10

Do you consider there is a need for greater regulation of safety requirements within embedded networks? Why/why not?

6.3 Further education

Survey results indicated that many embedded network stakeholders require further education as to the operation of these arrangements and how they differ from traditional electricity supplies. In particular for:

- customers purchasing or leasing properties within embedded networks;
- property professionals selling, leasing and/or managing properties in embedded networks;
- embedded network operators (for example strata companies engaging third party strata management).

Energy Policy WA is continuing to consult with Landgate, Consumer Protection and other government stakeholders in the strata titles and property sectors, regarding improving upfront disclosure to customers in embedded networks and increasing sector wide knowledge on the regulatory requirements for embedded networks.

If embedded networks become a Prescribed AES, then prior to the mandatory AES Code commencing, Energy Policy WA will consider what targeted education is required to support the introduction of code obligations and raise awareness of improved customer protections.

Appendix

Appendix A. Differences in customer protections between customers of licensed retailers and customers in embedded networks

Customers of licensed electricity retailers such as Synergy and Horizon Power have certain customer protections, whereas customers supplied by way of an embedded network have only a few basic protections under the Exemption Order.

A.1 Protections available to customers of licensed electricity retailers – Small Use Code

The Small Use Code provides protections to customers who use 160 MWh of electricity or less per annum and who are supplied by a licensed retailer with regard to billing, payment, metering, connection, disconnection, reconnection, marketing, payment assistance, information and communication standards, supply to life support equipment customers and family violence customers, complaints and dispute resolution and service standard payments.

The Small Use Code does not apply to end-use customers supplied within embedded networks.

A.2 Protections available to customers of licensed electricity retailers – Energy and Water Ombudsman

The Energy Ombudsman provides dispute resolution services for small-use electricity customers supplied by licensed entities. The Energy Ombudsman was established as a simple and practical dispute resolution body for smaller customers, recognising that court processes or arbitration can be onerous. Membership of the licence holder in the Energy Ombudsman scheme is a condition of every retail, distribution and integrated regional licence under the Act.¹⁷

However, exempt entities are not required to hold membership in the Energy Ombudsman scheme, therefore customers of exempt entities are not currently eligible to access the services of the Energy Ombudsman if a problem arises. While customers may be able to access a form of dispute resolution through a sector specific provider or the general provisions of other legislation (such as the Australian Consumer Law), or take steps to have a dispute resolved through the court system, this is not ideal.

The Final Report recommended at Recommendation 6 that as a condition of every AES registration, the code participant must be a member of the Energy Ombudsman scheme. Further consultation will be undertaken regarding the role of the Energy Ombudsman under the AES framework.

A.3 Compliance and monitoring of electricity licensing requirements by the ERA

The ERA has responsibility for administering the licensing framework for generation, distribution, retail and other licenses related to electricity, however there is no similar responsibility on the ERA for the administration of, and monitoring and enforcing compliance for, the on-supply of electricity under the Exemption Order.

Under the AES framework, the ERA will be responsible for administering the AES registration framework including monitoring and enforcing compliance. This will be the subject of further stakeholder consultation.

¹⁷ Exemption Order 2005, clause 19

A.4 Basic consumer protections which apply for customers in embedded networks

Some basic customer protections apply to customers who are supplied electricity within an embedded network. The Exemption Order requires on-sellers of electricity to provide end-use customers with a bill that includes, at a minimum:

- the quantity of electricity supplied to the occupier of the property; and
- the fees and charges payable by the occupier for electricity supplied and the provision of electricity services in relation to the property.

There are also restrictions on how much an exempt on-seller can charge **residential customers** for electricity, set out below.

- If the on-seller buys electricity from Synergy or Horizon Power, a residential customer may not be charged more for electricity consumption than a residential customer of Synergy or Horizon Power would be charged (clauses 6(4) and 6(5A) of Exemption Order)¹⁸. It should be noted that if a customer is charged a time of use tariff, each component price of that tariff must be at or below the current price cap.
- If the on-seller does not buy its electricity from Synergy or Horizon Power, this restriction does not apply.
- If electricity supplied to a residential property by an on-seller is generated using generating works that are owned or operated by the on-seller, any charge imposed by the on-seller for that electricity must not exceed the amount necessary for the on-seller to recover the costs of generation (clause 6(5)). This obligation applies even if the electricity is generated using generating works that are owned or operated by the on-seller.
- For the daily fixed supply charge, all residential customers of exempt on-sellers within Synergy or Horizon Power's licence area are entitled to be charged no more than a residential customer of Synergy or Horizon Power would be charged (this includes on-sellers that buy their electricity from a retailer other than Synergy or Horizon Power) (clause 6(6)).

The Exemption Order also requires exempt on-sellers to maintain a register of life support customers at the address and notify their retailer of life support customers at the address (clause 6A). There are limitations on exempt on-sellers disconnecting or interrupting supply to life support customers and a requirement on exempt on-sellers to pass on notices of planned outages to life support customers.

Equivalent pricing restrictions and life support customer arrangements are in place for residential customers in long-stay park homes under the Caravan Park Exemption Order.

For **non-residential customers**, the Exemption Order does not include any requirements relating to the amount the on-seller can charge for electricity.

¹⁸ Horizon Power and Synergy's regulated electricity prices are prescribed in the Energy Operators (Regional Power Corporation) (Charges) By-laws 2006 and Energy Operators (Generation and Retail Corporation) (Charges) By-laws 2006 respectively. The regulated residential prices are the A2 tariff and the A1 tariff respectively.

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