



Issues Paper

Draft Amendments to the Electricity Network Service Provider Registration Exemption Guideline

August 2016

© Commonwealth of Australia 2016

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the Director, Corporate Communications,
Australian Competition and Consumer Commission,
GPO Box 4141,
Canberra ACT 2601
or publishing.unit@acc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: (03) 9290 1444

Fax: (03) 9290 1457

Email: AERInquiry@aer.gov.au

AER Reference: 60281

Amendment Record

Version	Date	Pages
1.0	August 2016	43

Request for submissions

Interested parties are invited to make written submissions to the Australian Energy Regulator (AER) regarding this paper by the close of business, **10 October 2016**.

Submissions should be sent electronically to: aer inquiry@aer.gov.au

Alternatively, submissions can be mailed to:

Mr Chris Pattas
General Manager, Networks
Australian Energy Regulator
GPO Box 520
Melbourne VIC 3001

The AER prefers that all submissions be publicly available to facilitate an informed and transparent consultative process. Submissions will be treated as public documents unless otherwise requested.

Parties wishing to submit confidential information are requested to:

- clearly identify the information that is the subject of the confidentiality claim
- provide a non-confidential version of the submission in a form suitable for publication.

All non-confidential submissions will be placed on the AER's website at www.aer.gov.au. For further information regarding the AER's use and disclosure of information provided to it, see the *ACCC/AER Information Policy*, June 2014 available on the AER's website.

Enquiries about this paper, or about lodging submissions, should be directed to the Network Regulation branch of the AER on (03) 9290 6984.

Throughout the document we ask questions to help focus submissions. For convenience, a full list of consultation questions are provided in section 6 (page 30).

Contents

Request for submissions	iii
Background	4
1.1. Purpose of this issues paper	4
1.2. The Embedded Networks rule change	5
1.2.1 Access to retail competition under current regulations.....	5
1.2.2 AEMC Final Rule Change Determination	6
2 Introduction.....	8
2.1. What is an embedded network	8
2.2. Role of the AER.....	8
2.3. Why is access to retail competition important?.....	9
2.4. Role of the Embedded Network Manager	10
2.5. Difference between household and embedded network billing...	10
2.6. Fees, charges and transactions costs	12
3 Metering types and access arrangements	14
4 Appointment of an embedded network manager	16
4.1. Who must appoint an ENM?	16
4.2. Small networks appointment trigger	17
4.3. Who pays for the ENM?.....	18
4.4. General requirements for appointment.....	20
4.4.1 Advance fees and rebates prohibited	21
4.4.2 Eligible community cost recovery	21
4.4.3 Time limit extension	22
4.4.4 Non–appointment and reversion	23
5 Other amendments to the guideline.....	25
5.1. Changes to tables 1, 2, 3, 4, 5, 6, 7, 8, 9 & 10.....	25

5.2. Contact information and notifications	25
5.3. Information provision and unbundling	25
5.4. Dispute resolution	26
5.5. Pricing.....	26
5.6. Access to retail competition	27
5.7. Network conversions - supplementary conditions	28
5.7.1 Proposed revised network approach	28
5.8. Increased requirements for HV networks	29
6 Summary of consultation questions.....	30
Attachment 1 - Extract from the embedded network rule change	36
Attachment 2 - New clause 4.9.....	38
4.9. Alternative conditions for site conversion	38
4.9.1 Provision of retrofit information.....	38
4.9.2 Collecting and recording explicit informed consent.....	38
4.9.3 Offer matching for large customers	39
4.9.4 Offer matching for small customers.....	39
4.9.5 Duplication of network charges	40
4.9.6 Metering arrangements	40
4.9.7 Approval by the AER	40
Attachment 3 - Table of embedded network roles	42

Glossary

This issues paper uses the following definitions

Term	Definition
ABN	Australian Business Number
ACN	Australian Company Number
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ACCC	Australian Competition and Consumer Commission
ASIC	Australian Securities and Investments Commission
Body Corporate	Means a controlling body of a scheme constituted under state or territory strata titles legislation, the members of which are lot owners (or their representatives), and includes an owners corporation but is not a body corporate for the purposes of the <i>Corporations Act 2001</i> (Cth).
Customer	Means a consumer of electricity for primary industry, domestic, commercial or industrial use but does not include a wholesale market customer who is registered by AEMO as a Customer under Chapter 2 of the NER.
Eligible community	Has the meaning given in conditions 4.7.1.1 and 4.7.2.
Embedded network	Has the meaning specified in chapter 10 of the NER.
Embedded network manager	Has the meaning specified in chapter 10 of the NER.
Energy	Means electricity
Exempt embedded network service provider	Has the meaning specified in chapter 10 of the NER.
Exempt network	See private network
GWh	GigaWatt hour
Large customer	Means a business customer who consumes energy at business premises at or above the upper consumption threshold, as defined by the relevant jurisdiction. If no threshold is defined, 100 megawatt hours per annum for electricity.

Large corporate entity	A 'large proprietary company' as defined under clause 45A(3) of the <i>Corporations Act</i> 2001 or, if not a reporting entity under that Act, an unlisted company, trust, or other legal entity which fulfils the financial and/or staffing criteria specified in clause 45A(3) of that Act.
Meter	Means any device (compliant with metrology requirements and Australian standards) that measures the quantity of energy passing through it or records the consumption of energy at the customer's premises.
MWh	MegaWatt hour
NEL	National Electricity Law
NER	National Electricity Rules
Off-market energy generation	<p>Means an energy generation option not required to be registered with AEMO under clause 2.5.2 of the NER and applicable AEMO guidelines.</p> <p>Note: The category includes – but is not limited to – small scale diesel, petrol, bio-fuel, gas (including coal-seam and other methane sources), inverter, fuel cell, an electric vehicle inverter, thermal-electric, geothermal, solar (including photovoltaic), wind or hydro generation and cogeneration and tri-generation installations.</p>
On-market energy generation	<p>Means an energy generation option required to be registered with the AEMO under clause 2.5.2 of the NER and applicable AEMO guidelines. This category includes the four AEMO registration categories of scheduled generation, non-scheduled generation, market generation and non-market generation.</p> <p>Note: The category includes – but is not limited to – small scale diesel, petrol, bio-fuel, gas (including coal-seam and other methane sources), inverter, fuel cell, an electric vehicle inverter, thermal-electric, geothermal, solar (including photovoltaic), wind or hydro generation and cogeneration and tri-generation installations. Typically, this category relates to generation systems of 30MW or greater capacity.</p>
On-selling, selling	On-selling or selling means an arrangement where a person acquires energy from a retailer following which the person acquiring the energy or a person acting on their behalf sells energy for use within the limits of premises owned, occupied or operated by the person.
Parent connection point	Has the meaning specified in chapter 10 of the NER.
Private network	Means any network connected to the NEM or an islanded network subject to regulation under the NER, supplying electrical energy to a third party, but not a transmission or

	distribution network registered with AEMO.
Private network operator	See: exempt embedded network service provider
Public Register	Public Register of network exemptions
Residential customer	Means a customer who purchases energy principally for personal, household or domestic use at premises.
Responsible person	Has the meaning specified in clause 7.2.1(a) of the NER. For the purposes of condition 4.2.2.3, a relevant exempt embedded network service provider is deemed to be the responsible person.
Retailer	Means a person who is the holder of a retailer authorisation for the purposes of section 88 of the Retail Law.
Retail Law	National Energy Retail Law
Sell	The provision of electricity in exchange for money.
Small customer	Means a customer– who is a residential customer, or who is a business customer who consumes energy at business premises below the upper consumption threshold, as defined by the relevant jurisdiction. If no threshold is defined, 100 megawatt hours per annum for electricity.

Background

1.1 Purpose of this issues paper

On 17 December 2015, the Australian Energy Markets Commission (AEMC) released the Embedded Networks Final Rule Determination, which aims to reduce the barriers customers in embedded networks face in accessing retail competition. This issues paper sets out our proposed changes to the Network Guideline in response to the AEMC's determination and recommendations and submissions from stakeholders during the course of the Embedded Network rule change determination process. We also outline a number of other administrative changes.

Under Section 11(2) of the National Electricity Law (NEL) a person must not engage in the activity of owning, controlling or operating, a transmission system or distribution system that forms part of the interconnected national electricity system unless the person is a Registered participant in relation to that activity, or the person is **exempted by the Australian Energy Regulator** (AER) from the requirement.

This section (and the others that form Division 1 of Part 2 of the NEL) establishes two parallel regulatory frameworks for the regulation of network assets:

- Transmission Network Service Providers (TNSPs) and Distribution Network Service Providers (DNSPs), as registered with Australian Energy Market Operator (AEMO), are regulated under the relevant provisions of the NEL and National Electricity Rules (NER).
- Exempt Network Service Providers (exempt NSPs), as exempted by the AER, are regulated primarily according to the AER Electricity Network Service Provider Registration Exemption Guideline (the Network Guideline).

The AER is responsible for administering the exemptions framework under the NEL as outlined in the Network Guideline. In accordance with rule 2.5.1 of the National Electricity Rules (NER), the Network Guideline sets out the criteria for eligibility for an exemption and the conditions that exemption holders must comply with. The vast majority of exemptions are for exempt NSPs that own, operate or control 'embedded networks' that cover a single site (e.g. shopping centres, apartment buildings, caravan parks and retirement villages).

When the rule change commences on 1 December 2017, it will establish a new accredited service provider, the Embedded Network Manager (ENM), who will help to facilitate the transfer of customers between different energy sellers. The rule change also includes a provision (r. 11.87.4) that the AER revise the Network Guideline by 1 December 2016 to reflect the changes made to the NER concerning Embedded Networks and the appointment of an ENM. The task of the ENM is highly technical and specialised. It is a role that can only be carried out by a qualified service provider who has completed an AEMO accreditation course.

This guideline will take effect on 1 December 2016, one year earlier than the rule change. This is to allow time for accredited ENMs to become familiar with the AER's requirements.

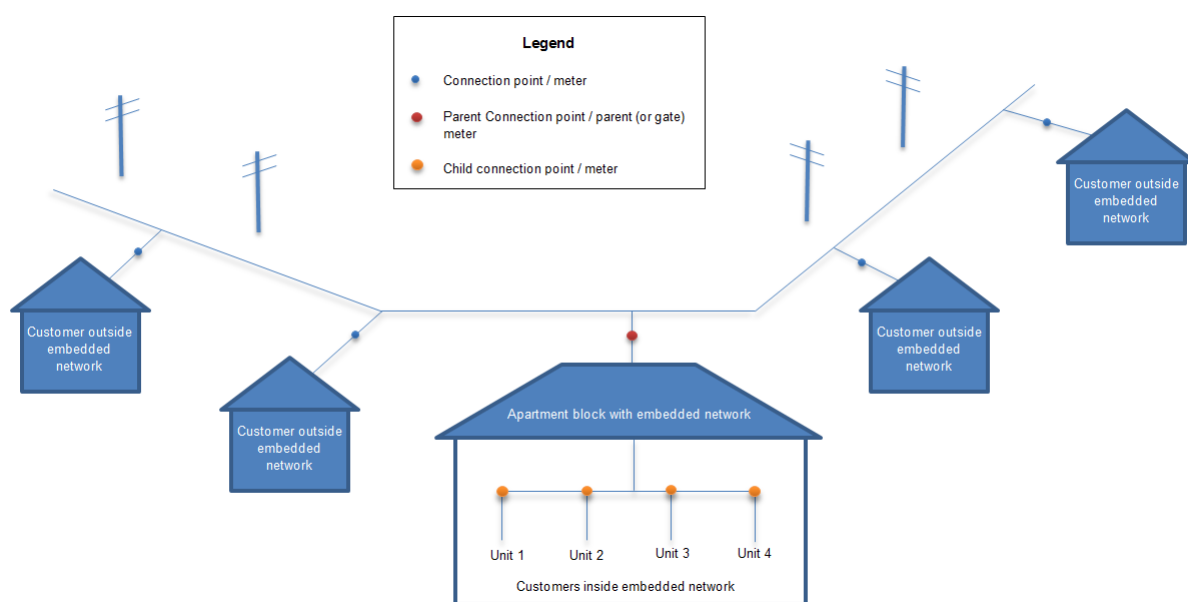
1.2 The Embedded Networks rule change

1.2.1 Access to retail competition under current regulations

Stated simply, an embedded network is formed when a 'parent' or 'gate' meter is placed between meters of multiple customers and the poles and wires that form part of the national grid. This simple act transforms all the electrical distribution system on the customer's side of the parent meter into an embedded network and the customers' meters into 'child' meters.

Figure 1.1 illustrates an embedded network in an apartment block.

Figure 0.1 Example of an embedded network



Most electricity customers are not within embedded networks. For customers outside of embedded networks, the direct supply of electricity to the premises is managed by the DNSP and the costs of electricity consumption are paid to an authorised retailer of choice (where more than one retailer operates).

In contrast, customers in embedded networks usually have their direct supply of electricity to the premises managed by the exempt NSP who also sells them electricity as an exempt seller (being exempted by the AER from the requirement to hold a retailer authorisation under Section 88 of the National Energy Retail Law). This type of energy sale is referred to as off-market.

The third possible scenario is that a customer in an embedded network has supply managed by the exempt NSP but purchases electricity for consumption from an authorised retailer. As the embedded network customer is purchasing energy from the wider energy market beyond the embedded network, this is referred to as on-market.

In each of the three possible scenarios, services are handled by different service providers in accordance with differing regulatory requirements. Regulation of services for customers outside embedded networks is provided by the NER and the National Energy Retail Rules (NERR). Similarly, regulation of services for off-market embedded network customers is provided by the AER's exemption framework under the Network Guideline and Exempt

Selling Retail Guideline (the Retail Guideline). However, regulation is unclear for on-market embedded network customers and this uncertainty acts as a barrier for customers in embedded networks seeking to become on-market customers. This is best illustrated by the Table 1.1 below.

Table 0.2 Legal instruments and service providers of electricity services

Service	Off-market embedded network customers		On-market embedded network customers		Customers outside of embedded networks	
	Service provider	Instrument	Services provider	Instrument	Service provider	Instrument
Network	Exempt NSP	Network Guideline	Exempt NSP	Network Guideline	DNSP	NER
Metering	Exempt NSP	Network Guideline	Accredited providers	NER and National Energy Retail Rules (NERR)	Accredited providers	NER and NERR
Market interface	Not required	Not required	<i>No party is responsible</i>	<i>No instrument allocates responsibility</i>	DNSPs	NER and AEMO procedures
Retail (sale of electricity)	Exempt NSP	AER exempt selling (retail) guideline	Retailers	NERR	Retailers	NERR

Source: AEMC 2015, Embedded Networks, Rule Determination, 17 December 2015, p.ii.

1.2.2 AEMC Final Rule Change Determination

The AEMC undertook a rule change determination process that sought to increase access to retail competition for customers in embedded networks by creating a new accredited service provider, the Embedded Network Manager (ENM), to be responsible for market interface services for on-market embedded network customers. The final rule change provided that the AER amend the Network Guideline to incorporate the NER amendments relating to the ENM and publish the revised guideline by 1 December 2016.

The AEMC rule change is quite extensive. It addresses matters which fall both within the scope of the AER network exemption guideline and a range of further matters which affect the market settlement system, and service provider accreditation requirements administered by AEMO.

In this section we focus only on those elements of the rule change which have direct relevance to the amendments we propose to the AER guideline. A full copy of the rule change may be viewed at the AEMC website.¹

The central change of concern for the Network Guideline is the addition of clauses (d1) and (d2) to rule 2.5.1 (d) of the NER. There are also a number of relevant definitions that have been added to Chapter 10 of the NER. This includes the ENM conditions and ENM conditions trigger referred to in clauses (d1) and (d2). An extract from the rule is included as attachment 1 for reference.

The amended rule applies in every jurisdiction which allows access to retail competition to customers in embedded networks. In those embedded networks, an ENM must be appointed where any customer of that network seeks access to a market retail offer.

However, the rule also requires the AER to consider if the costs of complying with ENM conditions defined in the rule outweigh the likely benefits to persons connected, or proposed to be connected, to the embedded network. If so, we may exempt a person from complying with the ENM conditions until such time as an ENM conditions trigger occurs.

A primary purpose of this issues paper is to address this question. However, we have also taken the opportunity to review the guideline more broadly. The changes we propose include an update to better align this guideline with our retail selling guideline, clarification of the scope of a number of activity classes and amendments to better reflect communications technologies such as the National Broadband Network. A full list of our other changes is included in section 5.

¹ <http://www.aemc.gov.au/Rule-Changes/Embedded-Networks>

2 Introduction

In this section we set out background information on how embedded networks fit in the regulatory framework, how they operate relative to retail competition and some of the challenges they present regarding billing, cost recovery and the imposition of fees and charges. We think understanding these issues is an important step to understanding the changes the embedded networks rule will bring when an ENM is appointed.

2.1 What is an embedded network

This is any situation where a single meter (a ‘gate’ or ‘parent’ meter) is installed at the point of connection of the site to the electricity distribution system and that meter records all the electricity usage by all consumers (i.e. residents and tenants) at the site. This means there must be two or more users sharing the supply for it to be an embedded network. The parent meter can be considered to be the bulk supply meter for the site. Under section 11 of the NEL, an embedded network is a miniature distribution network. All distribution networks must be registered with AEMO and regulated by the AER under chapter 6 of the NER or they must be exempted from registration by the AER. We set conditions for exemption from registration with the Australian Energy Market Operator (AEMO) which include a requirement for most embedded networks of any size to register with us as an exempt network.

2.2 Role of the AER

The AER has the role of determining the conditions for exemption of an embedded network. We do so under section 13 of the NEL. That section of the law requires we set conditions for exemption that are consistent with the National Electricity Objective (NEO). This means we must consider whether allowing an exemption from registration with AEMO for an embedded network is in the long-term interests of consumers. A fundamental principle we apply is that exempting an embedded network is only consistent with the NEO if customers have unfettered access to retail competition where it is available in a jurisdiction.²

Our conditions are set out in detail in the network guideline, which is issued under clause 2.5.1 of the NER. Where access to retail competition is not available for any reason, we further consider that an embedded network which cannot demonstrate that the costs to customers are equivalent to, or less than, the costs that generally apply in the NEM is unlikely to be serving the long-term interests of customers.

All NEM jurisdictions recognise customers should have access to retail competition. However, the delivery mechanisms vary. Since 2012 when the current AER network guideline came into operation the primary mechanism for access in NSW, Victoria and SA has been through parent/child metering. In the ACT, Tasmania and Queensland access to retail competition has required a direct connection to the local distributor. We understand that this requirement is under review in the ACT and Queensland.

² At the time writing, these jurisdictions are Victoria, New South Wales and South Australia.

Inside current embedded networks, each user is normally metered by their own meter, called a 'child' meter. The analogy often used is that the parent buys all the electricity and then shares it with the children. However, the concern of policy makers and the AER with this arrangement is that the children are denied their right of choice and sometimes the terms on which the bulk supply is shared amongst the children may not be fair and reasonable.

Under current arrangements the child meter may not be recorded in the Market Settlement And Transfer System (MSATS), which is managed by AEMO. Also, the MSATS details may not adequately identify the meter to be a child meter. Consequently, accurate meter information is not readily accessible to a market retailer. This lack of accessibility has been identified in the AEMC rule change as the major reason why many customers (i.e. children) in embedded networks have great difficulty trying to obtain a retail offer from any retail supplier apart from the embedded network reseller.

Anecdotal reports we have received from some industry participants suggest that some embedded network owners/operators may not have registered their embedded network for an exemption with the AER despite having an obligation to do so. We would be concerned if this resulted in those operators avoiding their responsibilities under the NER and the AER's network guideline to facilitate customer choice. Failure to register an embedded network is an offence in all NEM jurisdictions and is liable to prosecution. As the AER guideline has been in force since 2012 all existing embedded network operators have had ample time to register their networks.

2.3 Why is access to retail competition important?

When customers are located within an embedded network it is possible that the charges applied to customers could be greater than the charges that would have resulted if the customers were served directly by a market retailer or had a choice of market retailer. Economists call these charges 'monopoly rents'. Some embedded network operators may treat their customers as 'captive' to the network. There can be a strong financial incentive to exploit these situations and extract monopoly rents. The best remedy to this situation is for the customer to have ready access to a competing retail offer. If the embedded network seller charges too high a price, customers will simply get their energy from a cheaper competitor. This loss of customers places a natural cap on the ability of the embedded network seller to charge monopoly rent prices.

Anecdotal reports suggest some embedded network operators actively resist providing access to the metering installation by customers and/or competing retailers and some may prevent their customers accessing their billing information. They may also seek to prevent their customers obtaining better prices in those jurisdictions that allow access to retail competition through parent/child metering. These practices, where they occur, are breaches of the AER's conditions for exemption of the network. Where this is occurring, the registration of the exempt embedded network is invalid. Operating an embedded network without a valid AER exemption is subject to severe penalties under the NEL.³

³ It is a civil penalty provision under section 11(2) of the NEL to own, control or operate a transmission or distribution system connected to the national grid without being a Registered participant of the National Electricity Market or holding an exemption from the AER.

However, even where competition is allowed, the industry has identified that practical problems have sometimes prevented the current arrangements for access to retail competition from being fully effective. The embedded network rule change and these amendments to the network guideline are intended to address these practical problems.

2.4 Role of the Embedded Network Manager

Even where the embedded network operator is fully compliant with our embedded network guideline, customers located in that embedded network may find accessing a retailer to be difficult. This may be because their local metering arrangements are not established up to the standards which apply elsewhere in the NEM. Under the AEMC rule change, a new accredited service provider called the Embedded Network Manager (ENM) will be tasked with closing this gap by undertaking certain functions as described below.

When an ENM is appointed, the customers inside the embedded network will be able to access a retail offer in the same way as any other electricity customer. The ENM will ensure that the details of the customers metering installation are recorded in the market settlement system and are accessible to market retailers. However, this access does have added complications compared to standard retail offers. We discuss the differences later in this paper.

Although the physical meters may be different for each customer, for access to retail competition the critical information is the National Metering Identifier (NMI) for that meter. Most meters in embedded networks do not currently have a NMI. They are sometimes referred to as 'orphans' because they lack that essential identity. The ENM will have the task of registering NMIs for embedded network meters (i.e. the child meters) in the MSATS. The ENM will be an accredited role from 1 December 2017. A person should not refer to themselves as an ENM if they are not accredited by the AEMO.

The role of the ENM is to manage the details of the metering installation for the building or site to ensure that the child meters are an approved market meter and are correctly registered in the MSATS. When the meter NMI details have been recorded in the MSATS, the customer can provide their unique NMI to a retailer. The retailer can then perform a 'NMI discovery' enquiry which will inform the retailer the customer is located in an embedded network.⁴ Based on that enquiry and on information supplied by the customer the retailer can then prepare a quote. If the customer decides to accept the quote the retailer can commence the retail transfer process in conjunction with the ENM.

2.5 Difference between household and embedded network billing

To better understand how embedded networks are different we need to understand how 'normal' electricity supply is billed. Customers living in stand-alone houses have their own direct connection to the electricity supply, which is individually metered. They receive a single bill for all their electricity. That bill includes all the network charges. What happens in

⁴ 'NMI Discovery' is a process whereby the retailer enters the NMI in their system and looks up the details recorded for the customer in the MSATS to ensure they match the person talking to the sales agent. If they match, a critical first step in the retail transfer process is satisfied and the transfer process can commence.

the background is that the metering data allocated to their NMI is provided to both the distributor and the retailer through the MSATS. The distribution network charges for standard electricity services are billed directly to the retailer. The retailer then presents a single bill to the customer. This happens because the market retailer has an agreement with the distributor to bill this way.

In an embedded network, if a customer buys all their electricity from the embedded network's appointed retailer they would normally only get one bill, the same as a normal customer elsewhere. However, if a customer decides to buy from a market retailer directly they would normally get two bills – one is the 'energy only' bill from the market retailer and the second is a network charges bill from the embedded network.

This two bill approach arises because it is not common for the market retailer to have an agreement with the embedded network to recover their network charges. But, if the market retailer does set up an agreement to recover the network charges, then a single bill becomes possible once more. We all generally prefer the single bill option because it is relatively easy for customers to compare competing offers for electricity. However, the transaction costs involved mean that many market retailers do not support this approach when selling to a customer in an embedded network.

Many current embedded network customers accessing a market retailer accept the two bill approach. One bill is an energy only bill from their chosen market retailer. The second bill is a network charges bill from the embedded network operator or their appointed agent. This is necessary because the MSATS charges the total consumption of the network to the single gate meter (i.e. the parent meter). The embedded network operator must then identify which customer used what amounts of energy (and when) in order to apportion the network cost to each customer. This is generally classed as a pro-rata approach. However, it is generally very difficult to do in practice because the tariffs involved will not align and the necessary metering data is generally not available.

To avoid this problem we allow a 'shadow pricing' alternative for network charges. Under this alternative the customer is charged the prices they would receive as if they were directly connected to the distributor. This means customers are no worse off than if they had a direct connection to the NEM. To be clear, this means the embedded network operator may receive more revenue from network charges than they pay in their bulk supply bills. This is a source of profit which we consider can be applied to offset any costs incurred in satisfying our conditions for exemption. It should also be noted that shadow pricing of the network charges is also allowed where customers receive a single bill.

The AER allows this two bill approach but we note that it does carry a risk of the customer being charged twice for network charges. This can happen if either the retailer's billing system or the MSATS does not correctly record the meter is a child meter in an embedded network. The market retailer will continue to bill the embedded network customer for network charges because the default assumption in these systems is the meter is for a customer in a stand-alone house. In an embedded network, the network consumption of every embedded network customer is included in the distributor's charges for the parent meter. The embedded network customer's network charge has to be extracted from this bill and separately billed. This is not an easy task as discussed above. When errors arise in this process they can also be difficult to correct.

To address the duplicated charges issue we have expanded our guideline. We expect the two bill approach will be used by many retailers. In the guideline we distinguish between two situations:

- errors arising at the time of conversion of an existing site (i.e. brownfield) and,
- new sites and on-going retail churn at a site after conversion of the site (i.e. greenfield sites).

In a brownfield situation an existing customer will have a working relationship with an existing retailer. At the time of conversion to an embedded network this relationship will be disrupted by the conversion. Consequently, we consider it should be incumbent on the embedded network operator to resolve the transitional charging problems encountered by existing customers.

In a greenfield situation we anticipate the major cause of billing errors will be the retailer's system not correctly recording that the customer meter is a child meter in an embedded network. Therefore, in a greenfield the obligation to rectify an error will rest primarily with the retailer.

Q.1 - Is this sufficient? What more should be done? Who should bear responsibility for billing errors when network charges are duplicated?

2.6 Fees, charges and transactions costs

With the introduction of the embedded network rule change we think it is desirable to provide additional guidance on acceptable billing practices. The bulk purchasing of energy may lead to lower total energy costs than the costs incurred if every resident and/or tenant were to purchase individually. In such cases, there is potential for an embedded network to be attractive to all. However, this potential benefit is subject to additional transaction costs which will arise because of the need to replace the role of distributors in managing the metering installation. Also, an intermediary in the form of an energy seller/re-seller is involved. Thus, much of the initial cost–benefit may be eroded if costs are excessive. The impact of transaction costs is an essential consideration in assessing whether an embedded network should exist. We consider that embedded networks should only proceed where the business case for an embedded network remains sound despite transaction costs. Otherwise, having regard to the NEO, customers will be better served if there is no embedded network.

Normal retail customers do not receive separate charges for network management fees, billing or routine metering services such as meter reading. We consider some practices relating to these charges may be unreasonable and should be subject to greater control. Our current guideline requires that the fees charged to customers for network services must be no greater than the fees which would have applied had the local distributor serviced the customer directly. We are concerned that some operators have not interpreted this condition correctly and may be charging fees inappropriately or at an excessive and unnecessary frequency. We will amend the guideline to clamp down on these practices. We have added the following requirements to condition 4.6.4.

An exempt embedded network service provider must:

(a) not impose any network charge on an exempt customer that would not be charged by the relevant local area distributor to that customer if the customer were directly connected to the distributor and subject to a standard distribution connection contract;

(b) provide notice to the exempt customer of any change in the exempt customer network tariff as soon as practicable, and no later than the exempt customer's next bill; and

(c) limit any fee charged to a customer for late payment to a recovery of reasonably incurred costs by the exempt embedded network service provider as a result of the customer's late payment.

A charge under this provision must be directly linked to a tariff schedule approved by the AER and published by the relevant local distributor. A charge may not exceed (but may be less than) the applicable tariff schedule item.

And new condition 4.6.4.1 – Meter reading charges

A meter reading charge may only be levied at a frequency of once per billing cycle (if the billing cycle is greater than monthly) and, in any other circumstances, not more than once per month.

A manual meter reading charge may only be charged for a type 5 or type 6 metering installation which was compliant with this guideline at the date of commissioning or first use of the metering installation.

Where the installed meter type is an advanced technology meter, the applicable metering charge and the charge for energisation, re-energisation or de-energisation must not exceed the published applicable distributor charge for an advanced technology meter. For advanced technology meters, a manually read meter charge is only permitted when a customer requests a physical read of the meter and the read is subsequently performed by physical inspection of the meter.

We have provisionally included this condition in order to raise awareness of an issue that frequently arises in embedded networks. We are aware many embedded networks have discrete meter reading charges. We are not satisfied that this is a charge that should reasonably be applied to embedded network customers. The industry norm is for this cost to be borne by the market retailer and adsorbed into the bundled energy price.

Q.2 - Should a meter reading charge be allowed at all, or should it be capped as we propose or by an alternative mechanism?

Q.3 - Are customers, experiencing unfair, unreasonable or excessive fees?

Q.4 - If so, what form do these charges take?

Q.5 - Why do you think they are unfair, unreasonable or excessive?

Q.6 - What additional restrictions should the AER place on the levying of these charges?

3 Metering types and access arrangements

The differences in metering between jurisdictions mainly concern the types of meters that are used and how they are used. For new retail customers in embedded networks the AER requires that the metering used in each jurisdiction must comply with the NEM requirements as set out in the schedules to chapter 7 of the NER. Also, meters must be of a type approved for use in the jurisdiction. With the AEMC's Power of Choice reforms, retailers and their customers will have choice in the types of metering installed. Under our proposed amendments to the network guideline, these reforms will also apply to the meters installed in embedded networks.

In Victoria, all commercial and residential meters are new technology 'smart meters' or advanced meters. The Victorian specification for advanced meters requires that they be able to record energy use in every half hour period of every day and be remotely read at frequent intervals. They also have an inbuilt capability to remotely control one or more loads. In other jurisdictions the meters are a mix of older and new technologies, which include the old style accumulation meters (which feature a spinning disk), electronic interval meters (which might either be manually or remotely read) or smart meters of varying types and capabilities.

To facilitate access to retail competition, we will require where an existing meter is suitable for use by a market retailer, the embedded network operator must allow the customer and /or their retailer to continue to use that meter on reasonable commercial terms. Otherwise, if the commercial terms proposed are excessive, the customer or the retailer may opt to replace the meter. These requirements are consistent with the AEMC's Power of Choice reforms as apply to all other metering.

In these latter circumstances we consider the pre-existing embedded network meter to be a redundant asset. We note that regulated distributors who invested in metering did so in response to a statutory obligation. As a consequence, the right to recover their investment in metering has been recognised in the AER's determinations for regulated entities.

Embedded network operators normally invest in these networks for profit, not because of any statutory obligation. Consequently, there is no obvious reason to shield embedded networks from the risk of stranded investments arising from shifts in the competition environment. To prevent embedded network operators using meter replacement costs as a barrier to competition and to provide incentive to negotiate access to metering on reasonable commercial terms, we propose not to allow a residual charge to be levied for the redundant meter. We have added this requirement to condition 4.2.

Where a market retailer accesses an existing embedded network child meter the retailer or the customer (as the case may be) may:

- 1. purchase or lease the existing meter from the owner of the meter; or*
- 2. replace the meter with a meter of their own choosing.*

If option 1 applies, the purchase or lease of the meter and the arrangements to access meter data are to be determined at the discretion of the retailer or, otherwise, by the customer. If option 2 applies, no compensation is payable to the exempt embedded network service provider for the unrecovered cost of the meter.

Some installations currently may have meter types that are not compliant with the NER requirements. These meters may be issued a NMI and registered in MSATS but the meter must be replaced with a NEM compliant meter before the customer accesses a retail market offer. Under the AER's guideline, all meters installed since 1 January 2012 have been required to be NER compliant. Therefore, if the embedded network operator continues to own or operate the metering installation for a customer, the cost of replacement of a non-compliant meter installed from 1 January 2012 should be borne by the embedded network operator. However, meters installed before 1 January 2012 must be replaced by the customer or the market retailer, consistent with the Power of Choice arrangements. We propose to amend condition 4.2 accordingly.

An issue which arose in the AEMC consultation on the embedded networks rule change was whether the metering installation should be maintained to the standards set out in schedule 7.3 of the NER. The AEMC left this as a matter for the AER to determine in consulting on this amendment to the network guideline. Our position is we can see no reason why meters used in an embedded network for commercial transactions should be treated any differently to any other metering installation in the NEM. Although costs are involved, all energy consumers have a reasonable expectation that their metering installation should be accurate, safe and reliable. We therefore propose requiring all the metering in that installation must be maintained to the standards set out in schedule 7.3 of the NER. Our amended condition 4.3 will require the embedded network operator to stand in the shoes of the responsible person and apply schedule 7.3 to the meters which they own, operate or control.

An exempt embedded network service provider must operate and maintain a metering installation which they own, operate or control in accordance with the requirements of schedule 7.3 of the NER. For the purposes of this condition, the exempt embedded network service provider is deemed to be and must undertake the role of the 'responsible person' where mentioned in schedule 7.3.

Q.7 - Do stakeholders consider these metering arrangements are sufficient to facilitate access to retail competition?

Q.8 - What other conditions are necessary or desirable to support competitive offers?

Q.9 - Are the requirements for maintenance of the embedded network metering installation appropriate? Should any other exceptions apply? If so, why?

4 Appointment of an embedded network manager

From 1 December 2017, exempt embedded network service providers may be required to appoint an ENM (or become accredited as an ENM) for each embedded network for which they hold an exemption. The conditions that regulate when an ENM is required are detailed in Part B of the Draft Guideline and are discussed in detail in the following section. Refer to the decision tree on page 25 for an overview of these proposals.

4.1 Who must appoint an ENM?

In the embedded network rule change, provision was made for the AER to consult on the question of who should be required to initially appoint an ENM (i.e. before a customer seeks to enter into a retail market contract).⁵ We now consider that question.

Within the AER's system for network exemptions are a number of residential, commercial and industrial activity classes for customers. These are labelled ND1, ND2, ND10, NR1, NR2, NR3, NR4, NR5, NR6 and NRO5. These classes involve small and large residential, commercial and industrial customers. The exception is class NRO5 which captures metering systems that, historically, were established to support access to retail competition. We consider these to be the relevant classes to which the appointment of an ENM might apply.

We consider our other, unlisted activity classes do not involve a need for access to retail competition. We specifically omit class ND3 which concerns short-term rental accommodation. We do so on the basis that the transient nature of those tenancies make it unlikely that there would be sufficient opportunity to offset the transaction costs of appointing an ENM.

We also omit specific reference to the generation, industrial and commercial situations described in tables 2, 4 and 5 on the basis that these situations are likely to involve a direct arrangement with a market retailer with the necessary accreditation to correctly manage the metering installation. In these circumstances, the costs of appointing an ENM are likely to outweigh the benefit of an early appointment.

For any of these situations though, if the appointment of an ENM becomes necessary because an ENM conditions trigger has arisen as provided for in rule 2.5.1(d2) of the NER, an accredited ENM must be appointed.

We note that historically, there has been some inconsistency in the use of the NRO5 class where it overlaps with the NR1, NR2, NR3, NR4, NR5 and NR6 classes. As discussed elsewhere in this paper, a party currently registered in the NRO5 class will, in future, be required to update registrations to include the corresponding NR1 to NR6 activities. We intend to cease using the NRO5 activity class as, under the embedded network rule change, there is no longer a need to differentiate whether a metering system is suitable for access to competition.

Q.10 - Do stakeholders agree these are the only relevant activity classes?

⁵ National Electricity Amendment (Embedded Networks) Rule 2015 No. 15, NER Clause 2.5.1 (d2)

Our starting point for determining who must appoint an ENM is to note that where the right to access retail competition exists in a jurisdiction, this is framed as an absolute right. Therefore, if even a single customer were denied the benefits of access to retail competition there is a loss to that customer. As the role of the ENM is essentially to facilitate access to retail competition, our starting assumption is that an ENM should be appointed for every embedded network serving a residential, retail, commercial or industrial customer or a retirement community. The commencement of this requirement however, will be where a specified trigger event for that class has occurred and the allowed time for an appointment has elapsed. The effect of a trigger event requirement is to delay the date by which an ENM must be appointed. Through the trigger mechanism then, we can address those situations where a case has been made for a lenient trigger for this requirement.

For many smaller networks it is possible that the transaction costs involved in appointing an ENM will outweigh the benefit to customers of access to retail competition. Also, some embedded networks operate as community based schemes. As a group, the community benefits from bulk purchasing power. Some groups may be concerned that being required to appoint an ENM may undermine the benefit to the rest of the community if a member of the community were to seek an alternative retail supply. There may be other circumstances which warrant a departure from the requirement to appoint an ENM. If so, this consultation is the opportunity for others to make a case for an appropriate trigger event. We discuss trigger events further below.

Our proposed approach is to require that:

Subject to the further requirements set out in this condition, the relevant exemption activity classes for which an ENM must be appointed are ND1, ND2, ND10, NR1, NR2, NR3, NR4, NR5 and NR6 ('relevant activity classes').

An exempt embedded network with 30 or more customers operating in a relevant activity class and not subject to a non-appointment or reversion entitlement under condition 4.7.2 must appoint an ENM by:

(a) existing networks: 1 December 2017; or

(b) from 1 December 2017: immediately on the network commencing operation..

Q.11 - Do stakeholders agree these are the only appropriate activity classes required to appoint an ENM?

Q.12 - Should any other activity classes be added or removed? If so, which activity classes and why?

4.2 Small networks appointment trigger

Under clause 2.5.1(d2) of the NER we are required to determine if some network activity classes should be exempted from appointing an ENM immediately, on the basis of costs outweighing benefits.

We consider that scale is an important consideration for these activities. Discussion with industry representatives would suggest that networks with fewer than 30 small retail

customers are less attractive than larger networks because of transaction costs. However, because the ENM function does not currently exist, we have no reliable insight into the likely costs of the ENM role.

We accept that it is likely small networks will have a higher sensitivity to transaction costs than larger networks. In the absence of better information, we note the choice of a threshold is, in most respects, arbitrary and will vary considerably depending on a range of factors. The factors may include the actual load of customers and the efficiency of ENM and market retailers. In the absence of a clear demarcation point, we consider for the purpose of this draft guideline 30 is a reasonable threshold below which the immediate appointment of an ENM is not required. We note that this threshold may change as a result of this consultation. If so, we may vary this threshold in the final guideline. In condition 4.4.2.1 we propose that the threshold be set at 29 or fewer customers. Note also, in condition 4.7.2 we provide a mechanism for community groups to delay the appointment of an ENM.

For an exempt embedded network with 29 or fewer small customers, an ENM trigger event occurs when the following is satisfied:

(a) a customer or a retailer notifies the exempt embedded network service provider of the desire of the customer to access retail competition; and

(b) where an eligible member of an eligible community notifies the exempt embedded network service provider as provided for in condition 4.7.2 that the customer does not accept a binding written price counter-offer; and

(c) the cooling off period for that market retail contract has expired.

Q.13 - Is the threshold of less than 30 customers appropriate?

4.3 Who pays for the ENM?

In order to access a retail offer, an embedded network customer (be they residents or tenants) must have, or must arrange to have, an accredited metering installation. Where an existing meter conforms to the standards required for use in the NEM, it is necessary for the meter to be issued a NMI. This is arranged by the ENM. It is a commercial matter for the new retailer and the embedded network to agree arrangements for access to the meter. Otherwise, the embedded network customer must arrange with the retailer for the metering to be upgraded. Again, this work is coordinated in conjunction with the ENM. We are aware that many of the existing embedded network service providers intend seeking accreditation to become ENMs. This includes existing embedded network operators. The NER provides that the operator may assume the role of the ENM if the operator is accredited. Throughout this paper we discuss appointing an ENM. Wherever we do so, we intend the reference to also include the alternative that the appointed ENM is the embedded network operator in the capacity of an accredited ENM.

The question which also arises is who pays the ENM? Ultimately, it is inevitable that the customers of the embedded network must pay the cost. The more salient point is how the cost is passed on. This may be in the form of the ENM cost being billed to:

1. the embedded network operator or

2. customers (or to the retailers who win customers in the embedded network) or
3. a combination of these two options.

Option 1

Our baseline requirement is that the exempt embedded network service provider must absorb the cost of ENM services, except where an embedded network has been formed to operate as a community based bulk purchasing scheme. Despite this, stakeholders may wish to present a case why a different approach should apply, either generally or, in specific circumstances.

Our basis for this view is that it is consistent with our existing shadow pricing policy. Under this policy embedded network charges are capped at the charges levied by the local DNSP. It is a cost which the exempt embedded network service provider must absorb if they wish to otherwise profit from the ownership or operation of an embedded network.

A critical role for the ENM is ensuring the metering installation is visible to the MSATS and therefore, that all customers have access to retail competition. This is a service that benefits all customers of the embedded network to a greater or lesser degree. A major benefit is that access to retail competition limits the ability of an embedded network operator to extract a price premium from customers of the embedded network. Thus, it is a cost which cannot be attributed to a single customer or to a class of customers. It is cost for services which should be shared across the whole of the embedded network. This approach is consistent with the approach to provision of regulated shared services by distribution network service providers.

To the extent that a proportion of customers elect not to participate in the embedded network but obtain their retail energy supply from alternative sellers, it is the availability of this access which places a constraint on the potential for the embedded network proprietor to exploit other customers within the network. Under this approach, the entire cost of the ENM services is spread across the whole of the customer base. The effect of this approach is that any increase in costs will act to reduce the discount offered by an exempt embedded network service provider.

Option 2

A case might be made that to the extent a particular service results in costs that are clearly attributable to a customer, the cost should be placed with that customer. Often this is referred to as the 'user pays' principle. This could be a second option. For readers familiar with network regulation, this approach generally applies to the provision of 'alternative control services' by regulated distribution network service providers. We consider that this alternative approach may potentially apply where an eligible community is operating a community scheme based on bulk purchasing power. In section 4.4.2 below we discuss our proposed requirements if this approach is to apply.

In this context, it is a moot point whether cost recovery is achieved by the ENM billing the customer directly or by billing the retailer who has won the customer. The retailer may choose to absorb the cost as part of its marketing effort to win new customers or may pass the cost on to the new customer. If the only cost charged by an ENM is for services at the time of transfer, this would be a sufficient model for recovering those costs.

As noted above, under the AEMC's Power of Choice reforms, greater competition is to be allowed in the provision of metering services. The traditional roles will therefore change under those reforms. As a side note, we consider these reforms must also apply to embedded networks.

Given the incremental nature of the ENM role and the likelihood that, in a well-run embedded network, customers will be receiving a good price, we do not expect the cost of embedded networks to increase materially as a result of the rule change. We note that the ENM is accredited by AEMO and is intended to operate as a competitive service provider. However, our assumption on costs is untested and may not be realised. The AER would appreciate feedback on the likely cost of engaging the services of an accredited ENM.

Option 3

The third option for recovery is a hybrid of these approaches. Where a cost is identifiable as relating to a single customer, the cost is recovered from that customer but ongoing costs which are not readily attributable to a specific customer are recovered from all customers, using the mechanisms outlined above. We have not attempted to develop this alternative, however stakeholders may wish to bring a specific example to our attention.

Consultation questions

Regardless of the approach taken, the AER is concerned that the metrics used when common costs are shared across the community are fair and reasonable and do not unduly favour any party. However, we are not aware of any instances where an unreasonable approach has been adopted. In the absence of evidence of a problem in this respect, we have not sought to impose a condition on the form of the metrics that are used for this purpose. If, based on this consultation a specific problem is identified we will review this position and amend the guideline to address the specific problem.

Q.14 - How much will ENM services cost?

Q.15 - What is a reasonable range for estimating the costs of ENM services?

Q.16 - At what level do the additional costs of an ENM threaten the viability of an embedded network?

Q.17 - Are customers happy with current approaches as a model for recovery of the ENM costs?

Q.18 - Is there a need for specific measures or an AER condition to ensure that cost recovery occurs on an equitable basis for all network customers?

Q.19 - If so, what form should this take?

4.4 General requirements for appointment

We have previously noted that in allowing an exempt network to operate we may set conditions so long as those conditions are consistent with the NEO. An important consideration in the appointment of an ENM is ensuring the appointment is also in the long-

term interests of consumers. To mitigate against the possibility of future customers being locked in to long-term binding contracts that are not in their interests, we will require that any cost resulting from the accreditation of any person as an ENM or from the appointment or provision of services by an ENM must be borne by the exempt embedded network service provider. However, as discussed below, we leave open the possibility that where a community participates consensually in a group buying scheme, different arrangements might apply.

4.4.1 Advance fees and rebates prohibited

Any costs which arise through non-competitive processes or the payment of a bounty are inevitably recovered through additional fees paid by current and future residents and/or tenants. Therefore, the appointment of anyone with a statutory right to recover fees from a captive group of customers may be contrary to the long-term interest of those consumers if no safeguards are provided against improper practices. To address this possibility, condition 4.7 contains the following restrictions:

An ENM must not pay an advance fee or a rebate to a property owner, developer or exempt embedded network service provider or any other person in connection with the provision of ENM services or to secure a right to provide services to an embedded network regulated by the AER.

An exempt embedded network service provider must not seek an advance fee or a rebate from any other person in connection with the provision of ENM services or to secure a right to provide services to an embedded network regulated by the AER.

The operators of some embedded networks may think this provision is intrusive on their business model. However, we think it is incumbent upon those operators to demonstrate that their network offers benefits to customers and that any costs incurred can be demonstrated to be the minimum necessary. In any event, under the embedded network rule the operator may seek accreditation and thereby, maintain their control over the metering installation.

4.4.2 Eligible community cost recovery

In condition 4.7.1.1 we propose measures which would allow an eligible community which elects to appoint an ENM a means to recover costs for ENM services from ENM customers in limited circumstances.

We intend this condition to apply to eligible community based groups registered in activity classes ND2, NR2, NR3, and NR4. In particular, eligible community based groups would include caravan park, manufactured home site and retirement communities and other groups of a similar nature operating a bulk purchasing scheme. We would generally expect the eligible community (or a person or body corporate acting on behalf of the community) to act as the exempt embedded network service provider for the network.

An important consideration for the AER in the appointment of an ENM in this situation is to ensure the appointment of the ENM by the exempt embedded network service provider is also in the long-term interests of consumers. To mitigate against the possibility of future customers being locked in to long-term binding contracts that are not in their interests we will require that the appointment of an external ENM be conducted as an arm's length

transaction through a robust competitive process which includes a poll of network customers. Also, the appointment of an ENM (other than the operator of an embedded network) must be conducted by a transparent competitive process and with the agreement of a two-thirds majority of customers of the embedded network.

4.4.3 Time limit extension

Under this condition, if a member of the community were to exercise their right to accept a retail market offer and does not rescind that decision, an ENM must be appointed as provided for in rule 2.5.1(d2) because an *ENM conditions trigger* will occur. However, the community may elect not to absorb the ENM costs, in which case it may require the community member(s) accessing a market offer (or offers) to pay the reasonable costs of ENM services. To allow time for the community to alert the affected members to consider whether the costs involved affect their decision to accept a market offer we will allow the exempt embedded network service provider a reasonable period to seek accreditation or to appoint an external ENM.

We note that the AEMC in their determination on the embedded networks rule change declined to make a rule that allowed for the appointment of an ENM to be delayed. The AEMC noted that this was a matter which could be addressed by the AER in the conditions imposed under this guideline.⁶

We consider that a time limit to appoint an ENM must be imposed. If the time period is too short, the embedded network operator will be forced to make a hasty decision and incur excessive costs to the detriment of all customers. However, a lengthy period would disadvantage customers seeking access to competition. We therefore propose:

Where an ENM trigger event has occurred for one or more of the activity classes applicable to an embedded network, the exempt embedded network service provider, if the exempt person is not an accredited ENM, must appoint an accredited ENM within 40 business days of the occurrence of a trigger event.

Given that we propose that an ENM should be appointed by a competitive process and that customers should be allowed to approve or reject a proposed appointment, we consider 40 business days (notionally 8 weeks) to be a reasonable period.

We seek stakeholder feedback on this proposal.

Q.20 - Do stakeholders support these requirements? If so, why? Or, if not, why not?

Q.21 - Is the time to appoint an ENM reasonable?

Q.22 - Are the protections sufficient? Why not?

Q.23 - What further protections are required and why?

⁶ AEMC, Rule Determination, National Electricity Amendment (Embedded Networks) Rule 2015, No. 15, December 2015, pp.48-49

4.4.4 Non–appointment and reversion

In condition 4.7.2 we provide a mechanism to permit an eligible community to initially not appoint an ENM or to revoke an appointment of an ENM if the need for an ENM ceases. We propose this condition to satisfy the requirements of rule 2.5.1(d2).

This condition provides a mechanism for eligible communities to not appoint an ENM immediately or, if no community member is served by a market retail offer, to cease to engage an ENM. Our proposed mechanism is by a poll of eligible community members.

If requested by to do so by the lesser of 10 per cent of eligible members or ten eligible members, an exempt embedded network service provider must, within 30 days, prepare a resolution and conduct a poll of eligible members whether to adopt the resolution. A poll may be sought at any time; however, an exempt embedded network service provider is only required to conduct one poll in any twelve month period.

For eligible communities for which an exempt embedded network service provider offers price–matching in accordance with condition 4.9.4, the exempt embedded network service provider may, if requested by the eligible member, offer to match the prices offered by a relevant market retailer.

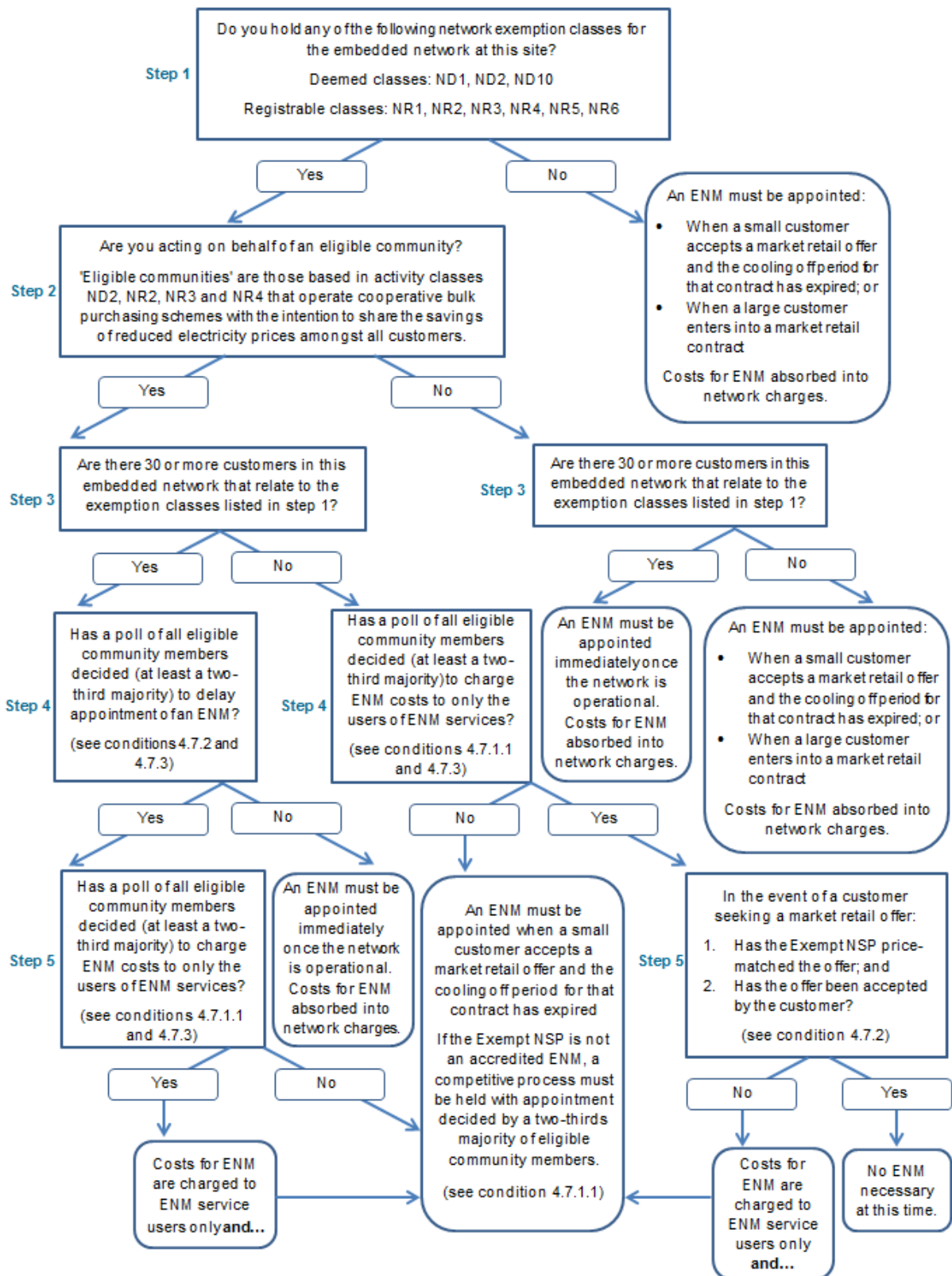
If no counter–offer is made or, if the counter offer is not accepted, the exempt embedded network service provider must appoint an ENM when the ENM condition trigger is satisfied.

Q.24 - Do stakeholders support these requirements? If so, why? Or, if not, why not?

Q.25 - Are the protections sufficient? Why not?

Q.26 - What further protections are required and why?

Figure 4.1 When and how to appoint an Embedded Network Manager



5 Other amendments to the guideline

In this section we identify a number of changes we have made to the guideline to address and update administrative matters, address unintended gaps in some activity classes and provide better guidance on our requirements.

5.1 Changes to tables 1, 2, 3, 4, 5, 6, 7, 8, 9 & 10.

We have reformatted the tables and removed redundant and outdated text. We have also corrected the tables where a condition not relevant to an activity class was ticked to be applicable.

In the activity descriptions for some classes we have changed 'selling' to 'supply'. This addresses an oversight and makes clear that the network activity class also applies if energy is supplied at no cost but not 'sold'. (This distinction is only relevant to network exemptions).

We have expanded our definition of government bodies in ND10 to explicitly include public and private education facilities (e.g. Universities).

We have updated the definition of Large Corporate Entity to clarify that a trust or other corporate entity of an equivalent size to a reporting entity under the Corporations Law is also eligible under class NDO6.

We have expanded our definition of telecommunications activities to make clear that power supply to all technologies associated with the NBN, mobile and fibre optic or cable equipment is deemed exempt.

5.2 Contact information and notifications

We have expanded our requirements for an available contact for all matters concerning the operation and access to the embedded network. We have amended the provision for notification of life support customers to reflect the role of the retailer at the parent meter. We have included additional obligations to notify customers within an embedded network of planned outages.

5.3 Information provision and unbundling

We note the submission of SACOSS to the AEMC rule determination which recorded their concern that the provision of information to customers in embedded networks is poor. We have added a requirement for all customers to be informed of their rights in an embedded network when:

- a network is created;
- when a customer first joins an embedded network; and
- when a customer requests information.

We have included a requirement in this provision that the exempt embedded network service provider provide details of the tariffs charged for network services. This is condition 4.8.

5.4 Dispute resolution

We have updated the requirement for a dispute resolution process to clarify our requirements and adopt the applicable Australian Standard for disputes.

Dispute resolution

(a) In the event of a dispute concerning the sale of energy to an exempt customer, and in the absence of a determination of the relevant tenancy tribunal if the customer is a tenant, the exempt person must:

- i. make reasonable endeavours to resolve the dispute, and*
- ii. advise the exempt customer of any right that the exempt customer has to access the energy Ombudsman scheme or any other relevant external dispute resolution body in the state or territory in which the exempt customer is located, if applicable.*

(b) The exempt person's dispute resolution process must meet, at a minimum, Australian Standards: AS/NZS 10002:2014 Customer Satisfaction – Guidelines for complaints handling in organisations.

The AER also intends to add a requirement that exempt embedded networks service providers must apply to join an Ombudsman scheme where it is available in a jurisdiction or otherwise abide by decisions of Ombudsman schemes. Jurisdictional schemes are currently exploring options and we intend to include any developments on this issue in the revised guideline.

Q.27 - Do stakeholders have any feedback about Ombudsman dispute resolution services becoming accessible to small customers in embedded networks for matters relating to exempt embedded network service providers?

5.5 Pricing

We have expanded our requirement re pricing to incorporate a requirement to notify customers of changes in tariffs and to limit the recovery of any fee for late payment to reasonably incurred costs. This better aligns the network guideline with our Retail Selling guideline.

The exempt person must not impose any network charge on an exempt customer that would not be charged by the relevant local area distributor to that customer if the customer were directly connected to the distributor and subject to a standard distribution connection contract.⁷

⁷ For clarification, a “charge” includes, but is not limited to, account establishment fees, late payment fees, debt collection fees, service charges, and security deposits.

The exempt person must provide notice to the exempt customer of any change in the exempt customer network tariff as soon as practicable, and no later than the exempt customer's next bill.

The exempt person must limit any fee charged to a customer for late payment to a recovery of reasonably incurred costs by the exempt person as a result of the customer's late payment.⁸

Q.28 - Do stakeholders agree with these amendments? If so, why? If not, why not? If relevant, what further changes do you consider necessary or desirable?

5.6 Access to retail competition

We have rephrased and expanded our requirement to allow access to retail competition in clause 4.1.12, in keeping with the intent of the rule change to promote competition in embedded networks.

Choice of retailer

1. Where an exempt customer is eligible under state or territory legislation to purchase energy from a retailer of their choice, the exempt embedded network service provider must not do anything to discourage or prevent them from exercising this choice, whether by:

(a) requiring the exempt customer to waive their ability to choose a retailer; or

(b) unreasonably hindering their efforts to find another retailer; or

(c) imposing a requirement for compensation for lost capital, income or profit by a customer exercising the right to access a market retail offer; or

(d) allowing, causing or permitting any other person to do any of the things mentioned in (a), (b) or (c) above;

and, except where the requirements of condition 4.8 have been met:

(e) an exempt embedded network service provider or agent must not alter the electrical supply arrangement to a customer or tenant in a private network directly connected to a registered distributor without the written consent of that customer, resident or tenant, freely given; and

(f) a customer, resident or tenant of commercial, industrial or residential premises must not be compelled to become part of a private network or subject to an exempt selling regime without the express written consent of that customer, resident or tenant.

2. Where condition 4.1.12.1 does not apply, an embedded network owner must not prevent or unreasonably impede a customer, resident or tenant within the embedded network from obtaining, at their own cost, a direct connection to the local distributor.

⁸ For clarification, a late payment fee can only be charged where it has not been excluded by jurisdictional legislation.

Q.29 - Do stakeholders agree with these amendments? If so, why? If not, why not? If relevant, what further changes do you consider necessary or desirable?

5.7 Network conversions - supplementary conditions

In the recent past we have received a number of applications for relief from condition 4.1.12 of the network guideline. These applications all concern customer access to retail competition associated with conversion of an installation to an embedded network. They sought a waiver of our requirement in condition 12 for every customer to consent to vary that customer's access to the NEM. Our condition in version 1.3 of the guideline requires that a customer with access to retail competition should not have that access taken away without their explicit written consent.

Condition 4.1.12 was added to the network guideline in August 2013. Our intention at the time was to give the proponent of a network conversion an incentive to negotiate with every tenant to obtain their consent prior to conversion. This requirement for written consent is often referred to as requiring 100% consent. This is because even a single non-consenting tenant can frustrate or delay a conversion if they withhold consent.

Our intention in requiring written consent was to keep customers 'whole' in a financial sense. However, it has become apparent that our implementation of this policy does not work as intended. A small percentage of tenants may elect not to participate in the embedded network. In particular, large retail chains with substantial bargaining power may have no incentive to join an embedded network. This is because they have used their bargaining power to obtain a good deal and fear they will lose some of that benefit.

The concern with the current approach is that it gives these groups an effective right of veto over the conversion. The problem which then arises is that this opposition prevents a large number of other less empowered consumers from accessing better electricity prices if the conversion proceeded. As the regulator, we should strike a balance between the rights of these customers and the potential benefit to smaller customers if a conversion were allowed.

5.7.1 Proposed revised network approach

In responding to those applications for relief we adopted a modified approach. We aim to minimise detriment by imposing additional conditions to maximise the benefits for all tenants. Our conditions seek to keep the customer financially whole, even where a customer does not consent to a conversion to an embedded network. In responding to retail applications where relief from condition 12 has been sought, we consulted widely. A benefit of that consultation is we have developed a set of requirements that mitigate any negative impacts on customers if an existing network is converted. We now propose to incorporate the conditions relevant to a network exemption in the network guideline. This is new condition 4.9. The proposed conditions are attached.

The conditions to apply where an applicant has not obtained 100% consent to convert an existing installation to an embedded network are set out in the attachment. To utilise the alternative conditions, an embedded network operator must make application to the AER for approval to apply the alternative conditions.

The applicant must have conducted a marketing campaign for a sufficient period to have obtained consent from a substantial majority of customers. Customers are counted by number, not size. The marketing campaign must comply with the requirements of condition 1 in the attachment. An application must detail the marketing campaign, including the steps taken to follow up with customers who have not consented. An application must explain why the steps taken represent a diligent campaign and explain in explicit terms the benefits to be derived by customers if the conversion proceeds.

An application will not be considered if it is insufficiently detailed, is not adequately quantified, poorly presented or missing important information. The AER may approve or reject an application or may impose additional requirements to apply before a conversion is approved. The installation must not be converted to an embedded network before our approval is granted.

Q.30 - Do stakeholders agree with these amendments? If so, why? If not, why not? If relevant, what further changes do you consider necessary or desirable?

5.8 Increased requirements for HV networks

We propose amending condition 4.2 to impose greater requirements for high voltage networks operating at 66,000 volts and above. This is because these networks have potential to affect the safety, reliability and operation of the national market. One emerging trend is the increased likelihood of embedded generation seeking to connect to exempt networks in remote areas. Our changes are intended to bring high voltage networks into alignment with the essential requirements for other network service providers under chapter 5 of the NER regarding planning, maintenance and safe operation of a network.

6 Summary of consultation questions

Throughout the document we ask questions to help focus submissions. For convenience, we have compiled a full list of consultation questions below. The questions are preceded by a brief summary of the issues to provide context. For a full discussion of the issues relating to each question, please refer to the specific pages listed next to each topic subheading.

Difference between household and embedded network billing (pages 10-12)

Network charges billed to an embedded network's parent or gate meter can be recovered from the child meters. These costs can be split proportionately amongst all energy users within the embedded network depending on how much energy is consumed and when energy is consumed as recorded by each meter. Alternatively, network costs can be recovered by 'shadow pricing'. This means that each energy user is billed no more than they would be charged if connected directly to the distributor. This option can result in the embedded network operator receiving more revenue from network charges than they are billed through their bulk supply to the parent or gate meter.

A customer may receive two bills in situations where a customer in an embedded network purchases energy from a retailer external to the embedded network (i.e. an on-market embedded network customer). One bill is an energy only bill from the retailer, the other for the recovery of network charges from the embedded network operator. There is a risk that a customer receiving two bills may be charged twice for network charges due to the lack of communication between the two billing entities. The party responsible for rectifying double charging depends on the situation:

- Errors arising at the time of conversion of an existing site are to be resolved by the embedded network operator.
- Resolution of errors arising at new sites and on-going retail churn post site conversion are primarily the responsibility of the retailer.

Q.1 - Have we done enough? What more should be done? Who should bear responsibility for billing errors when network charges are duplicated?

Fees, charges and transactions costs (pages 12-13)

Conditions 4.6.4 (charging customers) and 4.6.4.1 (meter reading charges) outline what charges and fees may be levied by exempt embedded network operators.

- Charges cannot be imposed that would not be charged by the relevant local area distributor under their standard distribution connection contract.
- Charges and fees may not exceed (but may be less than) the tariff schedule of the relevant local distributor.
- Notification of a change in network tariff must be no later than the exempt customer's next bill.
- Any late payment fees must be limited to a recovery of reasonably incurred costs.

- A meter reading charge may only be levied once per month or one per billing cycle (whichever is the least frequent).
- If an advanced meter is installed, meter charges, energisation charges and de-energisation charges must not exceed the published applicable distributor charge for advanced meters.
- Manual read charges may only be charged for:
 - type 5 or type 6 meters
 - advanced meters where a customer requests a physical read

Q.2 - Should a meter reading charge should be allowed at all, or should it be capped as we propose or by an alternative mechanism.

Q.3 - Are customers, experiencing unfair, unreasonable or excessive fees?

Q.4 - If so, what form do these charges take?

Q.5 - Why do you think they are unfair, unreasonable or excessive?

Q.6 - What additional restrictions should the AER place on the levying of these charges?

Metering types and access arrangements (pages 14-15)

Replacement of meters not compliant with NER requirements

All meters installed in embedded networks since 1 January 2012 have been required to be NER compliant in accordance with the Network Guideline. Before a customer access a retail market offer, their meter must be NEM compliant. However, the costs of any meter replacement to become compliant with NER requirements will be borne by different parties depending on the circumstances:

- The embedded network operator shall bear the costs of replacement if the customer's meter is owned or operated by the embedded network operator and the non-compliant meter was installed from 1 January 2012.
- The customer or market retailer shall bear the costs of replacement if the non-compliant meter was installed before 1 January 2012.

Access to meters and meter replacement by market retailers

If meters are replaced by an incoming market retailer, an embedded network operator will not be entitled to recover costs for the redundant meter. This is to prevent meter replacement costs being used as a barrier to competition and to incentivise negotiated access to metering on reasonable commercial terms.

- The embedded network operator must allow a market retailer or customer to exercise the following options where a market retailer accesses an existing embedded network child meter:

1. Purchase or lease the existing meter from the owner of the meter (as determined at the discretion of the retailer or customer along with arrangements to access meter data); or
2. Replace the meter with a meter of their choosing (with no compensation payable to the embedded network operator for any unrecovered costs of the meter).

Metering installation maintenance standards

Metering installations must be maintained to the standards set out in schedule 7.3 in all embedded networks that have an ENM. In this circumstance, the embedded network operator is deemed to be and must undertake the role of the 'responsible person' where mentioned in schedule 7.3.

Q.7 - Do stakeholders consider these metering arrangements are sufficient to facilitate access to retail competition?

Q.8 - What other conditions are necessary or desirable to support competitive offers?

Q.9 - Are the requirements for maintenance of the embedded network metering installation appropriate? Should any other exceptions apply? If so, why?

Who must appoint an ENM (pages 16-18)

We consider that where 30 or more customers under the following network exemption classes are within an embedded network, an ENM must be appointed: ND1, ND2, ND10, NR1, NR2, NR3, NR4, NR5 and NR6.

These classes involve the supply of energy to small and large residential, commercial and industrial customers. Holders of all other network exemption classes will only be required to appoint an ENM once the ENM conditions trigger is activated by either a small customer entering into a market retail contract and the cooling off period has expired or a large customer entering into a contract for the sale of energy (as mandated by the embedded networks rule change).

Existing networks must comply by 1 December 2017 and all subsequent embedded networks must comply immediately upon commencement of operation.

Q.10 - Do stakeholders agree these are the only relevant activity classes?

Q.11 - Do stakeholders agree these are the only appropriate activity classes required to appoint an ENM?

Q.12 - Should any other activity classes be added or removed? If so, which activity classes and why?

Q.13 - Is the threshold of 30 customers appropriate?

Who pays for the ENM (pages 18-20)

Exempt embedded network service providers will incur costs in appointing or otherwise providing the services of an ENM. Recovery of these costs will likely ultimately be passed on to the customers of the embedded network. There are three possible approaches to the recovery of ENM costs:

- Spread the costs across all customers within the embedded network because even if a customer does not seek a retail market offer all should benefit from the availability of full retail contestability in eliminating monopoly rents. These costs could be incorporated in the energy rates or daily charges offered to customers.
- Employ a user pays charging structure where those customers who have entered into a market retail contract are charged for the costs of the ENM because these are the customers that require an ENM's services.
- Charge specific customers for ENM service costs identifiable as relating to a single customer and recover from all customers any ongoing costs not readily attributable to a specific customer.

We have drafted the amended guideline on the basis that the exempt embedded network service provider will be required to absorb the ENM costs except in the limited case of an eligible community bulk purchasing scheme. Stakeholders may wish to submit alternative approaches for the AER to consider. However, such alternatives must also explain why the alternative would better satisfy the National Electricity Objective.

We propose no specific condition on the form of the metrics used for ENM cost recovery at this time but are receptive to stakeholder feedback on whether such a condition should be included. We also seek feedback on likely costs of ENM services.

Q.14 - How much will ENM services cost?

Q.15 - What is a reasonable range for estimating the costs of ENM services?

Q.16 - At what level do the additional costs of an ENM threaten the viability of an embedded network?

Q.17 - Are customers happy with current approaches as a model for recovery of the ENM costs?

Q.18 - Is there a need for specific measures or an AER condition to ensure that cost recovery occurs on an equitable basis for all network customers?

Q.19 - If so, what form should this take?

Time limit extension to appoint an ENM for eligible communities (page 22)

'Eligible communities' are those based in activity classes NR2, ND2, NR3 and NR4 that operate cooperative bulk purchasing schemes with the intention to share the savings of reduced electricity prices amongst all customers. If a customer accepts a retail market offer triggering the need to appoint an ENM, these eligible communities may decide not to absorb the costs of an ENM into the network charges payable by the all customers within the

network. Instead, eligible communities may decide to charge the reasonable costs of ENM services to those customers that have opted to leave the bulk purchase scheme and accept retail market offers. Customers considering whether to accept a retail market offer must factor in the added costs of ENM services to their decision.

Exempt embedded network service providers for eligible communities must appoint an accredited ENM within 40 business days of the ENM trigger event occurring. This timeframe of around 8 weeks allows for:

- Exempt embedded network services providers to alert those customers that will bear the reasonable costs of ENM services so they may fully consider the benefits of accepting a market offer; and
- A competitive process for appointment of an ENM involving the agreement of a two-thirds majority of customers of the embedded network.

Q.20 - Do stakeholders support these requirements? If so, why? Or, if not, why not?

Q.21 - Is the time to appoint an ENM reasonable?

Q.22 - Are the protections sufficient? Why not?

Q.23 - What further protections are required and why?

Non-appointment of an ENM and reversion for eligible communities (page 23)

Embedded networks with 30 or more customers operating in the relevant activity classes will be required to appoint an ENM by 1 December 2017 or otherwise immediately upon commencement of the network's operation. However, condition 4.7.2 would permit eligible communities with 30 or more customers to delay appointment of an ENM until a customer accepts a market offer and the cooling off period has expired. It also allows an eligible community to cease to engage an ENM if no customers are served by a market retail offer.

Members of the eligible community can request a poll of members to be held by the embedded network service provider as to whether an ENM should be appointed, not appointed or cease to be appointed. Should the requisite number or proportion of members request the poll, the embedded network service provider must comply and honour the decision of a two-thirds majority of members. The AER will approve the decision of the eligible community to appoint, not appoint or cease to appoint an ENM upon receipt and validation of polling evidence.

Q.24 - Do stakeholders support these requirements? If so, why? Or, if not, why not?

Q.25 - Are the protections sufficient? Why not?

Q.26 - What further protections are required and why?

External dispute resolution (page 26)

The AER intends to add a requirement that exempt embedded networks service providers must apply to join an Ombudsman scheme where it is available in a jurisdiction or otherwise

abide by decisions of Ombudsman schemes. Jurisdictional schemes are currently exploring options and we intend to include any developments on this issue in the revised guideline.

Q.27 - Do stakeholders have any feedback about Ombudsman dispute resolution services becoming accessible to small customers in embedded networks for matters relating to exempt embedded network service providers?

Pricing (pages 26-27)

We have expanded our requirement re pricing to incorporate a requirement to notify customers of changes in tariffs and to limit the recovery of any fee for late payment to reasonably incurred costs. This better aligns the network guideline with our Retail Selling guideline.

Q.28 - Do stakeholders agree with these amendments? If so, why? If not, why not? If relevant, what further changes do you consider necessary or desirable?

Access to retail competition (pages 27-28)

We have rephrased and expanded our requirement to allow access to retail competition in clause 4.1.12, in keeping with the intent of the rule change to promote competition in embedded networks.

Q.29 - Do stakeholders agree with these amendments? If so, why? If not, why not? If relevant, what further changes do you consider necessary or desirable?

Network conversions - supplementary conditions (pages 28-29)

Under the current Network Guideline, network conversions required the written consent of all customers at any site located within a jurisdiction where retail competition is available. We propose to revise this approach to allow a network conversion to proceed if a substantial majority of customers consent. In such cases, we propose to attach additional conditions to the exemption focused on mitigating any detriment customers may suffer from becoming part of an embedded network and providing customers with the information required to make an informed decision on giving consent. This approach aims to prevent a minority of customers preventing the majority benefiting from reduced electricity costs passed on through a bulk purchase at the gate meter while adequately protecting customers from the effects of reduced market contestability.

The full set of proposed conditions are detailed in Appendix 2.

Q.30 - Do stakeholders agree with these amendments? If so, why? If not, why not? If relevant, what further changes do you consider necessary or desirable?

Attachment 1 - Extract from the embedded network rule change

Additions to NER r. 2.5.1 - Registration as a Network Service Provider

(d) The AER may, in accordance with the guidelines issued from time to time by the AER, exempt any person or class of persons who is or are required to register as a Network Service Provider from:

- 1. the requirement to register as a Network Service Provider; or*
- 2. the operation of Chapter 5,*

where (in the AER's opinion) an exemption is not inconsistent with the national electricity objective.

(d1) An exemption granted by the AER under paragraph (d):

1. is, if the exemption relates to a person who owns, controls or operates an embedded network, deemed to be subject to the ENM conditions unless:

(i) the embedded network the subject of the exemption is located in a participating jurisdiction in which persons connected, or proposed to be connected, to the embedded network are not afforded the right to a choice of retailer; or

(ii) the AER has made a determination under paragraph (d2); and

2. may be subject to such other conditions as the AER deems appropriate.

(d2) If the AER considers that the likely costs of complying with ENM conditions outweigh the likely benefits to persons connected, or proposed to be connected, to the embedded network, the AER may, when granting an exemption under paragraph (d), determine to exempt that person or class of persons from the requirement to comply with the ENM conditions until such time as an ENM conditions trigger occurs.

Additions to NER Chapter 10 - Glossary

embedded network

A distribution system, connected at a parent connection point to either a distribution system or transmission system that forms part of the national grid, and which is owned, controlled or operated by a person who is not a Network Service Provider.

embedded network management services

Services that involve carrying out the roles, discharging the responsibilities and complying with the obligations of an Embedded Network Manager under the Rules and procedures authorised under the Rules.

Embedded Network Manager

A person:

(a) who meets the requirements listed in schedule 7.7 and has been accredited and registered by AEMO as an Embedded Network Manager; and

(b) who has not been deregistered by AEMO as an Embedded Network Manager under clause 7.4.4(d).

ENM conditions

An Exempt Embedded Network Service Provider must:

(a) act as the Embedded Network Manager for the relevant embedded network; or

(b) engage an Embedded Network Manager to provide embedded network management services for the relevant embedded network; and

(c) enter into an agreement with an Embedded Network Manager for the provision of embedded network management services where that person has engaged an Embedded Network Manager under paragraph (b).

ENM conditions trigger

In relation to a small customer, when the small customer enters a market retail contract for the sale of energy at the relevant child connection point and the cooling off period in relation to that contract has expired.

In relation to a large customer, when the large customer has entered a contract for the sale of energy at the relevant child connection point.

ENM service level procedures

The procedures established by AEMO in accordance with clause 7.16.6A.

Exempt Embedded Network Service Provider

A person who engages in the activity of owning, controlling or operating an embedded network under an exemption granted or deemed to be granted by the AER under section 13 of the National Electricity Law and clause 2.5.1(d).

Attachment 2 - New clause 4.9

New clause 4.9 of the guideline will provide a process for seeking AER approval for conversion of an existing site to an embedded network where not all customers of the proposed embedded network have consented to the proposed conversion.

4.9 Alternative conditions for site conversion

4.9.1 Provision of retrofit information

1. The exempt embedded network service provider must provide notice, by letter, to all tenants at the retrofit location, of the plan to install an embedded network at the site.
2. The exempt embedded network service provider must provide each tenant with the following information regarding the installation of the embedded network:
 - a. a written notice which provides the tenant with information concerning:
 - i. the tenant's right to choose their own retailer, even within an embedded network
 - ii. the tenant's ability to enter into an energy only contract with an authorised electricity retailer
 - iii. the obligations regarding electricity offer matching, as set out in conditions 4.9.3 and 4.9.4
 - iv. the obligations regarding duplication of network fees, as set out in condition 4.9.5.
 - b. a copy of the electricity sales agreement to be offered by the exempt person
 - c. the contact details of a representative of the exempt embedded network service provider who will address any concerns and queries relating to the planned retrofit.
3. The exempt embedded network service provider must ensure that information regarding the proposed retrofit is clearly, fully and adequately disclosed, and that it has regard to a person's capacity to provide consent.

4.9.2 Collecting and recording explicit informed consent

1. The exempt embedded network service provider must provide the tenant with the information set out in condition 4.9.1, prior to seeking the tenant's explicit informed consent to the retrofitting of the embedded network.
2. The exempt embedded network service provider must keep records of the consent obtained. These records must:
 - a. include copies of the information provided to tenants
 - b. include records of consultations and meetings held with tenants
 - c. identify and record which tenants have not consented and the reasons for non-consent
 - d. record the outcome of any negotiation and/or dispute resolution with tenants
 - e. be kept for a period of two years

- f. be provided to the AER on request.
- 3. The exempt embedded network service provider must engage with prospective customers who do not consent, and seek to mitigate their concerns.
- 4. The exempt embedded network service provider must obtain the tenant's consent for the retrofit in a separate document, that is, the document recording the exempt customer's consent to the retrofit must be separate to a document acknowledging that the exempt customer is selecting the exempt embedded network service provider as its electricity supplier.

4.9.3 Offer matching for large customers

This condition applies only if the large customer was a tenant or resident at the time of the creation of the embedded network.

- 1. If a tenant, who is categorised as a large electricity customer, does not consent to becoming part of the embedded network, the exempt embedded network service provider must:
 - a. facilitate, within the embedded network, the continuation of the tenant's electricity contract with their current retailer, or
 - b. facilitate the tenant's direct connection to a registered distributor, or
 - c. if a or b do not apply, fulfil a request made by the tenant that the exempt embedded network service provider match any genuine electricity offer that would be available to the particular tenant if they were still a grid connected customer.
- 2. The exempt embedded network service provider must fulfil any subsequent request made by a tenant to match an electricity offer if the request is made 12 months or more after a previous request.
- 3. In the absence of a subsequent request to match an electricity offer, the exempt embedded network service provider need only apply the matched offer for a period of 12 months.
- 4. The exempt person's obligation to match an electricity offer expires upon termination or renewal of the large customer's tenancy/lease.

4.9.4 Offer matching for small customers

This condition applies only if the small customer was a tenant or resident at the time of the creation of the embedded network.

- 1. If a tenant, who would be categorised as a small electricity customer, does not consent to becoming part of the embedded network, the exempt embedded network service provider must:
 - a. facilitate, within the embedded network, the continuation of the tenant's electricity contract with their current retailer, or
 - b. fulfil a request made by the tenant that the exempt embedded network service provider match any genuine electricity offer that would be available to the particular tenant if they were still a grid connected customer.

2. The exempt embedded network service provider must fulfil any subsequent request by a tenant to match an electricity offer if the request is made 12 months or more after a previous request.
3. In the absence of a subsequent request to match an electricity offer, the exempt embedded network service provider need only apply the matched offer for a period of 12 months.
4. The exempt person's obligation to match an electricity offer expires upon termination or renewal of the small customer's tenancy/lease.

4.9.5 Duplication of network charges

This condition applies only if the customer was a tenant or resident at the time of the creation of the embedded network.

1. The exempt embedded network service provider must take steps to remedy any duplication of network charges experienced by tenants who have entered into an energy supply contract with an authorised retailer.
2. The exempt embedded network service provider must not charge a connection charge to any tenant who enters into an energy supply contract with an authorised retailer in accordance with condition 4.8.1.

4.9.6 Metering arrangements

1. The exempt embedded network service provider must bear the costs of any changes to metering and other network alterations that take place in the course of the retrofitting of the embedded network.
2. The exempt embedded network service provider must ensure that metering arrangements within the embedded network allow exempt customers to access retail competition.

4.9.7 Approval by the AER

The applicant must conduct a marketing campaign for at least three months based wholly on this condition 4.9. If the applicant can demonstrate at the conclusion of that period a substantial majority of tenants and residents have agreed to conversion to an embedded network, the applicant may apply to the AER to convert the network.

The application must detail the marketing campaign undertaken and provide the AER with a report summarising the information collected under condition 4.9.2. An application must contain:

- (a) details of the sign-up percentage attained,
- (b) the views of customers both accepting and refusing to accept the conversion
- (c) the steps taken to mitigate these concerns and an undertaking to observe conditions 4.9.1 to 4.9.6.

If the AER is not satisfied with the application in any respect we may, at our discretion, require the applicant to rectify the defect in the application or may publicly consult on the

application or both. We may include a requirement that the marketing campaign be modified or extended, the application or any supporting material provided to consumers or the AER be revised or that an undertaking be amended.

If the AER is satisfied with an application we will issue a notice of acceptance, which may specify an effective date. The network must not be converted until the effective date specified in a notice issued by the AER.

Attachment 3 - Table of embedded network roles

The following table demonstrates the differences between the Exempt ENSP and ENM roles. References in the table refer to applicable sections of the Draft Network Guideline.

	Exempt Embedded Network Service Provider (Exempt ENSP)	Embedded Network Manager (ENM)
Short form	Exempt ENSP or Exempt NSP	ENM
Other roles and terms included in this category	<ul style="list-style-type: none"> • Embedded network owner • Embedded network operator • Embedded network controller • Agent (if they operator or control the network in any way, which includes reading meters) • The holder of a network exemption 	
Necessary for:	<p>Supplying energy to third parties within an embedded network connected to the national grid.</p> <p>An embedded network is a private electrical network which is owned, controlled or operated by a person who is not registered as a Network Service Provider with AEMO (i.e. not a transmission or distribution business). See the diagram in section 2 for illustration.</p>	<p>Managing the process that enables customers within an embedded network to access energy offers from market retailers outside of the embedded network.</p> <p>If an embedded network contains electricity customers that have entered into a contract with a market retailer, an ENM must be appointed.</p>
Legal definition (according to Chapter 10 of the NER)	A person who engages in the activity of owning, controlling or operating an embedded network under an exemption granted or deemed to be granted by the AER under section 13 of the National Electricity Law and clause 2.5.1(d).	<p>A person:</p> <p>(a) who meets the requirements listed in schedule 7.7 and has been accredited and registered by AEMO as an Embedded Network Manager; and</p> <p>(b) who has not been deregistered by AEMO as an Embedded Network Manager under clause 7.4.4(d).</p>
Requirements	<p>Must hold a network exemption obtained by:</p> <ul style="list-style-type: none"> • Qualifying for an automatic or 'deemed' exemption by 	Must be registered by AEMO as an accredited Embedded Network Manager. Accreditation and registration is dependent on

conducting activities that fit within a deemed class (see section 3.1); or

- Registering with the AER for a 'registrable' exemption by conducting activities that fit within a registrable class (see section 3.2); or
- Applying to the AER for an individual exemption if conducting activities that do not fit within a deemed or registrable class (see section 3.3). Applications for individual exemption must be granted by the AER.

demonstrating that the candidate has certain competencies including:

- a detailed understanding of the NER and AER Network Guideline;
- a detailed understanding of the role relationships and obligations that exist between different market participants;
- an understanding of interfaces needed to access AEMO's systems and support market procedures.

An Exempt ENSP must hold an exemption for each site that they perform this role.

Obligations under guidelines and legislation

Obligations are listed in this guideline under Part B – Conditions (see section 4). These include:

- accurate metering
- network safety
- dispute resolution
- life support requirements
- appointment of an ENM
- adherence to charging restrictions

Obligations are mainly listed under Chapter 7 of the NER, and AEMO's ENM guideline and service level procedures. Obligations include:

- confidentiality with customer data
- cooperation with other market participants such as a customer's retailer, metering coordinator, exempt ENSP etc.
- maintain information regarding types and configuration of metering installations to make available on request to market participants
- application to AEMO for a NMI
- provision of NMI to market participants