

# **CONSULTATION PAPER**

National Electricity Amendment (Expanding Competition in Metering and Related Services) Rule 2014

National Energy Retail Amendment (Expanding Competition in Metering and Related Services) Rule 2014

## Rule Proponent(s)

Standing Council on Energy and Resources

17 April 2014

For and on behalf of the Australian Energy Market Commission



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Reference: ERC0169

#### Citation

AEMC 2014, Expanding competition in metering and related services in the National Electricity Market, Consultation Paper, 17 April 2014, Sydney.

#### About the AEMC

The Council of Australian Governments (COAG), through its then Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005. In June 2011, COAG established the Standing Council on Energy and Resources (SCER) to replace the MCE. The AEMC has two main functions. We make and amend the national electricity, gas and energy retail rules, and we conduct independent reviews of the energy markets for the SCER.

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# **Executive summary**

This consultation paper seeks stakeholder comments on a rule change request received from the Standing Council on Energy and Resources (SCER) that proposes arrangements to promote competition in the provision of metering and related services in the National Electricity Market (NEM).

The rule change request proposes to amend the National Electricity Rules and National Energy Retail Rules to establish a competitive regime that would enable widespread investment in advanced metering technology. The objectives of these arrangements are to:

- support the uptake of efficient demand side participation (DSP) products and energy services that promote consumer participation and choice; and
- allow for the benefits of demand side participation to be captured across the supply chain.

The SCER rule change request forms part of the Council of Australian Government's and SCER's energy market reforms to facilitate efficient demand side participation in the market. The rule change request has been largely based on the recommendations made by the AEMC in its Power of Choice review.

The Power of Choice review made a number of recommendations for reform with the overall objective that the community's demand for electricity services to be met by the lowest cost combination of demand and supply side options. This objective is best met when consumers use electricity at times when the value to them is greater than the cost of supplying that electricity.

Advances in metering technologies have the potential to expand the range of products and services available to consumers. For example, advanced metering with communication capability (eg smart meters) are capable of recording consumption on a near real time interval basis and differentiate consumption at different times of the day. This can provide consumers with better information about their consumption and more control about how they manage their use consistent with their preferences and choices. Better consumption information can also help consumers compare retail pricing offers and services from the market, and enable different billing arrangements (eg monthly).

Such technology also has the potential to provide market and system benefits. For example, retailers will be able to settle in the wholesale market on a consumer's actual consumption, rather than on the average load profile for a consumer in that distribution area.

Investment in advanced metering technology can also enable more innovative pricing and service offerings for consumers and create efficiencies for distribution network businesses and retailers. For example, by removing the need for estimated meter reads, allowing for remote connection/disconnection (ie no need to visit the premise) and

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improving retail switching times. Further, reliability and quality of electricity supply can be improved, particularly where there is access to grid management technologies such as outage and supply quality detection.

Currently, there are differences in the capability of metering technology used in the NEM. Industrial and medium sized businesses across the NEM, and most residential and small business consumers in Victoria, have access to interval and smart metering technology. However, the majority of residential and small businesses in other NEM jurisdictions still have meters that record consumption on an accumulation basis and are only read every three months.

SCER argues that the existing arrangements in the NEM are inhibiting investment in the provision of metering technology that can support the uptake of a range of new and innovative energy products and services. For example, if a consumer makes an informed decision to switch to a flexible retail offer or take up different demand side participation products, the market currently is not able to support that choice.

SCER considers that there are currently a number of regulatory barriers to competitive investment in metering technology. The rule change request seeks to remove those barriers, which include:

- The rules currently provide for different regulatory treatment of different types of meters. Only distribution businesses can be responsible for types 5 to 7 meters (primarily interval or accumulation meters). Only retailers or local distribution network businesses can be responsible for types 1-4 meters (interval or smart meters). This prevents other parties from providing metering services, and can reduce the incentives to upgrade existing meters to more advanced meters.
- Metering charges are bundled with distribution use of system charges in some jurisdictions. This means that a customer may pay twice for metering services if it upgrades its existing meter.
- Clarity and transparency regarding the exit fees that apply where an existing meter is replaced.
- There is currently no minimum specification that sets out a common set of requirements for smart meters.
- The roles and responsibilities of the various parties involved in the provision of metering and related services need to be clarified, including in relation to the new functions that can be provided by advanced meters.

The rule change proposal is to remove these to allow for competitive investment in the infrastructure that will allow for such consumer choices and capture market benefits over the long term. Investment could include the following options:

• A consumer choosing a product or service offered by a retailer, distribution business or energy services company that requires advanced metering, eg flexible

pricing, direct load control, energy audit, or distributed generation, eg solar panels.

- A retailer supplying its consumers with advanced metering in order to improve business efficiencies, eg through remote meter reads.
- A local distribution network business seeking to provide smart meters to consumers as part of a DSP program in its distribution area to manage network constraints.

SCER highlights that any new arrangements for the competitive provision of metering and related services should be simple and practicable from a consumer perspective. That is, a consumer's decision to take up a new product or service will include any required metering technology as part of that package. Ultimately, it will be up to consumers to make choices based on the benefits as they perceive them provided by end use services. The benefit to the system will be realised through the choices that consumers make.

This consultation paper explains key aspects of SCER's rule change proposal and seeks stakeholder feedback on the:

- model proposed by SCER to facilitate competition in metering and related services; and
- supporting changes required to enable the competitive arrangements.

The key features of SCER's proposed model that we are seeking stakeholder comments on are:

- the proposal for a new separate Metering Coordinator role based on no party having the exclusive right to provide metering services;
- the roles of and nature of the relationships between the relevant parties including retailers, consumers and Metering Coordinators;
- the network regulation arrangements to support SCER's proposal, including unbundling of metering charges from distribution use of system charges, provision of transparent exit fees, provision for network businesses to provide smart meters as part of a regulated DSP business case and appropriate ring fencing arrangements.
- the requirements for a minimum functionality specification for smart meters;
- jurisdictional policies regarding new and replacement metering installations, and reversion; and
- transitional and implementation arrangements.

The SCER rule change request intersects with a range of other projects being carried out by the AEMC, SCER and the Australian Energy Market Operator. We are

considering each of these projects, including where areas of scope and issues are related. This will inform the timing to deliver the reform package regarding enabling technology and to make sure that project outcomes are considered and implemented in a coordinated way. If changes to the rules are made, the AEMC will consider implementation requirements so that the transition to any arrangements is as smooth as possible.

Submissions to the consultation paper close on 29 May 2014. We encourage stakeholders to respond on any issues raised in the consultation paper, including the questions outlined in Chapters four to nine. We intend to have stakeholder workshops during the next stage of the rule change process to discuss issues and options regarding the proposal.

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## 1 Introduction

## 1.1 The rule change request

In October 2013, the Standing Council on Energy and Resources (SCER) submitted a rule change request to the Australian Energy Market Commission (AEMC or Commission). The rule change request seeks to implement arrangements that would promote competition in the provision of metering and related services in the National Electricity Market (NEM).<sup>1</sup> SCER considers that the objectives of the proposed arrangements are to:

- support the uptake of efficient demand side participation (DSP) products and end use energy services that promote consumer participation and choice; and
- allow for the benefits of DSP to be captured across the supply chain.

The rule change request relates to the arrangements under Chapter seven of the National Electricity Rules (NER). The proposed changes will also affect arrangements under the National Energy Retail Rules (NERR) for residential and small business consumers, in particular regarding standard retail and connection contracts, and potentially the supporting consumer protection arrangements. SCER's proposed arrangements may therefore necessitate changes to both sets of rules.

The rule change request forms part of SCER's work program on DSP, which seeks to implement a number of other reforms recommended by the AEMC in the Power of Choice review.<sup>2</sup>

We recognise that this rule change request intersects with a range of other projects being carried out by the AEMC and other parties, including SCER and the Australian Energy Market Operator (AEMO). Work is underway to ensure a coordinated approach to these projects in the context of SCER's reform agenda so that the interactions between all issues are considered and the implementation of the outcomes is coordinated. We provide an overview of the relevant projects in Chapter two.

## 1.2 Purpose of the consultation paper

The purpose of this consultation paper is to facilitate stakeholder consultation on SCER's rule change request. In particular, the AEMC seeks stakeholder views on:

- the model proposed by SCER to facilitate competition; and
- the supporting changes required to enable the competitive arrangements.

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Standing Council on Energy and Resources, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013.

<sup>&</sup>lt;sup>2</sup> AEMC, *Power of Choice review*, final report, AEMC, 30 November 2012, Sydney.

SCER's rule change request is largely based on the framework proposed in the AEMC's Power of Choice review, but differs in a number of areas. These differences are discussed further in Chapter three.

## 1.3 Timing for the rule change request

The rule change request deals with a large scope of issues and, as noted, interlinks with a number of projects being carried out by the AEMC and other parties. The AEMC has extended the timeline for this request beyond the usual rule making timeline in order to adequately consider and consult with stakeholders on all relevant issues. The expected timeline for the rule change request is outlined in Table 1.1.

## Table 1.1 Timeline for the rule change request

Milestone	Date
Close of submissions on the consultation paper (6 weeks after publication)	29 May 2014
Stakeholder consultation - workshops and roundtables	June-September 2014
Publication of the draft rule and draft determination	18 December 2014
Public forum	Late January 2015
Close of submissions on the draft rule and draft determination	February 2015
Publication of the final rule and final determination	April 2015

## 1.4 Structure of the consultation paper

The consultation paper is structured as follows:

- Chapter two provides background to SCER's rule change request and an overview of related projects.
- Chapter three sets out SCER's proposed changes to the current arrangements under the NER and NERR.
- Chapter four outlines the framework that will be used by the AEMC to assess the rule change request.
- Chapters five to nine detail the issues that are relevant to the rule change request. Stakeholders are encouraged to comment on questions raised in these chapters:

- Chapter five discusses issues relevant to SCER's proposal to create the role of the Metering Coordinator.
- Chapter six discusses the roles and relationships between parties under SCER's proposed model.
- Chapter seven discusses the network regulatory arrangements that would support SCER's model.
- Chapter eight discusses the issues related to the minimum functionality specification for smart meters, and jurisdictional new and replacements and reversion policies.
- Chapter nine discusses transitional and implementation arrangements.
- Chapter 10 outlines the process for making submissions on the consultation paper.

## 2 Background

This chapter provides background to the rule change request. We also provide an overview of the existing arrangements for the provision of metering and related services in the NEM, and discuss other work that intersects with the scope of this rule change request.

## 2.1 Power of Choice review

In December 2012, the Council of Australian Governments and SCER agreed to implement a comprehensive package of energy market reforms to support investment and market outcomes in the long term interests of consumers.<sup>3</sup> One area of reform seeks to address the impediments to, and promote the commercial adoption of, DSP in the NEM.<sup>4</sup> SCER has developed a work program to implement the reforms, which covers three priority areas:

- 1. *Improving pricing and incentives*: This includes providing consumers with clear signals about the cost of their energy consumption in order to efficiently manage their demand. Businesses also need appropriate incentives to implement and facilitate DSP options.
- 2. *Informing choice*: This includes providing consumers and demand side providers with information so that they can identify and implement efficient demand options.
- 3. *Enabling response*: A range of technologies, skills and supporting frameworks are required to support pricing, information and demand management options, and to enable timely responses to market signals.

As part of these reforms, the Council of Australian Governments and SCER agreed to implement the recommendations made by the AEMC in its Power of Choice review.

The review, published in November 2012, identified the opportunities (information, education, technology and flexible pricing options) for consumers to make more informed choices about the way they use electricity. The review also addressed the market conditions and incentives required for network operators, retailers and other parties to maximise the potential of efficient DSP and respond to consumer choice. The overall objective of the review was to ensure that the community's demand for electricity services is met by the lowest cost combination of demand and supply side options. This objective would be best met when consumers use electricity at the times when the value to them is greater than the cost of supplying that electricity.

<sup>&</sup>lt;sup>3</sup> Council of Australian Governments, *COAG meeting 7 December 2012*, communique, COAG, 2012.

<sup>4</sup> SCER 2014, SCER, Canberra, viewed 24 March 2014, http://www.scer.gov.au/workstreams/energy-market-reform/.

An area of focus in the review related to the role of enabling technology. The AEMC considered the existing market and regulatory arrangements that govern investment in metering, and whether these arrangements can support a consumer's choice to take up different products and services that can be enabled by better technology. This is based on the premise that where a consumer makes an informed decision to switch to a flexible pricing offer or take up a DSP product (eg install smart appliances), the market needs to support that choice.

The AEMC recommended that a new framework be introduced into the NER to enable competition in the provision of metering and related services for residential and small business consumers. The framework would be supported by the smart meter minimum functionality specification that was endorsed by SCER in 2011.<sup>5</sup>

## 2.2 What are the objectives of the rule change request?

The purpose of this rule change request is to implement arrangements that would support a competitive market for energy services and facilitate widespread investment in advanced metering technologies.<sup>6</sup> Investment could take several forms, for example:

- A consumer chooses a product or service offered by a retailer, distribution business or energy services company that requires advanced metering, eg flexible pricing, direct load control, energy audit, solar panels.
- A retailer supplies its consumers with advanced metering in order to improve business efficiencies, eg through remote meter reads.
- A local distribution network business seeks to provide smart meters to consumers as part of a DSP program in its distribution area to manage network constraints.

The arrangements for metering in the NEM should be simple and practicable from a consumer perspective in order to facilitate these types of investments.

By reducing impediments to widespread investment in advanced metering technologies, a framework for the competitive provision of metering and related services is likely to have a number of benefits across the electricity supply chain. Under competitive arrangements, the uptake of advanced metering would be expected to:

- give consumers the ability to:
  - access better information about their electricity consumption, which can help them to manage their consumption and associated expenditure;
  - have bills reflect their actual consumption profile;

<sup>5</sup> AEMC, Power of Choice review, final report, AEMC, 30 November 2012, Sydney, p ii.

<sup>&</sup>lt;sup>6</sup> Box 2.1 outlines the different types of metering installations and the services they enable.

- access better data to compare offers from the market;
- choose from a wider range of energy products and services, including smart household appliances; and
- switch retailers more quickly and choose how frequently they want to be billed, which can help reduce exposure to 'bill shock';
- give industry the ability to:
  - offer different/innovative pricing, product and service options to consumers, including flexibility in retail tariff options and peak demand pricing;
  - gain a better picture of electricity consumption patterns, and be settled in the wholesale market on a consumer's actual consumption, as opposed to the average load profile for consumers in that distribution area;
  - access grid management technologies such as outage and supply quality detection;
  - create business and system-wide efficiencies, eg through remote meter reads or remote connection/disconnection; and
  - better manage the reliability and quality of electricity supply.

Historically, metering technology has only enabled the recording of electricity flow and consumption at a connection point. Innovation in metering technology is improving and expanding the range of functions that a meter can provide, and significantly increasing the range of energy products and services that a consumer can take up.

Smart meters are an advanced metering technology that comprise the meter and a communications module. The communication software enables data to be retrieved from the meter remotely (ie not manually read at a consumer's premise), and enables other smart services such as network monitoring (quality, continuity of supply) and load management. Smart meters can also, if the consumer chooses, link to other devices in the home through a home area network and in-home display to provide the consumer with instant access to their electricity use profile.

The different types of metering technology are provided in Box 2.1.

### Box 2.1: Types of metering and energy services available

Accumulation meters - record electricity used on an accumulation basis. Consumption data is retrieved manually from the meter at a consumer's premises periodically (typically every three months to match the retailer billing cycle). This data provides consumers with their total historical electricity consumption (in kWh) but does not record the timing of energy use (ie when electricity is used). *Interval meters* - record consumption on a near real time interval basis (every half hour). These meters provide consumers with historical information about the timing of their consumption. These meters can be read manually at the premises, or remotely via a communications link.

*Smart meters* - record consumption on a near real time interval basis (every half hour) and have communication technology that allows this data to be retrieved remotely. Depending on its functionality, a smart meter can provide other services, including network support functions such as quality of supply detection. These meters can link to other devices at the premises (eg home area networks and in-home displays) to provide the consumer with instant access to their electricity use profile.

# 2.3 Existing arrangements for the provision of metering and related services in the NEM

## 2.3.1 What are metering and related services?

As noted, the basic function of a meter is to measure and record the amount of electricity consumed at a connection point to enable accurate billing and financial settlement of the NEM.<sup>7</sup>

A metering installation is the assembly of components required to measure, process and enable the collection of energy data at a connection point.<sup>8</sup>

The type of metering installation used is determined in accordance with the NER and depends on the size of the load at that connection point. Table 2.1 outlines the seven types of metering installations under the NER.<sup>9</sup> A National Metering Identifier (NMI) is a unique code that identifies a metering installation for billing and settlement purposes.<sup>10</sup>

The phrase "metering and related services" is used in this paper to define the provision, installation and maintenance of a metering installation, and the collection, processing and delivery of metering data for billing and settlement purposes. The services enabled by advanced metering (ie energy management services) are not captured by this phrase.

<sup>&</sup>lt;sup>7</sup> For the purposes of this paper, a connection point is the agreed point of supply between the local network service provider and the consumer. This rule change focuses on the arrangements for metering and related services provided at a load connection point. However, we will need to ensure that any rule changes continue to provide appropriate arrangements for generation connection points.

<sup>8</sup> See clause 7.3.1 of the NER.

<sup>&</sup>lt;sup>9</sup> Schedule 7.2.3 of the NER.

<sup>&</sup>lt;sup>10</sup> For further information see clause 7.3.1(d)-(f) of the NER.

### Table 2.1 Types of metering installation

Size of load (annual electricity consumption)	Metering installation type
Greater than 1,000 Gigawatt hours (GWh)	1
Between 1,000 GWh and 100 GWh	2
Between 100 GWh and 750 Megawatt hours (MWh)	3
Between 750 MWh and zero (generally residential and small business consumers)	4,5,6,7 <sup>11</sup>

The capabilities of each metering installation type are determined in accordance with the NER.

- Type 1-4 installations must be capable of measuring electricity flows in 30 minute intervals, in both directions, and being remotely read.<sup>12</sup>
- Type 5 installations include interval meters that are manually read.
- Type 6 installations include accumulation meters that are manually read.
- Type 7 installations do not have a meter and are used at connection points where the load is small and the load pattern is predictable, eg street lights. Usage is estimated using standard data and calculations.<sup>13</sup>

# 2.3.2 Who is currently responsible for the provision of metering and related services in the NEM?

The central component of SCER's rule change request seeks to change the roles and responsibilities of the various parties involved in the provision of metering and related services. This section sets out what these roles and responsibilities currently are so that it is clear what SCER proposes to change.

Chapter seven of the NER sets out the roles and responsibilities of parties involved in the provision of metering and related services. It outlines the arrangements relating to:

- the provision, installation, accuracy and maintenance of a metering installation;
- the collection and provision of metering data;

13 Schedule 7.2 of the NER..

#### 8 Expanding competition in metering and related services

<sup>&</sup>lt;sup>11</sup> The maximum size of load for metering installation types 5 and 6 is determined by NEM jurisdictions under NER Schedule 7.2.3 and is outlined in the NEM metrology procedure, but must not exceed 750 MWh.

<sup>&</sup>lt;sup>12</sup> Different accuracy requirements apply for each meter type, as outlined in Schedule 7.2.3 of the NER.

- the security of, and rights of access to, metering data;
- standards of performance; and
- accreditation requirements.

### Obligations of market participants to establish metering installations

Market participants<sup>14</sup> have an obligation to ensure that each of their connection points has an AEMO registered metering installation in place.<sup>15</sup> In most cases, the retailer will organise the connection of a residential or small business consumer to the network by sending a request to the local distribution network business to perform this service. The provision and installation of a meter at this point forms part of the consumer's standard connection service contract under the NERR.<sup>16</sup> Large and medium sized consumers may often deal directly with the local network distribution business to organise their connection to the network.

#### Role of the Responsible Person

The Responsible Person is responsible for the provision, installation and maintenance of a metering installation, and the collection, processing and delivery of metering data.<sup>17</sup> The Responsible Person must, for each metering installation for which it is responsible:

- engage a Metering Provider for the provision, installation and maintenance of that installation unless the Responsible Person is the Metering Provider; or subject to the metrology procedure, allow another person to engage a Metering Provider to install that installation;<sup>18</sup>
- engage a Metering Data Provider to provide metering data services between the metering installation and the metering database and to parties entitled to it under Rule 7.7(a);<sup>19</sup>
- ensure that the installation is provided, installed and maintained in accordance with the NER, the metrology procedure and other procedures under the NER;<sup>20</sup>

- <sup>19</sup> Clause 7.2.5(c1) of the NER.
- <sup>20</sup> Clause 7.2.5(d)(1) of the NER.

<sup>14</sup> A market participant is a person registered by AEMO in the categories of Market Generator, Market Customer, Market Small Generation Aggregator or Market Network Service Provider. For further information see AEMO 2014, AEMO, Sydney, viewed 1 April 2014, http://www.aemo.com.au/Electricity/Registration/Participant-Categories/Other-Participants.

<sup>15</sup> Clause 7.1.2 of the NER.

<sup>&</sup>lt;sup>16</sup> Schedule 2 of the NERR. This applies in NECF jurisdictions only.

<sup>17</sup> Clause 7.2.1 of the NER.

<sup>18</sup> Clause 7.2.5(a) of the NER. This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

- ensure that the components, accuracy and testing of the installation comply with the requirements of the NER, the metrology procedure and other procedures under the NER;<sup>21</sup>
- ensure that the security control of the installation is provided in accordance with the NER and that associated links, circuits and information storage and processing systems are protected by security mechanisms acceptable to AEMO;<sup>22</sup>
- ensure that a communications interface is installed and maintained to facilitate connection to the telecommunications network, where remote acquisition is used or is to be used for the collection of metering data;<sup>23</sup> and
- not replace a device that is capable of producing interval energy data and is already installed in a metering installation, with a device that only produces accumulated energy data unless the metrology procedure permits the replacement to take place.<sup>24</sup>

The Financially Responsible Market Participant (usually the retailer) is responsible for the payment of all costs associated with metering at a connection point, unless it has allowed another party to engage a Metering Provider to install the meter, in which case that party would pay those installation costs.<sup>25</sup>

### Arrangements for large and medium sized consumers

For large and medium sized consumers (ie the industrial and commercial sectors), the Financially Responsible Market Participant (ie the retailer) has responsibility for type 1-4 metering installations unless it accepts an offer from the local distribution network business to take on this role.<sup>26</sup> Where the retailer is responsible for metering and related services, it must ensure that an accredited Metering Provider and Metering Data Provider are engaged for each connection point.<sup>27</sup> The retailer may allow large and medium sized consumers to contract directly with a Metering Provider to have a meter installed, subject to the metrology procedure.<sup>28</sup> Where this occurs, the consumer pays the Metering Provider directly for those services, not the retailer.<sup>29</sup>

### Arrangements for residential and small business consumers

Although the original NEM principles for investment in metering were based on competition in metering responsibility, installation and data services, competition for

- <sup>22</sup> Clauses 7.2.5(d)(3) and 7.8.1 of the NER.
- <sup>23</sup> Clause 7.2.5(d)(4) of the NER.
- <sup>24</sup> Clause 7.2.5(d)(7) of the NER.

- Clause 7.2.2 of the NER.
- 27 Clause 7.2.5 of the NER.
- <sup>28</sup> Clause 7.2.5(a)(2) of the NER.
- 29 Rule 7.3A(b) of the NER.

<sup>&</sup>lt;sup>21</sup> Clause 7.2.5(d)(2) of the NER.

<sup>25</sup> Rule 7.3A of the NER.

the provision of these services has been restricted in a practical sense to large and medium sized consumers where interval metering is used.

For residential and small business consumers using manually read interval meters (type 5) and accumulation meters (type 6), the role of the Responsible Person lies with the local distribution network business.<sup>30</sup> This was adopted as a transitional measure to ensure that small electricity consumers had effective metering services at the commencement of full retail competition, but has remained in the NER to date.

In Victoria, where a government mandate led to the provision of smart meters to all residential and small business consumers, the local distribution network business is the Responsible Person.<sup>31</sup>

#### Role of the Metering Provider

The installation and maintenance of a metering installation must only be carried out by a Metering Provider.<sup>32</sup> Metering Providers must be accredited and registered by AEMO, the requirements for which are outlined in the service level procedures.<sup>33</sup> In order to be accredited and registered, Metering Providers must be able to exhibit all of the capabilities relevant to the type of metering installation they are seeking to provide, as set out in the NER and procedures authorised under the NER.<sup>34</sup>

Metering Providers must also provide and maintain the security controls of a metering installation in accordance with the NER.  $^{35}$ 

#### Role of the Metering Data Provider

Metering Data Providers carry out responsibilities related to the collection, processing and delivery of metering data from each metering installation.<sup>36</sup> They must be accredited and registered with AEMO, the requirements for which are outlined in AEMO's service level procedures.<sup>37</sup> In order to be accredited and registered, Metering

- <sup>33</sup> Clause 7.4.2 of the NER.
- 34 Schedule 7.4 of the NER.
- Clause 7.4.1(b) of the NER.
- <sup>36</sup> Paragraph 7.4.1A(a) of the NER.
- <sup>37</sup> Clause 7.4.2A of the NER.

<sup>&</sup>lt;sup>30</sup> Clause 7.2.3 of the NER states that the local distribution network business is the Responsible Person for metering installation types 5-7.

<sup>&</sup>lt;sup>31</sup> In 2009 the AEMC made a jurisdictional derogation to vary the application of the NER in Victoria. The derogation made distribution network businesses exclusively responsible for providing metering and related services to Victoria's residential and small business consumers. The derogation was extended by the AEMC in November 2013 to preserve this exclusivity until 31 December 2016, or until national arrangements for competition in metering and related services are implemented. See Rule 9.9C of the NER.

<sup>&</sup>lt;sup>32</sup> Clause 7.4.1(a) of the NER. This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

Data Providers must be able to exhibit the capabilities applicable for the category of accreditation sought.  $^{\rm 38}$ 

Metering Data Providers must also provide and maintain the security controls associated with metering data services in accordance with the NER.<sup>39</sup>

### AEMO metrology and service level procedures

AEMO must establish, maintain and publish the service level procedures that will apply to the relevant categories of registration for Metering Providers and Metering Data Providers.<sup>40</sup> This includes the obligations and technical requirements associated with the processes of meter reading, data collection, data processing and data delivery. AEMO also has a number of other responsibilities under Chapter seven of the NER.

## Metering installation components - minimum standard for electricity metering

The NER set out the basic components that each metering installation is required to have. This includes a number of requirements regarding the measurement, recording and accuracy of the energy consumed at a connection point, and the communication and storage of energy consumption data.<sup>41</sup>

A local network distribution business or market participant may, with the agreement of the Responsible Person, arrange for a metering installation to contain features in addition to those outlined in the NER.<sup>42</sup>

Each metering installation must have a unique NMI that is issued by the local distribution network business.<sup>43</sup> The Responsible Person must apply to the local distribution network business for a NMI<sup>44</sup> and must register the NMI with AEMO in accordance with AEMO procedures.<sup>45</sup>

### B2B arrangements

B2B procedures prescribe the content of, processes for and information to provide to support communication between retailers and distribution network businesses regarding the supply of electricity to a consumer.<sup>46</sup> Chapter seven of the NER sets out

40 Clause 7.14.1A(a) of the NER.

- 42 Clause 7.3.1(c) of the NER.
- <sup>43</sup> Clause 7.3.1(e) of the NER. This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.
- 44 Clause 7.3.1(d) of the NER.

<sup>&</sup>lt;sup>38</sup> Schedule 7.6 of the NER.

<sup>&</sup>lt;sup>39</sup> Clause 7.4.1A(b) of the NER.

<sup>41</sup> Clause 7.3.1 of the NER.

<sup>&</sup>lt;sup>45</sup> Clause 7.3.1(f) of the NER. This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

AEMO 2014, AEMO, Sydney, viewed 26 March 2014, http://www.aemo.com.au/Electricity/Retail-and-Metering/B2B/BB-Procedures.

the arrangements regarding B2B procedures, including the content of and the method of making and changing B2B procedures.

AEMO must provide and operate the B2B e-Hub and establish the Information Exchange Committee.<sup>47</sup> The Information Exchange Committee is established under the NER to manage the ongoing development of the B2B Procedures. The committee comprises:

- three Distribution Network Service Provider members;
- three Local Retailer/Market Customer members; and
- two Independent members.<sup>48</sup>

#### Entitlement to metering data and access to metering installation

The NER set out the parties that are entitled to access or receive data from a metering installation. These parties include registered participants, Metering Providers, Metering Data Providers, retailers, local distribution network businesses, AEMO, the customer, ombudsmen and the Australian Energy Regulator (AER).<sup>49</sup>

## 2.4 Related reforms

A range of projects being carried out by the AEMC and other parties are considering issues that intersect with this rule change request. These include issues relating to appropriate access to smart meter functionality, changes to the governance of retail market procedures, smart meter consumer protections and consumer access to energy data. A diagram outlining the various projects and their interactions is at Appendix A.

As noted in Chapter one, we are considering how each of the projects intersects, common issues of relevance and coordination of how their outcomes might be implemented. There are six projects that are particularly relevant to SCER's rule change request, as outlined below.

#### AEMC advice to SCER - Open access and common communication standards

The AEMC has provided advice to SCER on a framework for open access and common communications standards to support the provision of energy products and services enabled by smart meters. The purpose of the advice was to establish a framework that would provide authorised parties with the required level of access to a smart meter's functionality to enable the provision of DSP and other products and services.<sup>50</sup>

<sup>&</sup>lt;sup>47</sup> Rule 7.2A of the NER.<sup>48</sup> Clause 7.2A.2 of the NER.

<sup>48</sup> Clause 7.2A.2 of the NER.

<sup>49</sup> Rule 7.7(a) of the NER.

<sup>50</sup> AEMC 2014, AEMC, Sydney, viewed 25 March 2014, http://www.aemc.gov.au/market-reviews/open/framework-for-open-access-and-communication -standards.html.

The advice noted that the competition in metering rule change request seeks to establish the role of Metering Coordinator, and recommended that the role and responsibilities of the smart meter 'gate keeper' be considered as part of SCER's rule change request.<sup>51</sup> The advice noted that this will need to include consideration of appropriate accreditation requirements and arrangements to support the transition to a competitive framework.

The advice also recommended that additional regulation is not required to govern the rights of access to smart meter functionality and the charges for access. This recommendation was based on two assumptions:

- 1. that the Metering Coordinator role is established under this rule change request; and
- 2. that consumers will have the option to appoint their own Metering Coordinator.

As part of this rule change request we will review whether these assumptions remain valid with respect to the rights and charges for access to smart meter functionality. If not, the AEMC will consider whether additional regulation is required, and what form it should take.

Further information about the components of the open access advice that will be addressed as part of this rule change request is at Appendix B.

## AEMO rule change request - Governance of retail market procedures

AEMO submitted a rule change request to the AEMC seeking to facilitate the implementation of a more efficient and effective single governance framework for all retail market procedures. The request considers the governance arrangements for the Information Exchange Committee and the ongoing development of Business to Business (B2B) procedures.<sup>52</sup>

This work is relevant because there may be a need to consider the arrangements regarding the composition of the Information Exchange Committee if a new party (ie the Metering Coordinator role) is established in the NER as a result of SCER's rule change request.

### SCER rule change request - Customer access to information about their energy consumption

In October 2013, SCER submitted a rule change request to the AEMC seeking to establish a clear and transparent framework for governing the ability of consumers to request and receive their energy and metering data from their retailer or local distribution network business, and to share that data with approved service

<sup>&</sup>lt;sup>51</sup> The 'gate keeper' would be the party responsible for managing access to the functionality of a smart meter, and managing the security of and congestion at the smart meter.

<sup>52</sup> AEMC 2014, AEMC, Sydney, viewed 25 March 2014, http://www.aemc.gov.au/Electricity/Rule-changes/Open/governance-of-retail-market-procedur es.html.

providers.<sup>53</sup> The request is based on a recommendation made by the AEMC in its Power of Choice review, with the objective of better equipping consumers with the information they need to make more efficient energy consumption decisions. A consultation paper on this rule change request will be published in May 2014.

We will need to consider the impact of any changes made to the NER and/or NERR under this rule change request in the context of SCER's proposed framework to promote competition in the provision of metering and related services.

#### AEMC review - Electricity customer switching

The AEMC has published its review of electricity customer switching arrangements in the NEM. The objective of the review was to determine if the current switching process is timely and accurate, and whether any modifications are required, including having regard to future technologies (such as smart meters) that may affect the switching process.<sup>54</sup> We will have regard to the outcomes of this work where relevant to SCER's rule change request.

#### SCER advice - Regulation of third party energy service providers

The AEMC's Power of Choice review recognised the role that third party service providers have in helping consumers to understand and manage their electricity use. The review recommended that consideration be given to whether the National Energy Customer Framework (NECF) should be amended to include a framework for the regulation of third party service providers.

SCER officials are considering the recommendations made in the Power of Choice review, in particular whether third party energy services should be regulated under the NECF and, if so, whether any changes to this framework are required to accommodate their activities and what exemptions or authorisations, if any, should apply.<sup>55</sup> We will have regard to this work in considering SCER's rule change request.

#### SCER officials' report - National Smart Meter Consumer Protection and Safety Review

In November 2012, SCER's Energy Market Reform Working Group published the *National Smart Meter Consumer Protections and Safety Review*. The review explores the consumer protection and safety issues that need to be addressed in the context of the deployment and use of smart meters, including pricing arrangements, third party service providers, direct load control and billing.<sup>56</sup>

<sup>53</sup> SCER 2013, SCER, Canberra, viewed 26 March 2014, http://www.scer.gov.au/files/2013/10/SCER-Consumer-access-to-data-rule-change-request-Octo ber-20131.pdf.

AEMC 2014, AEMC, Sydney, viewed 25 March 2014, http://www.aemc.gov.au/market-reviews/open/review-of-electricity-customer-switching.html.

<sup>55</sup> SCER DSP Working Group 2014, SCER, Canberra, viewed 25 March 2014, http://www.scer.gov.au/files/2014/02/Demand-Side-Participation-Update-table.pdf.

<sup>&</sup>lt;sup>56</sup> SCER DSP Working Group 2014, SCER, Canberra, viewed 25 March 2014, http://www.scer.gov.au/files/2014/02/Demand-Side-Participation-Update-table.pdf.

SCER officials are in the process of addressing the issues raised in the review, some of which are included in the various rule change requests submitted by SCER to the AEMC. In particular, SCER has asked the AEMC to develop appropriate arrangements for retailers to inform consumers of their metering charges as part of this rule change request.

Where relevant, we will take into account SCER's ongoing work program on safety and consumer protections in considering this rule change request.

## 3 Details of the rule change request

This chapter summarises SCER's rule change request, including:

- the issues SCER identifies with the current arrangements;
- SCER's proposed model and supporting arrangements; and
- SCER's view on how the proposed changes are likely to promote the National Electricity Objective and the National Energy Retail Objective.

# 3.1 What SCER identifies as the problem with the current arrangements

The current arrangements for metering in the NEM were developed to ensure the measurement of electricity flows to support settlement of the market. As discussed in Chapter two, innovation has meant that metering technology can now do much more than just measure the flow of electricity. Advanced metering technology has become a strategic asset – it can provide businesses with the information needed to innovate and supply the market with new energy products and services that suit consumer preferences and circumstances. It can also provide consumers with new choices and ways of interacting with their energy suppliers and managing their consumption.

Most residential and small business consumers in NEM jurisdictions other than Victoria still have metering technology that measures consumption on an accumulation basis and requires it to be read manually at the premises (typically once every three months to match retailer billing cycles). As a result, these consumers are limited in their ability to take up certain DSP products or services, including flexible pricing and more frequent billing, because their current metering installation does not have the functionality to support that choice. To date there has been no movement on a large scale provision of advanced metering technology (ie smart meters) by industry, other than in Victoria.<sup>57</sup>

SCER considers that the current arrangements for metering in the NER are inhibiting market participants, metering companies and consumers from investing in metering technology that can support the uptake of DSP products and services.<sup>58</sup> Some of the issues with the current arrangements include:

• Local distribution network businesses are primarily responsible for managing the provision of metering and related services for residential and small business

<sup>&</sup>lt;sup>57</sup> The Victorian Government initiated a rollout of smart meters in 2009. As at 29 November 2013 more than 90 per cent of the rollout was complete, with more than 2.5 million meters installed at homes and small businesses across the state. See Smart Meters 2014, Government of Victoria, Melbourne, viewed 26 March 2014,

http://www.smartmeters.vic.gov.au/home/latest-news/Smart-Meter-rollout-arrangements.

<sup>&</sup>lt;sup>58</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p5.

consumers. If the local distribution network business's metering services are classified as a standard control service its metering costs are regulated and the assets are included in its regulatory asset base. The local distribution network business has certainty that it will be the provider of type 5-7 metering installations and will receive regulated returns to recover the costs of providing those assets and services. However, the provision of type 1-4 metering installations is open to competition. This presents a less certain outcome for the LNSP because it cannot be sure that its offer to provide the metering and related services would be successful. If its offer was successful, the local distribution network business would need to agree a commercial (rather than a regulated) arrangement with the retailer. For these reasons the local distribution network business may have less incentive to help consumers/retailers upgrade to more advanced meters.

- Metering charges are bundled with distribution use of system charges in some jurisdictions. As a result, if a retailer replaces a metering installation, the customer would be paying both the charges passed on by the retailer for the new meter, and the local distribution network business's metering charges bundled in with distribution use of system charges.
- There is uncertainty about the framework for negotiating exit fees between a retailer and a local distribution network business if the retailer seeks to replace an existing metering installation owned by the local distribution network business. The current provision for parties to negotiate in good faith is not a clear or efficient arrangement. A high exit fee might be a disincentive for retailers to invest in replacement metering technology, while a low fee may under-recover the local distribution network business's residual asset value for the metering infrastructure.
- There is uncertainty about who has a right to use the non-metering functions included in the meter, which may limit the incentive to invest in advanced metering. These issues were explored in the AEMC's advice to SCER *Framework for open access and communication standards*. Where relevant, we will consider the outcomes of the review as part of this rule change process.
- Smart meter consumer protection arrangements are still being established and their implications are uncertain. SCER is addressing some consumer protection issues through parallel amendments to the NERR and has asked the AEMC to make or advise of any necessary additional consumer protection arrangements as part of this rule change request and others recommended by the Power of Choice review.

There was investment uncertainty resulting from the power under National Electricity Law (NEL) for jurisdictions to mandate a rollout of smart meters by local distribution network businesses. Legislation has now been passed by the South Australian Parliament to remove this requirement from the NEL.<sup>59</sup>

<sup>59</sup> Statutes Amendment (Smart Meters) Act 2013 (SA).

## 3.2 SCER's proposed solution

SCER seeks to introduce a new framework into the NER that builds on the original principles for metering in the NEM, to promote competition in the provision of metering and related services.

To achieve this, SCER proposes to amend Chapter seven of the NER and relevant provisions of the NERR to:

- Change who is responsible for the provision of metering and related services.
  - Separate the responsibility for metering services from the roles of the retailer and the local distribution business so that no party has the exclusive right to provide these services.
  - Any party accredited with AEMO would be able to provide these services.
  - Replace the term Responsible Person with Metering Coordinator.
  - Consumers would be able to engage a Metering Coordinator directly.
- Determine what additional accreditations might be required, if any, for the Metering Coordinator role.
- Establish arrangements for where a Metering Coordinator fails.
- Require unbundling of metering charges from distribution use of system charges in jurisdictions where this has not already occurred. SCER proposes that distribution network businesses should unbundle these charges for any meters included in their regulated asset base at the next regulatory review.
- Require clearly defined exit fees for accumulation meters managed by the local distribution network business. SCER proposes a number of criteria that the AER should consider when making an exit fee determination, including whether a cap on fees is appropriate.
- Include the term 'smart meter minimum functionality specification' in the NER. This term would refer to a guideline or procedure established, maintained and published by AEMO regarding the minimum functionality requirements and performance levels for smart metering infrastructure.
- Include provisions for jurisdictions to determine their own new/replacement and reversion policies. SCER also proposes that jurisdictions be given the power to allow a particular Metering Coordinator exclusivity for certain types of meters (eg type 6/7) to support the efficient provision of basic metering services.
- Require retailers to inform consumers of their metering service charges and the retail tariff that would be offered if charges for metering services were removed. This would require retailers to separately identify metering costs from electricity supply costs to the consumer. The purpose of this requirement is to give

consumers access to information that enables them to compare the costs and benefits of different metering arrangements.

- Revise the current arrangements regarding the provision of electronic data transfer facilities to a metering installation to support competition in the deployment of meters with advanced functionality.
- Establish appropriate implementation and transitional arrangements, including for Victoria where smart meters are already in place.<sup>60</sup>

SCER also asks that the AEMC determine whether the proposed model is adequately supported by existing arrangements regarding the following matters, or whether amendments to those arrangements are required:

- ring fencing for distribution network businesses;
- consumer protections; and
- Retailer of Last Resort provisions.

Several aspects of SCER's rule change request are different to what the AEMC proposed in the Power of Choice review. The key differences relate to:

- 1. *Relationship between the Metering Coordinator and the retailer.* The Power of Choice review proposed that a standard contract between the Metering Coordinator and the retailer be established. SCER asks that the AEMC consider the implications of regulating a standard contract between the two parties, and proposes that a retailer's assignment of a Metering Coordinator to a metering installation should be a commercial arrangement, the terms of which would be a commercial negotiation.
- 2. *Smart meters as part of a regulated DSP business case.* The Power of Choice review recommended that a framework be established to govern the targeted provision of smart meters by a distribution network business as part of a DSP program. SCER removed this proposal but suggests that nothing in the proposed arrangements would preclude a distribution network business from offering payment to a Metering Coordinator for metering services to support a DSP program.
- 3. *Jurisdictional policies.* The Power of Choice review recommended that there should be a national approach to new and replacement policies. SCER has proposed that jurisdictions should have the power to determine their own new and replacement policy, and decide whether this policy requires meters to meet all or part of the smart meter minimum functionality specification. SCER also proposes that jurisdictions should have the power to prescribe a particular Metering Coordinator exclusivity to coordinate metering services for one or more

<sup>&</sup>lt;sup>60</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, pp 25-36.

meter types (eg type 6/7 meters) as a transitional measure, or where the jurisdiction sees little benefit in opening that market up to competition. SCER also proposes that jurisdictions would maintain the right to determine their own reversion policies, eg a policy stating an existing meter cannot be replaced with a lower functionality meter.

4. *Information about metering charges.* SCER has proposed that retailers be required to inform consumers of their metering charges and asks the AEMC to determine how this could be achieved. This proposal was an outcome of SCER's *National Smart Meter Consumer Protection and Safety Review,* and has been included in this rule change request for the AEMC's consideration.

Figure 3.1 outlines SCER's proposed model and responsibilities. Figure 3.2 provides an overview of the issues that relate to the rule change request.



#### Figure 3.1 SCER's proposed model and responsibilities

#### Figure 3.2 Overview of the issues that relate to the rule change request



### 3.3 SCER's assessment of how the changes would promote the National Electricity Objective and the National Energy Retail Objective

SCER expects that these changes would advance the National Electricity Objective (NEO) in three ways, as outlined below. These arguments would apply equally to the National Energy Retail Objective (NERO). The NEO and NERO are further explained in Chapter four.

#### Improving overall market efficiency

SCER considers that the proposed arrangements would help consumers and other market participants make more efficient decisions about how they use and invest in the electricity system, in particular by:

- enabling engaged consumers to better manage the quantity, timing and cost of their electricity use, facilitating choice in electricity products and services to meet their needs (ie enabling the provision of a range of tariff options and products);
- more efficient network investment decisions, where efficient price signals lead to deferred or avoided network capital or operating costs by reducing peak demand; and
- more efficient operation of generation assets and participation in financial markets (where retailers have access to actual customer load profiles and where operation of peaking generation can be avoided).<sup>61</sup>

### Promoting efficient investment in metering and related services

SCER considers that the proposed arrangements would support more efficient investment decisions about metering. A decision to deploy advanced meters would only be expected to occur where the benefits throughout the supply chain (ie to retailers, third party energy service providers, network businesses and consumers) exceed the costs of deployment. In the long term the benefits to retailers, third party energy service providers and network businesses should be captured by customers in the form of lower costs, through competition and the operation of economic regulation undertaken by the AER.<sup>62</sup>

SCER expects that the proposal to allow any accredited party to take on the role of Metering Coordinator would increase competition in the provision of metering and related services, which would be expected to reduce metering costs to customers. Competition is also likely to promote innovation that would further reduce metering costs in the long term and increase the range of functions and associated services that can be offered to consumers.

<sup>&</sup>lt;sup>61</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, CER, October 2013, p20.

<sup>&</sup>lt;sup>62</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p20.

By separating the provision of metering and related services from the activities of retailers and other third party energy service providers, SCER considers there would be a reduced need for the meter to be replaced when a customer changes retailer or moves premises where an advanced meter is installed. This would reduce metering costs directly by reducing the likelihood of unnecessary meter replacement, and indirectly by increasing investment certainty for Metering Coordinators. These cost reductions are likely to be passed on to customers.<sup>63</sup>

#### Reducing the cost of maintaining quality, reliability and security of supply

SCER considers that the increased penetration of advanced metering with network functions would help network businesses to better monitor reliability and quality of supply by allowing them to respond more promptly to power outages or poor quality. It is also expected to enable functions like direct load control and remote connection and disconnection, which provide additional options for network businesses to manage reliability and security of supply more effectively and at a lower cost.

SCER proposes that these cost savings and the increased ability to monitor the operation of the network would improve the quality and reliability of electricity supply to consumers.<sup>64</sup>

<sup>&</sup>lt;sup>63</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 21.

<sup>64</sup> SCER, op. cit, p 21.

## 4 Assessment framework

This chapter sets out the requirements under National Electricity Law and National Energy Retail Law that the AEMC must satisfy in considering the rule change request, and provides our proposed approach for assessing the rule change request.

## 4.1 Requirements under National Electricity Law

Our assessment of this rule change request must consider whether the proposed rule promotes the National Electricity Objective (NEO) as set out under section 7 of the National Electricity Law (NEL). The NEO states that:

"the objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:<sup>65</sup>

(A) price, quality, safety, reliability, and security of supply of electricity; and

(B) the reliability, safety and security of the national electricity system."

We may make a more preferable Rule if we are satisfied that it is likely to better contribute to the achievement of the NEO.  $^{66}$ 

## 4.2 Requirements under National Energy Retail Law

SCER's rule change request proposes amendments to the NERR, which therefore requires the Commission to have regard to the National Energy Retail Objective (NERO). The NERO states that:

"The objective of this Law is to promote efficient investment in, and efficient operation and use of, energy services for the long term interests of consumers of energy with respect to price, quality, safety, reliability and security of supply of energy".<sup>67</sup>

The National Energy Retail Law (NERL) requires us to:

Where relevant, satisfy itself that the rule is "compatible with the development and application of consumer protections for small customers, including (but not limited to) protections relating to hardship customers" (the "consumer protections test").<sup>68</sup>

<sup>&</sup>lt;sup>65</sup> The objective captures the three dimensions of efficiency, productive (efficient operation), allocative (efficient use of) and dynamic efficiency (efficient investment). Productive efficiency means that goods and services are provided at lowest possible cost to consumers; allocative efficiency means that resources are allocated to their highest value uses and prices reflect the resource costs of providing those goods and services that consumers value; dynamic efficiency means investment and innovation in the production of goods and services over time, taking into account changes in technologies and the needs and preferences of consumers.

<sup>66</sup> Section 91A of the NEL.

We may make a more preferable Rule if we are satisfied that it is likely to better contribute to the achievement of the NERO. $^{69}$ 

## 4.3 Proposed assessment framework

This section sets out our approach for assessing whether the proposed rule change will, or is likely to, promote the NEO and the NERO.

The rule change request seeks to provide for a new regulatory framework in the NER (and NERR where relevant) to promote competition in the provision of metering and related services in the NEM. We will need to consider whether such a framework would:

- encourage consumer participation and choice of energy services and products that reflect needs and preferences;
- provide energy services at lowest possible cost to consumers;
- maximise overall market efficiency, ie metering and related services that reflect efficient costs; and
- support innovation and efficient investment in metering and related services over time.

To inform our analysis, we propose to use the following criteria:

## 4.3.1 Facilitating competition

A competitive market for metering should promote incentives for commercial parties to supply consumers with the energy products and services that consumers want, and should reflect the efficient cost of providing those services.

It is recognised that metering data and services have value to a range of other parties including retailers, network businesses and third party energy management companies. The party that owns or manages access to a meter should have incentives to provide other users with access to the meter and supporting functionality where it is efficient to do so (subject to compliance with applicable privacy obligations). This recognises that metering resources and services should flow to their highest value uses and enable efficiencies to be captured across the supply chain.

We will consider any interactions between the regulated and competitive market frameworks that may lead to distortions in competition. In particular, arrangements for the efficient identification and recovery of the regulated costs of existing metering infrastructure in way that does not undermine the competitive provision of more advanced metering infrastructure (for example, through regulated exit fees).

69 Section 244 of the NERL.

<sup>67</sup> Section 13 of the NERL.

<sup>68</sup> Section 236(2)(b) of the NEL.

We will also assess whether the obligations and incentives likely to arise under the proposed new framework are the most efficient way of promoting consumer choice and participation in the market.

## 4.3.2 Transparency and predictability

There are two aspects to transparency that we will consider as part of this rule change process.

First, the new legal framework for metering, governing roles, responsibilities and accountabilities, should be clear and understandable to all participants. This supports business confidence and their willingness to invest.

Second, all parties, especially consumers, should have sufficient relevant information from which to make efficient decisions and trade-offs. For example, consumers will need to have clear information about the cost of metering services, including the relative costs of upgrading from their existing meter, currently paid for through regulated network charges, to more advanced metering technology. This requires that metering costs be unbundled from network charges. Transparency is integral to consumer confidence and engagement in the market.

## 4.3.3 Administrative burden and transactions costs

Transactions costs represent the costs of entering into arrangements or contracts to purchase or supply a good or service.

Any new arrangements should be simple and practicable from a consumer's perspective. Competition in metering is unlikely to mean that consumers will actively shop around for different types of meters. Instead, a consumer's decision to take up a new product or service will include (if required) the metering technology as part of that package. Consumers should have timely and easy access to the information they require to make informed decisions regarding the range of service offerings available to them. This will promote consumer engagement with retailers and other providers of metering and energy related services. Such engagement will also help foster effective competitive discipline on the pricing and quality of these services.

The rules should be simple from the perspective of businesses and the minimum necessary to achieve their intended objectives. Where regulation is excessive, complex or ambiguous, it imposes unnecessary risks and increases costs for businesses. These costs will inevitably be passed through to consumers in the form of higher prices.

## 4.4 Proposed assessment of consumer protections

The Commission is also required to satisfy itself, in accordance with the consumer protections test under the NERL, that any rule it makes is compatible with the development and application of consumer protections for small customers, including (but not limited to) protections relating to hardship customers. There are a number of elements to the Commission's consideration of the consumer protections test, including the:

- meaning of "compatible" with consumer protections;
- meanings of "development" and "application" of consumer protections; and
- meaning of "consumer protections".

The Commission proposes to give the word "compatible" its ordinary meaning, as it is not defined in the NERL. In simple terms, the consumer protections test could be interpreted as: can the rule be made without causing problems for, or conflicting with, the development and application of consumer protections for small customers.

Considering the "application" of consumer protections will examine consumer protections as they currently exist and how they are presently applied. The Commission proposes in this regard to consider:

- whether a new rule would impede currently applicable consumer protections; and
- whether a new rule would clarify (and not be inconsistent with) currently applicable consumer protections.

The consideration of the "development" of consumer protection requires a forward looking assessment. In this regard, the Commission proposes to consider:

- whether a new rule will or may impede the future development of consumer protections; and
- whether consumer protections (either within or outside the NERL and NERR) may be developed through other regulatory avenues over time, including judicial decisions.

Given that the Commission is required to "satisfy itself" that the test has been met, the Commission has a degree of discretion in how it considers and gives weight to the different matters and issues relevant to its consideration.

### 4.4.1 Scope of consumer protections

The Commission proposes to consider whether any new rule is compatible with the development and application of:

- consumer protections provided within the NERL and NERR;
- consumer protections under the general law (for example, Australian Consumer Law);
- consumer protections provided under retail energy laws and regulations of jurisdictions participating in the NECF (which currently includes Tasmania, the Australian Capital Territory, South Australia and New South Wales); and
- to the extent relevant and to be given appropriate weight, consumer protections under the retail energy laws and regulations of jurisdictions not yet participating in the NECF (which currently includes Queensland, Victoria, Western Australia and the Northern Territory).

The consumer protections test is most likely to be relevant to the proposed arrangement in the rule change request that allows for consumers to appoint their own Metering Coordinator. As discussed in Chapter six, SCER has requested that the AEMC consider what consumer protections, if any, should be established to protect consumers who exercise that choice.

### Question 1 Are there any additional criteria that should be considered in assessing this rule change request?

#### 5 Efficient provision of metering and related services

SCER has proposed a number of elements that would form part of the arrangements to promote competition in metering and related services in the NEM. This chapter focuses on SCER's proposal for a new Metering Coordinator role and associated issues for consultation. Chapter six discusses the relationships and incentives between parties on the basis of SCER's proposal for a Metering Coordinator.

#### 5.1 SCER's proposal for a Metering Coordinator

SCER proposes to establish a Metering Coordinator role for the provision of metering and related services. The Metering Coordinator role would be based on the current "Responsible Person" responsibilities as set out in Chapter seven of the NER. SCER proposes to change the term "Responsible Person" to "Metering Coordinator" to provide clarity in the transition to the new arrangements.

To allow for the competitive provision of metering and related services and to give effect to the Metering Coordinator role, SCER proposes to change the existing provisions under the NER.

The existing provisions would be amended to allow any registered and accredited party to perform the Metering Coordinator role and hence provide metering and related services to the market. This would mean that the existing provision that only provides for a retailer or local distribution network business to become the "Responsible Person" would be removed.

SCER noted in its rule change proposal that if registered and accredited with AEMO as a Metering Coordinator, a retailer or local distribution network business (as a separate ring fenced business) could perform the role.

SCER considers that the proposed Metering Coordinator role is consistent with, and builds on, the intention of the original NEM principles for competition and investment in metering. In particular, allowing any registered and accredited party to be a Metering Coordinator would increase competition and innovation in range of functions and associated services that could be offered to consumers. This in turn would lead to more efficient costs in provision of meters and related services.

#### Proposed functions and obligations of the Metering Coordinator

As discussed in Chapter two, the "Responsible Person" manages the end to end metering services and is liable for the accuracy of the metering installation, integrity and delivery of metering data. The "Responsible Person" is required to engage a Metering Provider<sup>70</sup> and a Metering Data Provider.<sup>71</sup>

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<sup>&</sup>lt;sup>70</sup> The Responsible Person may in some cases allow another person to engage a Metering Provider to install and maintain the metering installation.

<sup>&</sup>lt;sup>71</sup> A Metering Data Provider collects, processes, stores and delivers metering data to the relevant parties that are entitled to receive it under the NER. See NER clause 7.4.1A.

SCER proposes that the Metering Coordinator would have the same responsibilities and liabilities as currently attached to the "Responsible Person" role under Chapter seven of the NER. In particular, the Metering Coordinator would:

- retain responsibility for provision of metering and related services, including installation, maintenance and testing of the metering installation and collection, processing and delivery of metering data;
- be legally liable for accuracy of the metering installation and integrity and delivery of metering data;
- be registered and accredited by AEMO; and
- engage and coordinate the availability, dispatch, performance and payment of the Metering Provider and Metering Data Provider.<sup>72</sup> SCER has proposed no changes to the roles and responsibilities for Metering Provider and Metering Data Provider.

The Metering Coordinator would also be responsible for new functions, such as identifying the features of the equipment to be included in the metering installation in accordance with the requirements of the party engaging the Metering Coordinator.

The AEMC recently provided SCER with advice on a framework for open access and common communication standards to support competition in end use energy services enabled by smart metering functionality. The final advice included a number of recommendations, including the need for a gate keeper role to manage access, security and congestion to smart meter functionality.<sup>73</sup> The advice suggested that the gate keeper role could be incorporated into the role and responsibilities of the Metering Coordinator, or combined with an existing role under the NER, for example the Metering Provider. We will consider the gate keeper role as part of our assessment of SCER's proposal for a Metering Coordinator, including, among others recommended by the advice, defining the functions that would apply and appropriate accreditations that may be required.

#### 5.2 Issues to consider

This section considers a number of issues related to creating the Metering Coordinator role. This includes our considerations regarding whether to adopt a separate Metering Coordinator role. It also considers the following issues related to the arrangements that SCER has proposed to support implementation of a Metering Coordinator:

- Accreditation and enforcement requirements required for the role.
- Loss of accreditation or failure of a Metering Coordinator.

<sup>&</sup>lt;sup>72</sup> Under the rule change request, a Metering Coordinator can also be a Metering Provider and/or a Metering Data Provider where accredited to fulfil these functions.

<sup>73</sup> AEMC, Framework for open access and common communication standards, Final advice, AEMC, 10 April 2014.

- Data access provision for billing and settlements.
- SCER's proposal that jurisdictions could give one or more Metering Coordinators exclusivity for certain types of metering installations.

#### 5.2.1 Adoption of a separate Metering Coordinator role

We will consider SCER's proposal for a separate Metering Coordinator role and whether this is the most efficient approach. As part of our assessment we will have regard to other options that may also allow for competitive provision of metering and related services. The Power of Choice review considered the need for a Metering Coordinator and potential alternative options. We intend to build on this analysis for the rule change request.

Our assessment will take into account the following:

- Barriers to entry for new participants.
- Compliance costs for parties to be accredited by AEMO.
- Avoiding inefficient meter churn when a consumer switches retailer.
- Provision of efficient metering and energy services and costs.
- Need for a smooth transition to any new agreed framework.

To determine whether the Metering Coordinator option should be adopted, it is important to distinguish between the party that is responsible for a metering installation at a connection point as compared to the parties responsible for the provision and quality of metering and data services.

The provision of a metering installation at a connection point/s can be considered a separate obligation to the obligation to provide metering and related services on behalf of a consumer.

Under the NER, retailers must ensure that there is a metering installation at each of their connection points and that these metering installations are registered with AEMO.<sup>74</sup> SCER has not proposed to change this obligation.

For the provision of metering and related services, the following new arrangements would apply:

• The retailer would have the default responsibility for engaging a Metering Coordinator on a consumer's behalf. This is a default responsibility for consumers that do not elect to contract directly for the services of a Metering Coordinator.<sup>75</sup> SCER expects this would reduce the potential for inefficient

<sup>&</sup>lt;sup>74</sup> Clause 7.1.2 (a)(1) of the NER.

<sup>&</sup>lt;sup>75</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 8.

meter churn when a consumer switches retailers, as the choice in metering services and technology is not tied to the retailer or retail energy charges.<sup>76</sup> We discuss the arrangement between the Metering Coordinator and a consumer in Chapter six.

• The Metering Coordinator would provide the metering and related services on behalf of the retailer or consumer that appointed it.

There are alternative options that could be considered to SCER's proposed model. For example, the option of expanding the existing arrangements that are in place for remotely read interval meters; or alternatively combining the current responsibilities of the "Responsible Person" with the Metering Provider role.<sup>77</sup> These options are discussed below.

#### Expanding existing arrangements in place for remotely read interval metering

Currently, where remotely read interval meters are installed, the arrangements for metering services are considered contestable. That is, either the retailer or the local distribution network may be responsible for the provision of metering services. The relevant metering services, for example, installation, maintenance, and collection of data services must be provided by a Metering Provider and Metering Data Provider.<sup>78</sup>

An alternative to creating a separate Metering Coordinator role is to allow the retailer to become the "Responsible Person" for all types of meters. The retailer would retain liability for the accuracy of a metering installation and the integrity of data collection and delivery. Under this option, retailers may choose to provide the metering services directly or contract out these services to separate provider. Retailers would still be required to appoint a Metering Provider and Metering Data Provider in accordance with existing provision of the NER.<sup>79</sup>

This approach may be simple to implement given retailers' current role for remotely read interval meters and that retailers are also Registered Participants in the NEM. Registered Participants in the NEM are required to meet a number of requirements under the NEL and the NER that include, among other provisions, participation in dispute resolution and confidentiality obligations. Compliance with these obligations is important to consider when designing new competitive framework.

While the option of making the retailer the "Responsible Person" may be relatively simple to implement, it could limit competition in the provision of metering and related services.

<sup>76</sup> SCER, op.cit., p 7.

<sup>77</sup> AEMC, *Framework for open access and common communication standards,* final report, AEMC, March 2014, p iv.

<sup>78</sup> Accreditation is granted by AEMO in accordance with the NER, the metrology procedure and service level procedures.

<sup>79</sup> Clause 7.4.2(d) and clause 7.4.2A(f) of the NER. See also clause 7.2.5(a) and clause 7.2.5(c1) of the NER.

For example, where the retailer is given exclusivity for metering services, the incentive is placed on the retailer to offer the right product or service to the consumer and the necessary metering technology to support those services. Therefore a consumer's choice may be limited to the products and services that the retailer is willing to offer.

There may also be a risk of inefficient meter churn when the consumer changes retailers, because the losing retailer may not be willing to offer its meter for use by the incoming retailer (or will only be willing to do so at an excessive cost). This option may also increase meter stranding risk for retailers, as the new retailer may seek to replace the existing meter of a customer it wins (eg if the existing meter does not have the functionality the new retailer or customer desires). To avoid this, the losing retailer may seek to recover the costs of the metering installation over the duration of a retail contract, which is generally significantly less than the life of the meter (eg through addition of a risk premium to the contract or an exit fee). This might increase the costs of metering are related services under these arrangements relative to arrangements that allocated metering responsibilities to non-retailer third parties.<sup>80</sup> Other issues that need to be considered include the ability for the consumer to renegotiate its services with new retailers, and the potential for smaller retailers to participate and obtain efficient metering services. These are discussed further in Chapter six.

#### Combining the existing "Responsible Person" role with the Metering Provider responsibilities

The role of the "Responsible Person" to date has been separated from that of the Metering Provider. This is to allow for independence and competitive arrangements between the party responsible for end to end metering services and those who provide the metering installation itself.

The Metering Provider is an accredited service provider under the NER<sup>81</sup> and is required to meet a number of obligations in accordance with AEMO's metrology and service level procedures. However, Metering Providers are not Registered Participants under the NER and therefore do not have the same liabilities<sup>82</sup> and compliance requirements as the current "Responsible Person".<sup>83</sup>

As part of the AEMC's advice for a framework for open access and common communication standards, it was proposed in some submissions that the gatekeeper role could be combined with the role of the Metering Provider. In considering this option, it is important to recognise the different services that each party provides. For example, the Metering Provider currently provides basic metrology services, whereas the gateway role will enable access and use of energy services enabled by functionality of smart meters. Our assessment of this option will have regard to the existing

<sup>&</sup>lt;sup>80</sup> AEMC, *Power of Choice Review*, supplementary paper to draft report, AEMC, 6 September 2012, Sydney, p 10.

<sup>&</sup>lt;sup>81</sup> Metering Providers must be accredited and registered by AEMO, the requirements for which are set out in the AEMO service level procedures.

<sup>&</sup>lt;sup>82</sup> The Metering Provider is subject to civil penalties in some instances, for example, as per Clause 7.8.2©) and 7.12 of the NER.

<sup>&</sup>lt;sup>83</sup> The Responsible Person is not itself a Registered Participant but parties that can be the Responsible Person are Registered Participants (eg retailers, local distribution businesses).

arrangements that allow for competitive provision of services provided by Metering Providers and Metering Data Providers. We will also consider whether a Metering Provider is an appropriate party to take on the responsibilities and liabilities for provision of end to end metering and related services given the nature of their role.

## Question 2 What are the benefits for competition by allowing any registered and accredited party to take on the Metering Coordinator role?

# Question 3 Are there alternatives that are preferable to creating a separate Metering Coordinator role? For example, would it be appropriate to combine the proposed Metering Coordinator responsibilities with the existing Metering Provider role? If so, what advantages would this alternative deliver?

#### 5.2.2 Accreditation and enforcement requirements

SCER proposes that before any party becomes a Metering Coordinator that party must register with, and be accredited by, AEMO for the role. SCER has also requested that the AEMC consider as part of the rule change request any enforcement provisions required, including the need for any changes to civil penalties provisions.<sup>84</sup>

As noted above, the "Responsible Person" is currently a Registered Participant in the NEM. This is due to the allocation of the role to market participants (including retailers) and distribution network businesses. The "Responsible Person" role has certain civil penalty provisions attached to its responsibilities and hence where there is a breach of certain provisions of the NEL or NERL, enforcement action could be taken.

There are various categories of accreditation applicable for the various metering installation types and metering service provisions already in place under the NER. Accreditation is a technical qualification process through which AEMO and registered participants gain assurance that these service providers have the ability – through adequate systems and procedures – to comply with their obligations.

Any registrations or accreditation provisions will need to consider the requirements for provision of basic metrology functions and also those required as part of the proposed "gate keeper" role recommended to facilitate open access to energy services and products enabled by smart meters.

We will have regard to the existing arrangements for becoming a Registered Participant, for example, whether current provisions are appropriate to apply for the proposed Metering Coordinator role, or whether alternatives could be considered.

<sup>&</sup>lt;sup>84</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 14.

## Question 4 If established, should the new Metering Coordinator role be classified as Registered Participant under the NER or should other arrangements be put in place? If so, what accreditations may be required?

#### 5.2.3 Loss of accreditation or failure of Metering Coordinator

SCER proposes that there should be arrangements to address the risks of the failure of a Metering Coordinator, Metering Provider, or Metering Data Provider. For example, under this scenario, SCER proposes that these parties would automatically lose their accreditation if a receiver or other insolvency official was appointed.<sup>85</sup>

In the event where a Metering Coordinator fails, SCER proposes that the retailer must arrange for another Metering Coordinator to be appointed or must ensure that a Metering Coordinator will be appointed by a customer without undue delay. Where a Metering Provider or a Metering Data Provider fails, the Metering Coordinator must arrange for another Metering Provider or a Metering Data Provider to be appointed.<sup>86</sup>

Currently, there are arrangements in place for loss of accreditation of Metering Providers and Metering Data Providers. Under these arrangements, AEMO is responsible for considering whether a Metering Provider or Metering Data Provider has breached the NER, or considers a party should be deregistered.<sup>87</sup> In the event that these parties fail, the "Responsible Person" is required to ensure that a new Metering Provider and/or Metering Data Provider are engaged. Contracts between the "Responsible Person" and Metering Provider/Metering Data Provider are likely to include arrangements where those businesses may be under external administration.

We will also consider whether arrangements should be put in place under the NER to determine what would happen in the event a Metering Coordinator fails. In particular, we will need to consider whether arrangements should be established to allow a new Metering Coordinator to communicate with the failed Metering Coordinator's metering installations, for example a requirement to put escrow arrangements in place, or whether this could be left to commercial negotiation.

SCER has proposed that the Commission also consider any consequential changes that may be required to the Retailer of Last Resort (ROLR) arrangements that are currently in place. This is to ensure that there is continued provision of metering services in the event a retailer fails.<sup>88</sup>

The ROLR scheme seeks to ensure that a consumer's continuity of supply is maintained in the event their retailer fails by establishing arrangements to transfer that consumer to another retailer. It is important to note that the ROLR scheme is governed under the

<sup>88</sup> SCER, op.cit., p 14.

<sup>&</sup>lt;sup>85</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 28.

<sup>&</sup>lt;sup>86</sup> SCER, op.cit., p 28.

<sup>87</sup> Clause 7.4.3 of the NER.

NERL and thus any amendments could not be made as part of this rule change request. However, the AEMC can recommend that SCER consider amendments to the NERL if they are considered necessary.

The failure of a retailer would affect the contract that retailer has with its Metering Coordinator, or the retailer's ability to provide metering services where it decides to operate as Metering Coordinator. There would need to be arrangements to ensure that the new retailer that is appointed following a ROLR event can maintain metering services to the consumer.

Under the current ROLR arrangements, the designated ROLR takes on the role of the "Responsible Person" for any metering installation for which the failed retailer was the "Responsible Person". Where the failed retailer (in its capacity as the "Responsible Person") has entered into an agreement with a Metering Provider under Rule 7.2.5 of the NER, the designated ROLR will, by force of law, become party to that agreement.<sup>89</sup>

If the Metering Coordinator role is established, we will need to consider whether a ROLR would be required to take on the contract between the failed retailer and the Metering Coordinator, and whether this will require changes to the NERL.

#### **Question 5** Are any specific arrangements required in the event that a Metering Coordinator fails?

#### **Question 6** Should there be any specific changes to the ROLR arrangements regarding metering?

#### 5.2.4 Data access provisions for billing and settlement

The NER sets out who is entitled to access and receive energy and metering data and how that data should be used.<sup>90</sup> The NER also outlines the requirements on the Metering Data Provider regarding remote communications to a metering installation.<sup>91</sup>

SCER considers that the current rules regarding data access and provision of electronic data transfer facilities to metering installations require revision, in light of future deployments of meters with advanced functionality.<sup>92</sup>

Our consideration of any consequential amendments required to the NER regarding who is entitled to energy, metering and settlements ready data will be limited to the proposed role of the Metering Coordinator. We will not consider any broader issues

<sup>89</sup> Section 140(2) of the NERL.

<sup>90</sup> Rule 7.7(a) of the NER.

<sup>91</sup> Clause 7.11.3 of the NER.

<sup>92</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 18.

related to parties seeking access to energy and consumption data as these are being considered in separate processes.

We will also consider any amendments required to the existing provisions for remote access and electronic data transfer facilities, including telecommunications requirements between the metering installation and the metering database. Our assessment of any changes will have regard to the recommendations made by the AEMC in its advice to SCER regarding the framework for open access and common communication standards, and how these recommendations are progressed.

## 5.2.5 Jurisdictional arrangements for prescribing Metering Coordinator exclusivity for certain metering installations

SCER proposes that the new arrangements should allow jurisdictions to prescribe, in certain situations, one or more, or a class of, Metering Coordinators exclusivity to coordinate metering services for some meter types. This is intended to support the efficient provision of basic metering services. SCER indicates that jurisdictions may wish to prescribe this arrangement for:

- Basic accumulation meters (ie type 6). SCER indicates a jurisdiction might consider that there is benefit in retaining the existing exclusive arrangements for this type of metering as a transitional measure. SCER highlights that it may be unlikely that competition would provide consumers with lower cost metering where there is a decreasing number of basic accumulation meters being installed.
- Maintaining registers of unmetered connections and calculating their energy use (eg street lights). SCER notes that a jurisdiction may consider there is little prospect of different business models to provide such services and hence there may be no benefit in opening this sector to competition.<sup>93</sup>

We will consider whether this provision is appropriate. In particular, we will consider how this arrangement would work in practice, and what affect it might have on the proposed competitive approach. For example, what may be the potential impacts on investment and innovation for more advanced metering and consumer choice of energy products and services that may require upgrades to the metering technology.

SCER's proposal is not specifically limited to basic type 6 and 7 metering installations. Therefore, our assessment will consider whether any exclusivity provision should be limited to only basic metering types.

#### Question 7 How would the proposed jurisdictional arrangements impact on the proposed approach for competitive provision of metering and related services?

<sup>&</sup>lt;sup>93</sup> SCER, op.cit, p 17.

Should SCER's proposal for prescribing Metering Coordinator exclusivity be limited certain metering types? If yes, what are the metering types that should be considered?
considered :

#### 6 Roles and relationships between parties

This chapter discusses the roles, relationships and incentives between parties based on SCER's proposed model for expanding competition in metering and related services. We outline the relationship between the:

- retailer and the consumer;
- retailer and the Metering Coordinator; and
- Metering Coordinator and the consumer.

#### 6.1 Retailer and consumer relationship

There are a number of circumstances in which a residential or small business consumer might seek to replace or upgrade their metering installation, including:

- when a consumer chooses to take up a flexible pricing offer;
- installation of distributed generation at their premise, such as solar panels (ie export/import to the grid);
- new connections;
- refurbishment at the premises; or
- replacement due to end of life of the metering technology.

Where a consumer decides to take up a new retail offer, product or service and an upgrade to their metering technology is required (eg time of use retail tariff), generally the provision of metering services may form part of a market retail contract for the sale and supply of energy. When a consumer installs a new product, for example solar panels, there also may be an agreement between the service provider and the consumer. The service provider may have another arrangement in place with the retailer or local distribution business to upgrade the consumer's metering technology.

In the case of new connections, refurbishment or replacements, the provision of metering and related services currently form part of a customer connection service. In practice, residential and small business consumers may organise a connection service through their retailer, who will liaise with the local distribution network business for the connection service or a change to the existing connection.<sup>94</sup> As discussed in Chapter two, large and medium business consumers may liaise directly with the local distribution network for an alteration to their connection. Generally, the retailer is responsible for recovering the costs from the consumer where it relates to provision of metering services.

<sup>94</sup> Part 3, Division 2, section 66 of the NERL. Part 4 and Schedule 2 of the NERR. Chapter 5A of the NER.

As discussed in Chapter five, under SCER's proposal the retailer must ensure that there is a Metering Coordinator at each of its customer's connection points. The retailer is responsible for engaging a Metering Coordinator on behalf of a consumer unless:

- the consumer elects to engage a Metering Coordinator directly; or
- a jurisdiction prescribes Metering Coordinator exclusivity for certain metering installations.

The retailer is able to perform the role of the Metering Coordinator provided that it is registered with AEMO as an accredited provider of metering services. In the circumstance where a consumer chooses to appoint their own Metering Coordinator, the retailer is not able to charge the consumer for metering services.<sup>95</sup>

To simplify arrangements for residential and small business consumers, SCER proposes that the standard retail contract under the NERR would include a clause specifying that the retailer is to arrange metering services on behalf of a consumer (unless the consumer chooses to engage its own Metering Coordinator).<sup>96</sup> Currently, the provision of physical metering equipment is not part of the current standard retail contract<sup>97</sup> - they form part of a deemed standard connection contract.<sup>98</sup> In determining the nature of competition in the provision of metering and related services, it will be necessary to understand the provisions that currently exist for metering services in standard retail and connection contracts and the contractual arrangements that may be required between a retailer and a consumer.

SCER has noted that any arrangements governing the provision of metering and related services should be as simple as possible for consumers. Consumers' decisions about metering are likely to be based on the product or service being offered (eg flexible pricing). This will be an important consideration in establishing any arrangements between consumers and other parties as part of this rule change request.

#### 6.1.1 Consent arrangements

The information and consent requirements between a retailer and consumer under the competitive framework need to be considered. There are number of different scenarios where consent may be required. For example, as discussed above, where a:

• consumer decides to take up a new retail tariff and an upgrade to its metering installation is required to support that offer;

<sup>&</sup>lt;sup>95</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 8

<sup>&</sup>lt;sup>96</sup> Under the proposal, a consumer would need to enter into a market retail contract with the retailer, and a separate contract with a Metering Coordinator. See SCER, *Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services*, rule change request, SCER, October 2013, p 8.

<sup>97</sup> Schedule 1, Clause 5.2 of the NERR.

<sup>98</sup> Schedule 2, clause 5.3 of the NERR.

- consumer seeks to upgrade its metering technology, for example because of renovations or building a new house;
- retailer or distribution network business seeks to upgrade its consumers' metering technology to improve business operation efficiencies, which can lead to more efficient services and costs to consumers.

SCER proposes that where a retailer:

- has engaged a Metering Coordinator (or has taken on the role of Metering Coordinator itself) it would be required to action a request from a residential or small business consumer to change the features of a metering installation. In this case the retailer:
  - must inform the consumer of any additional cost resulting from the consumer's request, and obtain their consent to the additional costs prior to proceeding with the change; and
  - may recover any additional costs from its consumer in a transparent manner.<sup>99</sup>
- seeks to change a consumer's metering installation, the retailer must:
  - adequately inform the consumer in writing prior to the change where there is no change to the costs charged to the consumer or services available to it; or
  - obtain the prior consent of the consumer where the change results in changes to the costs charged to the consumer or the services available to it.<sup>100</sup>

In other words, SCER proposes that the retailer would be required to seek the consumer's consent when a change to their metering installation results in a change to the costs or services agreed to in the original contractual arrangement between the consumer and the retailer. Where there is no change to the costs or services agreed to in the original contractual arrangement between the consumer and the retailer, SCER proposes that the retailer would only be required to inform the consumer of the proposed change, for example by letter. It is expected that the consumer would be able to opt-out of the upgrade if it so decides.

It is important to recognise that there are different forms of consent. Explicit informed consent is defined in the NERL, and can be summarised as consent given by a small consumer to a retailer where the retailer, or a person acting on its behalf, has clearly, fully and adequately disclosed all matters relevant to the consent and the consumer gives the consent to the transaction in writing, verbally (in a way that can be verified)

<sup>&</sup>lt;sup>99</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 29.

<sup>&</sup>lt;sup>100</sup> SCER, op. cit, p 29.

or by electronic communication.<sup>101</sup> For example, this applies when entering into an energy retail contract. SCER's proposal only considers explicit informed consent when there is a change to the costs or services provided by the meter.

In assessing SCER's proposal, we will have regard to the existing arrangements regarding information and consent, and what may be appropriate to support consumer decision-making and choice in energy products and services.

## Question 9 What information and consent requirements would be appropriate under the competitive model for provision of metering and related services?

## Question 10 Should opt-in / opt-out provisions apply where a party seeks to upgrade a consumer's metering installation to achieve business operational efficiencies that may lead to reduced costs for consumers?

#### 6.1.2 Information about metering charges

SCER proposes that retailers should be required to inform residential and small business consumers of their metering service charges and the retail tariff that would be offered if these charges were removed.<sup>102</sup> This arrangement would give consumers the information needed to compare the costs and benefits of different metering services. SCER considers that consumers who are interested in engaging a Metering Coordinator directly should have access to information about their current metering charges in order to adequately compare the costs and benefits of different metering options.<sup>103</sup>

Large electricity consumers have a range of options to investigate the cost of metering installations for their business, for example through a tender process. However, these options are not readily available to small consumers. Residential and small business consumers do not currently have ready access to information about their metering charges because they are not separately identified on a consumer's bill, but rather aggregated with network service availability charges.

SCER asks that the AEMC consider the best approach for a retailer to discharge this obligation. Options include separately identifying metering charges on bills, including it in the information a retail marketer is to provide a residential or small business consumer, or providing it to the consumer on request.

<sup>101</sup> Section 39 of the NERL.

<sup>102</sup> This proposal arose out of SCER's work program on smart meters and has been incorporated into this rule change request.

<sup>&</sup>lt;sup>103</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 10.

The implications of this obligation and the different options for a retailer to fulfil it will need to be considered. For example, a requirement to provide information about metering charges on a consumer's bill is likely to impose additional administrative costs on the retailer, which could be passed on to consumers. We will consider the costs against the potential benefits of such information.

## Question 11 Should retailers be required to inform consumers of their metering services charges? If so, what is an appropriate means for retailers to fulfil this obligation?

#### 6.2 Retailer and Metering Coordinator relationship

#### Obligations between parties

Under SCER's model the NER would be amended to require the Metering Coordinator to:

- inform the retailer of the functions required in a meter in that jurisdiction, and the circumstances in which the metering installation must be upgraded to provide those functions;
- inform the retailer where a change in meter results in material change to the consumer services, costs or contract terms;
- where the consumer chooses to appoint its own Metering Coordinator, the new Metering Coordinator must advise the consumer's retailer of the agreement between the consumer and the Metering Coordinator; and
- not unreasonably block a request from the retailer to change the features of a metering installation, provided it does not affect the functions being used by other parties.

SCER proposes that the Metering Coordinator would be able to assign its responsibility to another Metering Coordinator so long as there were no changes to the consumer's retail contract (where the retailer has engaged the Metering Coordinator) or the metering contract (where the consumer has engaged the Metering Coordinator). The Metering Coordinator must inform the retailer (or the customer, as applicable) of the change in responsibility.

#### Contract arrangements

SCER recognises that a competitive framework for the provision of metering and related services should seek to:

- support retention of the existing meter when a consumer changes retailer, where this is efficient;
- functions/services provided by the meter should be the same irrespective of the retailer'

- be based on normal commercial agreements; and
- allow parties to emerge alongside retailers and distribution network business that can independently accept financial liability for the provision of metering installations, including assessing the cost of that liability and the risk of the meter being replaced during its economic life.<sup>104</sup>

As such, SCER proposes that the assignment of a Metering Coordinator to a metering installation should be a commercial arrangement, the terms of which would be a matter for commercial negotiation. While SCER has proposed that the retailer and Metering Coordinator relationship should be based on commercial arrangements, they note that, to facilitate competitive outcomes, a standard contract between the retailer and the Metering Coordinator should be considered. If considered necessary, the contract should contain at a minimum contract length, termination fees, and exclusivity restrictions. SCER notes that the NER could be amended to include any principles necessary to define the minimum content of contracts for metering services.<sup>105</sup>

The nature of the relationship between the retailer and the Metering Coordinator will have an effect on the ability of the framework to achieve the above objectives. To inform these considerations, we will assess the various options (ie commercial arrangements versus a standard contract but still retains some commercial negotiation) having regard to:

- incentives for the Metering Coordinator to ensure its metering offer represents best value, and to provide a competitively priced offer to an incoming retailer;
- the risk that large retailers, who have capability to have separate metering service business may supply metering services to other smaller retailers at less favourable terms than themselves, which may reduce competition in the retail market;
- whether transaction costs for consumers are increased when switching retailers (eg need to renegotiate a contract each time);
- the possibility of inefficient meter churn in the event a consumer changes retailer (ie whether an incoming retailer would continue the contractual relationship with the incumbent Metering Coordinator, noting that it has the right to choose another Metering Coordinator);
- incentives for an incumbent Metering Coordinator and new retailer to negotiate in circumstances where the incumbent Metering Coordinator is also the former retailer for the site;
- whether the Metering Coordinator is likely to provide services that offer a good range of additional functions or can be easily upgraded so that its meters will not

<sup>104</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p9.

<sup>&</sup>lt;sup>105</sup> SCER, op. cit, p 26.

need to be replaced as new functions are taken up by retailers, distribution businesses or other service providers; and

• incentives for associated communications and data management systems to be interoperable with a range of parties.

#### Question 12 Should the relationship between the retailer and the Metering Coordinator be based on a commercial arrangement? If not, what alternatives should be considered? What are considered the costs and benefits of a standard contract for this relationship?

#### 6.3 Metering Coordinator and consumer relationship

As discussed, under SCER's proposal, all consumers would be able to contract directly with any accredited Metering Coordinator.<sup>106</sup> SCER expects that this arrangement will be relevant to large and medium sized consumers in particular by allowing them to arrange metering services to minimise costs or maximise opportunities to manage energy use. This arrangement would be supported by the unbundling of metering charges from distribution use of system charges because it would enable consumers to compare the costs and benefits of different metering service options.

Under the proposed arrangements:

- the retailer must not prevent a consumer from engaging a Metering Coordinator directly, and must inform the consumer of any changes required to their retail contract to facilitate this change;
- small customers would need to enter into a standard or market retail contract with their retailer for the supply of energy, and a separate metering contract with its chosen Metering Coordinator for the provision of metering services;
- the Metering Coordinator must inform the consumer of the functions required in a metering installation in that jurisdiction, and the circumstances in which the installation must be upgraded to meet those requirements;
- where a Metering Coordinator changes a metering installation or its functions, and the change has not been requested by the consumer, the Metering Coordinator must:
  - adequately inform the consumer in writing prior to the change where there is no change to the costs charged to the consumer or services available to it; or
  - obtain the prior consent of the consumer where the change results in changes to the costs charged to the consumer or services available to it; and

<sup>106</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 8.

• the Metering Coordinator must not unreasonably block a request from the consumer to change the features of their metering installation, provided it does not affect the functions being used by other parties.

The ability for a consumer to choose their own Metering Coordinator and contract directly could increase competitive discipline on retailers, for example, to provide products and services that consumers value at a price that appropriately reflects costs. However, there are a number of situations where this choice might be limited:

- A consumer could be locked into a market contract with its retailer that stipulates who the Metering Coordinator will be for the duration of that contract, therefore limiting a consumer's ability to contract their own Metering Coordinator.
- Consumers might choose not to engage in the metering segment of the supply chain, effectively meaning that in most cases the retailer is the Metering Coordinator.
- Prices offered for energy services by a retailer may be discounted because the retailer is the Metering Coordinator, thereby reducing a consumer's incentive to switch to another Metering Coordinator. This may have an effect on competition and innovation.<sup>107</sup>

Large and medium sized electricity consumers are likely to continue to, in the appropriate circumstances, organise their own metering under the new arrangements. Small business consumers may also seek to appoint their own Metering Coordinator. Residential consumers may choose a product or service offered by an energy services company, who then engages a Metering Coordinator on the consumer's behalf. For this arrangement to apply to small customers, we will need to have regard to whether:

- the AEMC has the power to regulate a relationship between a small customer and a Metering Coordinator under the NERR;
- small customers are likely to exercise this choice and, if so, whether the benefits accruing to consumers and market participants would outweigh the burden of any regulatory arrangements that might need to be put in place to support the arrangement; and
- the relationship between the consumer and their chosen Metering Coordinator should be a commercial arrangement negotiated between the two parties or a standard contract with minimum terms and conditions.

#### Consumer protections

If the possibility of a direct relationship between a small customer and a Metering Coordinator is established, we will need to have regard to what consumer protections are currently in place to protect these customers and any additional specific protections that may be required.

<sup>107</sup> AEMC, Framework for open access and common communication standards, final report, AEMC, 10 April 2014, p31.

A range of national and state arrangements provide contractual and market conduct requirements for businesses engaging with consumers, including the NECF, jurisdictional concession regimes and the Australian Consumer Law. The NECF is a framework that establishes the energy specific consumer protection obligations and arrangements for regulating the sale and supply of electricity to consumers in participating jurisdictions.<sup>108</sup> The framework includes provisions for a consumer's relationship with a retailer and a distribution network business, including associated rights, obligations and consumer protection measures (such as marketing, information and consent arrangements, security and privacy provisions).

However, the NECF framework does not generally apply to the services provided by third party energy service providers. As such, consumer protection obligations under the NECF do not cover a direct relationship between a consumer and a Metering Coordinator (unless the Metering Coordinator is the retailer).

SCER officials are considering a recommendation made in the Power of Choice review that consideration be given to whether the NECF should amended to include a framework for the regulation of third party service providers. As part of this rule change request we will consider what additional protections might be required in the context of SCER's work, to make sure that a consumer is appropriately protected in any direct relationship it has with a Metering Coordinator.

#### Question 13 Should residential and small business consumers be able to exercise a right to appoint their own Metering Coordinator? If so, what arrangements would need to be put in place to govern that relationship?

## Question 14 Are any additional consumer protections required to support a direct relationship between a consumer and a Metering Coordinator?

<sup>&</sup>lt;sup>108</sup> The NECF includes NERL, NER and NER Chapter 5A.

#### 7 Network regulatory arrangements

This chapter provides an overview of the issues related to the network regulatory arrangements that may be needed to support the proposed arrangements. The issues that we will consider in the rule change request include:

- the need for metering charges to be unbundled from network charges;
- clarity and transparency of exit fees when an existing accumulation or manually read interval meter is replaced;
- provision for network businesses to provide smart meters as part of a regulated DSP business case; and
- whether the ring fencing arrangements for distribution businesses are appropriate for the competitive provision of metering and related services.

## 7.1 Unbundling metering charges from distribution use of system charges

SCER proposes that each distribution network business should be required to unbundle metering charges for any meters currently included in its regulatory asset base from its distribution use of system tariff at the next regulatory review.<sup>109</sup> SCER considers that unbundling metering charges from distribution use of system charges would:

- introduce more transparency for the costs of metering services;
- allow consumers to compare the costs and benefits of different metering service options; and
- allow advanced metering technology to be installed with the consumer being confident that they are not still paying for the old metering installation through general network charges.<sup>110</sup>

The AER determines the classification of services provided by network businesses as part of the regulatory reset process for each jurisdiction.<sup>111</sup> Classification determines how distribution services will be regulated and how the costs of providing these services will be recovered during a regulatory control period. Most distribution services are classified as standard control services and the regulated revenue required to provide these services is recovered in full from consumers through distribution use of system charges.

<sup>109</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 11.

<sup>&</sup>lt;sup>110</sup> AEMC, *Power of Choice review*, final report, AEMC, 30 November 2012, Sydney, p 88.

<sup>111</sup> Clause 6.2.1(a) of the NER.

Services for accumulation and manually read interval meters have generally been classified by the AER as a standard control service. This means that the network distribution businesses are able to bundle charges for metering services into the basic electricity network charges that all consumers pay at a price approved by the AER. Reclassifying services for accumulation and manually read interval meters as an alternative control service means that these charges are unbundled from the general network charge and only paid by consumers using those types of meters.

The AER has unbundled metering charges from distribution use of system charges for distribution network businesses in the ACT and South Australia. In Victoria, the state government established an order that set out separate arrangements for metering charges in Victoria, which makes metering services tantamount to an alternative control service.<sup>112</sup> The AER is in the process of changing how metering services are classified for distribution network businesses in NSW and Queensland.<sup>113</sup> Assuming that the AER unbundles metering charges for distribution network businesses in Queensland and NSW at their next regulatory control periods, Tasmania would be the only remaining NEM jurisdiction where metering charges are recovered through distribution use of system charges. Tasmania's next regulatory control period commences in 2017.

Distribution network businesses may seek to retain some services as standard control services, for example existing load management (ie ripple control) and bundle those charges into distribution use of system charges. This may be based on the premise that load control services have network wide benefits that will eventually lead to lower costs to all consumers. We will need to consider what implications a decision to classify these services as standard control might have for consumers who are paying separately for load control capability.

Given that the AER has unbundled metering charges from distribution use of system charges for most distribution network businesses in NEM jurisdictions or is in the process of doing so, we will need to consider whether any additional requirements are needed in the NER.

Question 15 Do the NER require any changes to facilitate unbundling of metering charges from distribution use of system charges? If so, what factors should be considered?

<sup>&</sup>lt;sup>112</sup> See section 15A and section 46D of the *Electricity Industry Act* 2000.

In March 2013 the AER decided to reclassify the provision, maintenance, reading and data services for type 5 and 6 metering services in NSW from standard control to alternative control. Reclassification and subsequent changes to cost allocations for all NSW distribution network businesses is due to occur by the regulatory period commencing 1 July 2015. See AER Stage 1 Framework and approach paper, Ausgrid, Endeavour Energy and Essential Energy, March 2013. In December 2013 the AER released a paper outlining its preliminary positions for the Framework and Approach for the next regulatory control period for Queensland distribution network businesses from 1 July 2015 to 30 June 2020. The paper proposed that metering services be reclassified from standard control to alternative control to facilitate more choice for customers. See AER, *Framework and Approach for Energex and Ergon Energy*, preliminary positions paper, AER, December 2013.

#### 7.2 Exit fees for accumulation and manually read interval meters

SCER proposes that a transparent exit fee be determined by the AER and applied where a consumer, retailer or other party on behalf of the consumer chooses to upgrade an accumulation or manually read interval meter that is owned and managed by the local distribution network business.<sup>114</sup> In many cases these meters will not be near the end of their useful lives. This represents a stranding risk to the distribution network businesses as they may not have recovered the full cost of those metering installations.

The objective of an exit fee is to help the local distribution network business to recover the stranded (sunk) costs of its existing meters.<sup>115</sup> An appropriate, clearly defined and transparent exit fee for accumulation or manually read interval meters would be expected to encourage competition and more efficient investment in advanced metering.

The NER require that retail and distribution network businesses negotiate in good faith to ensure that the distribution network business is reasonably compensated when a type 5, 6 or 7 metering installation is upgraded (and therefore the distribution network business is no longer the "Responsible Person").<sup>116</sup> However, a lack of clarity around the phrase "reasonably compensated" can lead to uncertainty about the fee a distribution network business is able to charge and what a retailer might reasonably be expected to pay.<sup>117</sup>

SCER proposes a change to the NER to remove the existing requirement that compensation for accumulation or manually read interval meters be negotiated between retailers and distribution network businesses. It is proposed that the AER is given the responsibility to determine an appropriate exit fee.<sup>118</sup> SCER proposes that the AER consider the following criteria when making an exit fee determination to provide sufficient transparency regarding exit fees and certainty to network businesses that they are able to recover the costs incurred by any metering installation no longer required:

- The fee must be reasonable.
- The fee should be based on the average depreciated value of the stock of the distribution business's existing accumulation and manually read interval meters.

<sup>&</sup>lt;sup>114</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 11.

<sup>&</sup>lt;sup>115</sup> AEMC, Principles for metering arrangements in the NEM to promote installation of DSP metering technology, supplementary paper, AEMC, 6 September 2012, Sydney, p 27.

<sup>116</sup> Clause 7.3A(g) of the NER. For example, in South Australia, where metering charges have been unbundled, SA Power Networks' annual pricing proposal for 2013/14 proposed a meter exit fee service tariff of \$256.84 for type 6 (accumulation) meters. See SA Power Networks, Annual pricing proposal, SA Power Networks, 1 May 2013, p 82.

<sup>117</sup> AEMC, Power of Choice review, final report, AEMC, 30 November 2012, Sydney, p 92.

<sup>&</sup>lt;sup>118</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 31.

This is for simplicity and administrative ease, as an alternative to attempting to determine the age of the actual meter at each individual consumer's premise.

- The fee may include efficient and reasonable costs associated with transferring the customer to another Metering Coordinator.
- The fee for type 5 metering installations may differ from the fee for type 6 metering installations.
- Where a meter is installed that is not compliant with the new and replacement policy and minimum functionality required by that jurisdiction, exit fees would not apply.<sup>119</sup>

SCER also proposes that the AER should consider whether a cap on fees would be appropriate and, if so, the level of the cap. A cap may help to provide retailers, consumers and other parties with certainty that exit fees would not be unreasonably high, and confidence to invest in a new meter.<sup>120</sup>

As a transitional arrangement, SCER proposes that the local distribution network business would become the initial Metering Coordinator for those metering installations for which it was previously the Responsible Person.<sup>121</sup> Where another party becomes the Metering Coordinator at a site with an accumulation or manually read interval mater, the distribution network business could recover the regulated exit fee. In Victoria, the local distribution network business would be the Metering Coordinator for the smart meters it has deployed for a specified period, at the end of which the regulated exit fee would apply to allow a retailer or consumer to replace a meter installed under the mandated smart meter program.<sup>122</sup> Transitional arrangements are discussed further in Chapter nine.

### Question 16 Should the AER have a role in determining exit fees for accumulation and manually read interval meters?

### Question 17 If so, are SCER's proposed criteria for determining exit fees appropriate, and should a cap on fees be considered?

<sup>&</sup>lt;sup>119</sup> It is unclear in what situations this might occur, and we will need to consider whether the proposed arrangement is necessary.

<sup>120</sup> AEMC, Power of Choice review, final report, AEMC, 30 November 2012, Sydney, p 93.

<sup>121</sup> Most residential and small business consumers (other than in Victoria) have accumulation meters. These meters are owned and managed by the local distribution network business who receives a regulated return on this investment.

<sup>&</sup>lt;sup>122</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 34.

## 7.3 Provision for network businesses to provide smart meters as part of a regulated DSP business case

SCER's rule change request states that nothing in the proposed arrangements would prevent a local distribution network business from offering payment for metering services as part of a demand management program, for example to achieve operating efficiencies or enable grid management functions.<sup>123</sup>

A distribution network business may seek to provide consumers in its distribution area with advanced metering technology to capture network benefits, such as reductions in the cost of electricity supply, more efficient use of the electricity system and deferral of network augmentation.<sup>124</sup> It is important that any new arrangements allow for these potential network operational benefits to be captured. A number of elements in SCER's proposal, including the requirement for a minimum functionality specification and to retain existing load control capabilities, would help to achieve this.

Distribution network businesses investing in a demand management program will seek to recover those costs through the regulatory determination process. The primary sources of funding for demand management projects are the operational expenditure and capital expenditure allowances approved by the AER for each distribution network business for every regulatory control period. Generally, there are three ways in which a network business can seek to fund its demand management projects:

- 1. Inclusion in allowed expenditure at the start of the regulatory period (either operating or capital expenditure, depending on the type of project)
- 2. Funding through savings created by deferring or avoiding capital expenditure that was included in the allowed expenditure for the regulatory period.
- 3. Inclusion in the Demand Management and Embedded Generation Connection Incentive Scheme.<sup>125</sup>

The AER makes an assessment of whether a distribution network business's proposed expenditure for a regulatory control period is efficient.

The Regulatory Investment Test for Distribution sets out a process by which a distribution business must assess its proposed expenditure for projects over \$5 million. The purpose of the Regulatory Investment Test for Distribution is to make sure that distribution network businesses consider all credible options (including any proposal to undertake a demand management program as an alternative to network augmentation) when choosing how to address identified network needs. The preferred option is that which maximises the economic benefit to all those who produce, consume and transport electricity in the NEM.

<sup>&</sup>lt;sup>123</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 31.

<sup>124</sup> AEMC, Power of Choice review, final report, AEMC, 30 November 2012, Sydney, p 15.

<sup>125</sup> AEMC, Demand side participation and profit incentives for distribution network businesses, supplementary paper, AEMC, 23 March 2012, Sydney, p 11.

We will need to consider whether the current regulatory determination arrangements allow networks to appropriately consider advanced metering as part of a DSP program. The AEMC considered these issues in the Power of Choice review and recommended a number of criteria for the AER to consider in approving a distribution business's proposed expenditure. We will have regard to these criteria in our assessment of whether any changes would be required to existing regulatory frameworks.

Under SCER's proposal the distribution network business could provide consumers with advanced metering by entering into a contract with the retailer or its own ring fenced metering business (whichever is the Metering Coordinator). We will therefore need to consider how these arrangements would work in practice, for example what information and consent requirements should govern a distribution network business's provision of advanced metering as part of a DSP program.

In assessing the rule change request we will need to consider what effect this provision might have on the competitive model, for example:

- how it might affect the incentives on parties to behave with competitive discipline and provide products and services that represent best value; and
- whether it affects investment certainty for other businesses seeking to provide metering and related services in that market.

We might also need to consider the implications of a circumstance in which a distribution network business sees value in installing an advanced meter at a consumer's premise, but the Metering Coordinator does not.

## Question 18 Are the existing arrangements under the NER appropriate to enable a distribution network business to allow for advanced metering technology as part of a regulated DSP business case/program?

#### Question 19 If not, what additional arrangements might need to be put in place to allow sufficient certainty to distribution businesses to do so?

#### 7.4 Ring fencing arrangements

As discussed, a distribution network business would be able to take on the role of Metering Coordinator, however this would need to be carried out by a ring fenced business. SCER proposes that the AER may wish to establish ring fencing and competitive procurement arrangements to ensure competitive neutrality between a distribution network's Metering Coordinator business and any other Metering Coordinator that may wish to provide those services.<sup>126</sup>

Under the NER, all distribution network businesses must comply with the distribution ring fencing guidelines.<sup>127</sup> Distribution ring fencing guidelines are administered by the AER. These may vary in application between NEM jurisdictions but generally require the accounting and functional separation for the provision of direct control services from other services provided by a distribution network business.<sup>128</sup> Most jurisdictional guidelines include some provisions around non-discrimination, requiring that a distribution network business must not deal with a related business on more favourable terms than it deals with other businesses. These non-discrimination provisions could be applied to circumstances of procurement, for example the procurement of metering installations. However, the AER recognises that, in general, these guidelines do not adequately address the issues arising from emerging technologies and services, including smart meters.<sup>129</sup>

The AER is in the process of establishing a national distribution ring fencing guideline to bring together the various jurisdictional guidelines. The AER recognises that the development of a robust guideline will be informed by the outcomes of the Power of Choice review, including this rule change request, and has deferred further consultation on this process.<sup>130</sup>

#### **Question 20**

Are changes required to the AER's ring fencing guidelines to accommodate a distribution network business seeking to take on the role of Metering Coordinator?

<sup>&</sup>lt;sup>126</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 32.

<sup>127</sup> Rule 6.17 of the NER.

<sup>128</sup> AER, Electricity distribution ring fencing guidelines, position paper, AER, September 2012, p 9.

<sup>129</sup> AER, *Electricity distribution ring fencing guidelines*, position paper, AER, September 2012, p 2.

<sup>130</sup> AER 2013, AER, Sydney, viewed 28 March 2014, http://www.aer.gov.au/node/12493.

#### 8 Minimum functionality specification

This chapter discusses SCER's proposals relating to:

- a new smart meter minimum functionality specification;
- maintaining existing load management capabilities; and
- jurisdictional new and replacements and reversion policies.

## 8.1 Proposal for a new minimum smart meter functionality specification

To support competition and investment in the provision of metering and related services, SCER proposes that the NER is amended to cater for a new smart meter minimum functionality specification. SCER considers that broader market benefits would be achieved if parties have certainty and access to an agreed specification of the metering components, functions and performance levels that a smart meter should provide.<sup>131</sup>

The SCER rule change proposal indicates that the smart meter functionality specification would not override the basic metrology requirements in the NER. These include the accuracy, design standards, inspection and testing of metering installations and other requirements to meet Australian<sup>132</sup> and international standards.<sup>133</sup>

SCER proposes that the smart meter minimum functionality specification will not be a binding minimum standard unless prescribed by a jurisdiction. We discuss this issue in relation to jurisdictional new and replacement policies in section 8.2.

In December 2011, SCER endorsed the Smart Meter Infrastructure (SMI) Minimum Functionality Specification (MFS) that was developed by the National Smart Metering Program. The National Smart Metering Program was established by the Ministerial Council on Energy to develop a framework for an efficient, flexible and open-access smart metering infrastructure across the NEM. That group developed the SMI MFS in the context of the functionality requirements for the smart metering infrastructure as part of a distribution network business led roll out mandated by a jurisdictional Minister.<sup>134</sup>

#### 56 Expanding competition in metering and related services

<sup>&</sup>lt;sup>131</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 15.

<sup>&</sup>lt;sup>132</sup> Such as the requirements under the *National Measurement Act* 1960 (*Cth*).

<sup>&</sup>lt;sup>133</sup> This includes compliance with AS ISO/IEC 17025 "General Requirements for the Competence of Calibration and Testing Laboratories" with regard to the calculation of uncertainties and accuracy.

<sup>&</sup>lt;sup>134</sup> The provision for a jurisdiction to mandate a rollout of smart meters has subsequently been removed from the NEL.

In the rule change proposal, SCER notes that the SMI MFS provides a basis for the functionality requirements and performance levels where parties may consider installing smart meters.

The SMI MFS was designed to capture the economic benefits to:

- consumers (through more available choices and the support of a home area network);
- retailers (through efficiency gains and options for new services); and
- distribution businesses (through network operational data and load control options), where the benefits were likely to exceed the likely cost of including the functions.

While there may be competitive pressures on metering service providers to install meters with some degree of increased functionality to avoid their meters being changed, SCER considered at the time that there may be a risk that retailers and other parties may not be sufficiently incentivised to install more expensive meters with network functions as they would not be able to capture the associated network benefits. Therefore the SMI MFS generally reflects a system wide view and contains features that allows for the potential benefits across the supply chain to be captured, for example, smart grids.<sup>135</sup>

The NER currently contains a minimum standard for electricity metering installations used for revenue purposes.<sup>136</sup> This minimum standard was established to meet the national electricity market settlements requirements and was deemed adequate to also meet the billing requirements for small business and residential consumers.

Currently, the minimum specification in the NER is limited to the requirements for recording consumers' energy consumption on a 30-minute interval basis and making this information available for remote reading. To date, however the functionality of most meters has been limited to being manually read at the premises and to only being able to measure consumption on accumulation basis. The main exceptions to this are the Advanced Metering Infrastructure deployed in Victoria and some smart meter trials in some other states.

The AEMC's Power of Choice review highlighted that when considering a minimum specification for smart meters, three elements should be taken into account:

1. The measuring element (or multiple elements) that measures and records the energy consumption (ie basic function of meters).

<sup>&</sup>lt;sup>135</sup> The European Technology Platform Smart Grid defines the smart grid as "an electricity network that can intelligently integrate the actions of all users connected to it – generators, consumers and those that do both – in order to efficiently deliver sustainable, economic and secure electricity supplies".

<sup>136</sup> Clause 7.3.1 of the NER.

- 2. Energy management system functions that allows messages to be sent via the meter into the consumer's premise and communicate with its appliances (eg for load control, home area networks).
- 3. Smart Grid business functions that enable distribution network businesses, retailers, and other parties to communicate with the meter, to both receive information and send messages/instructions to the metering installation. These could support such network operational functions as supply capacity control, loss of supply detection and energisation/de-energisation of a load at a settlements point.<sup>137</sup>

Having a minimum functionality specification for new metering installations is necessary so that their operation is coordinated with AEMO and other market participants billing and settlement systems. That is, the metering data is of sufficient accuracy and the correct format, and that agreed communication protocols are used. It is equally important when more advanced functions are included so that these functions can be utilised by relevant stakeholders.

When determining the minimum functionality specification to be applied for future metering installations, it is useful to consider:

- How a consumer's ability to capture the value of changing its consumption patterns is facilitated. For example, it is essential that the meter has the ability to record consumption on an interval basis so that consumers are able to understand how much and when electricity is used. This enables consumers to compare their retailer offers and other products and services that may be available to help manage their electricity use and expenditure.
- The benefits of increased options in the meter and possible functions that could be made available so that innovative energy products and services can be offered to the market. For example, remote electronic communications that can allow real time access to information and data. Such functionality can provide businesses with the ability to make operational efficiencies and allow for innovative products and services to be developed eg greater range of retail tariffs, monthly billing based on actual consumption rather than estimated meter reads and home area network/ automated appliance services).

We recognise that the existing SMI MFS took some time to develop and obtain a level of consensus. Therefore for the rule change request, we consider that the SMI MFS provides a good starting point for parties to consider, noting that it was developed in 2011 and requirements to facilitate competition in the provision of metering and related services may have changed.

<sup>137</sup> AEMC, Power of Choice review, final report, November 2013, p.103.

There are currently a few different advanced metering technology options.  $^{138}\,$  These are:

- Manually read interval meters. Electricity consumption is recorded on a half hourly basis, however the meter does not have any communication package built in and therefore cannot be remotely read nor can additional functionality be used.
- Remotely read interval meters without additional functionality built into the meter. This means the meter has the ability to remotely retrieve consumption information, but does not have the capability to offer energy services and products (eg Direct Load Control).
- Remotely read interval meters with a communication package and additional functionality built into the meter. This means the meter has the ability to remotely retrieve consumption information and has the capability to offer advanced services. This is typically known as a smart meter.

The costs of metering installations are a key consideration for deciding to upgrade metering technology and hence will impact on the specification that parties require. The cost of a providing a smart meter is not necessarily significantly higher than the cost of a more basic meter. This is because the installation costs are generally more than the meter itself, irrespective of the meter's functionality. Further, the incremental costs of additional functionality are relatively low (eg adding a direct load control component or relay into the meter at the production stage).<sup>139</sup>

#### Governance arrangements

SCER has proposed that AEMO would develop, maintain and publish the smart meter minimum functionality specification. This would be in the form of a procedure that also provides an explanation of those functions and related performance levels. AEMO would need to apply the rules consultation procedures when establishing and changing the smart meter minimum functionality specification.<sup>140</sup>

SCER highlight that the smart meter functionality specification that would be established by AEMO would not necessarily replicate the SMI MFS, however guidance could be provided to AEMO on the factors that should be considered in establishing the specification.<sup>141</sup>

<sup>&</sup>lt;sup>138</sup> The exception is Victoria where smart meters have been installed.

<sup>&</sup>lt;sup>139</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 15.

<sup>&</sup>lt;sup>140</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 15.

<sup>&</sup>lt;sup>141</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p.15.

AEMO are currently responsible for developing, maintain and publishing the metrology and service level procedures.<sup>142</sup> These procedures are based on set of requirements outlined in Chapter seven of the NER.

We will consider the governance provisions that may be needed for a minimum specification and the options available. For example, we will consider whether this role should be provided to AEMO, or alternatively the existing industry based committee that is responsible for the B2B procedures, the IEC, or whether some other form of committee may be appropriate, given the expanded functionality beyond basic metrology.

As noted in Chapter two, the AEMC is currently considering a rule change request from AEMO regarding the governance of the existing IEC and ongoing development of B2B procedures. We also note the AEMC's advice to SCER for a framework for open access and common communication standards, in particular, the advice for a shared market protocol and how that is to be implemented. We will take both of these processes into account in considering this rule change request.

## Question 21 What do you consider are the appropriate governance arrangements for allowing for a new smart meter minimum specification in the NER?

## Question 22 Is AEMO the appropriate body to develop and maintain the proposed minimum functionality specification to support competition in metering and related services, or are there alternative options that could be considered?

#### Existing load management capabilities

There are existing load management DSP options that already operate in a number of the distribution networks in the NEM. A typical example is off peak hot water. This allows distribution network business to shift the electricity consumption use for this service to pre-determined off peak times. This service can be provided through use of time switches, audio-frequency load control or ripple control. This has been a feature of the market for some decades and helps to reduce:

- the size of the peak demand at a location in the network (or the network as a whole) and hence the capital and operating costs of maintaining a reliable supply, and
- the costs of energy at times of peak demand.

<sup>142</sup> Clause 7.14.1 of the NER.

SCER has proposed that the functionality of such existing load management options must be retained if a meter is replaced. That is, if the load management service operates through additional functionality in the existing metering installation, an upgraded or replacement metering installation should include equivalent functionality which is activated and operational at the time of the upgrade or replacement. Under the proposed model, the Metering Coordinator would ensure that existing functionality remains operational.<sup>143</sup>

Existing load management equipment may be separate to the actual meter or, as is often the case now, included in the meter itself and hence forms part of that meter's functionality. It is recognised that there is general industry consensus for maintaining existing load control capability. As part of the rule change request we will have regard to stakeholder views, and in particular, how the arrangement between the Metering Coordinator and the local distribution business may work in practice and interactions with network regulatory arrangements that may need to be in place.

#### 8.2 Jurisdictional new and replacement policies

The rule change proposes to codify that jurisdictions will have the ability to define whether advanced meters must be installed in new and replacement situations<sup>144</sup> and if such advanced meters must meet the smart meter minimum functionality specification.<sup>145</sup> A jurisdictional new and replacement policy would not be able to override the basic metrology requirements in the NER.

This would be implemented by making the appropriate amendments to the NER that allow jurisdictions to provide their metrology requirements in the existing NEM meteorology procedures.<sup>146</sup>

SCER notes that where a jurisdiction requires that smart meters be installed in new and replacement situations, an exemption to the minimum functionality may be applied to existing manually read interval metering installations that can be upgraded to remotely read interval meters by adding remote communications capability. SCER considers this would reduce the need for these meters to be replaced unnecessarily.

All jurisdictions are required to provide an update on their new and replacement policies to the next SCER meeting on 1 May 2014. South Australia published a discussion paper on its new and replacement policy in January.<sup>147</sup>

<sup>&</sup>lt;sup>143</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p.15.

<sup>&</sup>lt;sup>144</sup> For example, new connection, replacements, or potential for electricity to be exported from a site.

<sup>&</sup>lt;sup>145</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p.16.

<sup>146</sup> Rule 7.14.2 of the NER allows for the inclusion in the metrology procedure for metrology material for a participating jurisdiction in relation to type 5, 6 and 7 metering installations.

<sup>147</sup> Department for Manufacturing, Innovation, Trade, Resources and Energy, South Australian policy for new and replacement electricity meters, discussion paper, Government of South Australia, January 2014.

It is expected that the uptake of more advanced metering will primarily be driven by consumer and business choices based on the costs and benefits that energy service product or technology provide. However, new and replacement policies can support the benefits of advanced technology beyond that expected under a voluntary approach.

The Power of Choice review recommended that the NER and relevant jurisdictional codes are changed to require the installation of appropriate metering technology when the opportunity arises, and that all meters installed would be consistent with the SCER's agreed SMI MFS. It was considered that this provides the most cost effective way to enable the near-term introduction of flexible pricing options for the smaller end of the electricity market, and allow for further technology and service innovation and avoid technology stranding within the present circumstances of the electricity market.<sup>148</sup>

The effect of any jurisdictional policy will need to be considered on how this may impact competition and market and system wide efficiencies that may be gained through a national approach. This is particularly where the minimum functionality specification may not be applied consistently, and there is scope for jurisdictions to decide if the minimum specification will apply and which functionality it can choose to include or not include. We also will need to consider how this arrangement impacts other reforms currently being considered by the AEMC regarding reform of distribution network pricing arrangements to enable more flexible pricing options.

## Question 23 Should there be arrangements that allow for jurisdictions to determine their own new and replacement polices or should all new and replacements meet a common minimum functionality specification?

#### 8.3 Jurisdictional reversion policy

A jurisdiction's meter reversion policy clarifies whether an existing meter can be replaced with a lower-functionality meter. For example, if a new and replacement meter policy requires that interval meters must be installed, but a customer chooses to have a smart meter installed, a jurisdiction could require that the smart meter must not be replaced by a basic interval meter at a later date.

SCER notes that jurisdictional reversion policies are currently defined in the metrology procedures for the NEM.<sup>149</sup> This arrangement is proposed to remain unchanged.<sup>150</sup> Jurisdictional reversion policies will likely need to be reviewed based on any jurisdictional new and replacement policy put in place. For example, South Australia as part of the recent discussion paper on their policy for new and replacement of

<sup>148</sup> AEMC, Power of Choice review -giving consumers options in the way they use electricity, Final Report, AEMC, November 2012, Chapter four.

<sup>149</sup> AEMO 2014, AEMO, viewed 26 March 2014, http://www.aemo.com.au/Electricity/Policies-and-Procedures/Metrology-Procedures-and-Unme tered-Loads/NEM-Metrology-Procedure.

<sup>&</sup>lt;sup>150</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 17.

meters has indicated that meter reversions to accumulations meters will not be allowed where a customer elected to install a 'smart ready' meter.<sup>151</sup> This also applies where a customer moves into a site where an advanced meter is installed.<sup>152</sup>

<sup>&</sup>lt;sup>151</sup> The South Australian Government defines a 'smart ready' meter as an interval meter without remote communication capabilities. A consumer may request that the meter be retrofitted with a communications component, which can be done without the meter having to be removed and reinstalled.

<sup>&</sup>lt;sup>152</sup> Department for Manufacturing, Innovation, Trade, Resources and Energy, *South Australian policy for new and replacement electricity meters*, discussion paper, Government of South Australia, January 2014, p 6.

#### 9 Transitional and implementation arrangements

This chapter outlines what transitional arrangements would need to be put in place to support the changes proposed under SCER's rule change request. This includes consideration of arrangements for Victoria, where a mandated smart meter rollout has already occurred, arrangements for metering installations in other jurisdictions, and necessary updates to NEM systems, procedures and guidelines.

#### 9.1 Arrangements for Victoria

The Victorian Government mandated a rollout of smart meters in 2006. Under the Advanced Metering Infrastructure (AMI) program, the state's five distribution network businesses were required to install and maintain smart meters at all residential and small business premises in Victoria. The program is now over 95 per cent complete.<sup>153</sup>

In 2009, the AEMC made a jurisdictional derogation to vary the application of the NER in Victoria. The derogation made distribution network businesses exclusively responsible for providing metering and related services to Victoria's residential and small business consumers. The derogation was extended by the AEMC in November 2013 to preserve this exclusivity until 31 December 2016, or until national arrangements for competition in metering and related services are implemented.<sup>154</sup>

If SCER's proposed competitive model is put in place, we will need to determine what arrangements should be established for those meters provided to consumers under the AMI program. SCER proposes the following transitional arrangements for Victoria:

- Distribution network businesses may continue to deploy smart meters in accordance with the Victorian mandate until this rule change commences.
- The local distribution network business would become the Metering Coordinator for the smart meters it has deployed under the AMI program, and may continue in this role to the exclusion of other parties for a defined period. This period would be determined by the Victorian Government through a jurisdictional instrument.
- At the expiry of the exclusivity period, the regulated exit fee would apply to allow a retailer or consumer to replace a meter installed under the program.<sup>155</sup>

SCER's rule change request is unclear on whether the local distribution network business itself would take on the Metering Coordinator role or whether it would have

<sup>153</sup> As at November 2013 the program had seen the installation of smart meters in over 90 per cent of residential and small business consumers in Victoria, with more than 2.5 million meters installed. See State Government of Victoria 2014, State Government of Victoria, viewed 2 April 2014, http://www.smartmeters.vic.gov.au/home/latest-news/Smart-Meter-rollout-arrangements. This figure has been updated on advice from AEMO.

<sup>154</sup> Rule 9.9C of the NER.

<sup>&</sup>lt;sup>155</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 13.

<sup>64</sup> Expanding competition in metering and related services
to be taken on by a ring fenced entity. We will therefore need to establish how the local distribution network business would take on this role.

In our analysis of appropriate transitional arrangements we will need to consider whether it is necessary that an exclusivity arrangement be put in place for Victorian distribution network businesses to continue in the Metering Coordinator role for a specified period of time, and what effect this might have on the competitive model.

If it is decided that there should be an exclusivity period, we will need to consider whether the Victorian Government should be able to determine the length of this period through a jurisdictional instrument or whether it should be defined in the NER. A long exclusivity period might hinder the benefits of the competitive model by prohibiting other parties from competing with the incumbent Metering Coordinator to provide metering and related services. A short exclusivity period might affect the incumbent Metering Coordinator's ability to recover the costs associated with the installation of the smart meter, and may increase metering charges for consumers in the short term.

It will also be important to determine whether it is appropriate that the regulated exit fee applies to meters installed under the AMI program once the exclusion period has ended. As discussed in Chapter seven, SCER proposes a set of criteria that the AER should use in deciding on an appropriate exit fee for type 5-7 meters. We will need to consider whether this criteria is appropriate to make sure that the exit fee for meters installed under the AMI program is not unreasonably high.

As discussed in Chapter eight, SCER proposes that jurisdictions may define the functions of meters that must be installed in new and replacement situations, and whether they must meet the smart meter minimum functionality specification established through this rule change process. The Victorian Government has its own minimum functionality specification that applies to smart meters installed under the AMI program. This specification is broadly similar to the one endorsed by SCER in 2011. Under SCER's model, Victoria would be able to apply its own specification as part of its new and replacement policy.

#### Question 24 Is it appropriate that the Victorian distribution network businesses would become the Metering Coordinator for the smart meters they have deployed?

# Question 25 Should an exclusivity arrangement be put in place to allow Victorian distribution network businesses to continue in the Metering Coordinator role for a specified period of time? If so, should this be determined by the Victorian Government or defined in the NER?

## Question 26 Should Victoria's local distribution network business be required to take on the Metering Coordinator role as a ring fenced entity after the exclusivity period has ended?

### 9.2 Arrangements for existing meters owned by distribution businesses

In NEM jurisdictions other than Victoria, SCER proposes the following transitional arrangements for the commencement of the new framework:

- The local distribution network business would become the Metering Coordinator for those meters for which it was previously the Responsible Person.
- The retailer would engage the local distribution network business as the initial Metering Coordinator for those meters. The Metering Coordinator must not increase its charges to the retailer for providing metering services, and must provide at least the same level of service as it provided in its role as Responsible Person.
- The AER would regulate charges for metering services where the Metering Coordinator was previously the Responsible Person, and in a situation where the AER considers there is not yet competition that would constrain the fees charged by the Metering Coordinator business unit of a distribution network business.<sup>156</sup>

Once these arrangements are in place, the retailer (or the consumer) may replace the incumbent Metering Coordinator in line with SCER's model as outlined in Chapter six. The regulated exit fee would apply to parties seeking to replace an accumulation or manually read interval meter owned by the local distribution network business (as discussed in Chapter seven).

SCER's rule change request is unclear on whether the local distribution network business would take on the role of Metering Coordinator itself or whether it would have to be taken on by a ring fenced entity. The request is also unclear about when the ring fenced entity would need to be established to take on this role. However, in line with Chapter seven, we expect that competition in this transitional phase would be more effective if the distribution business was required to establish a ring fenced entity to take on the Metering Coordinator role. We will also need to clarify whether the local distribution network business can contract out the Metering Coordinator role to another party in the transitional period.

An overarching consideration in assessing these arrangements will be to ensure that consumer confidence and existing levels of service are maintained in the transition to the competitive model. Appointing the local distribution network business as the initial Metering Coordinator for accumulation and manually read interval meters would be expected to limit transaction costs and ease the transition to the competitive

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<sup>&</sup>lt;sup>156</sup> SCER, Introducing a new framework in the National Electricity Rules that provides for increased competition in metering and related services, rule change request, SCER, October 2013, p 11.

model by retaining the existing responsibilities for that metering installation until a retailer or consumer chooses otherwise.

It may also be necessary to consider arrangements that may be required to enforce SCER's requirement that the Metering Coordinator must not increase its charges to the retailer and must provide at least the same level of services as it provided in its role as the Responsible Person.

Although SCER's rule change request does not explicitly consider transitional arrangements for large and medium sized consumers, consideration will need to be given to which party would take on the Metering Coordinator role for metering installations for which the retailer is currently the Responsible Person.

#### Question 27 Is it appropriate that as part of the transitional arrangements, the local distribution network business would become the initial Metering Coordinator for existing meters for which it is the Responsible Person?

Question 28	If so, should the local distribution network business be required to take on this role as a ring fenced entity? And by what stage of the transition would the ring fenced entity need to be established?
	what stage of the transition would the ring fenced entity need to be established?

#### Question 29 Is it appropriate that as part of the transitional arrangements, retailers would become the initial Metering Coordinator for existing meters for which it is the Responsible Person?

#### 9.3 Updates to relevant systems, procedures and guidelines

A number of NEM processes and procedures would need to be amended to support any new framework. AEMO will be required to consult on any changes in accordance with the Rules Consultation Procedures.<sup>157</sup>

AEMO metrology procedure and service level procedures

As noted in Chapter eight, the metrology procedure is established by AEMO in accordance with the NER. The procedure sets out the obligations on parties in relation to metering installations - from the connection point to the collection of metering data. The procedure applies to AEMO, Registered Participants, Metering Providers and Metering Data Providers.

<sup>&</sup>lt;sup>157</sup> Chapter 8, Part F of the NER.

The AEMO service level procedures apply to accredited Metering Providers and Metering Data Providers. These procedures detail the obligations, technical requirements and performances associated with the provision, installation and maintenance of a metering installation (*Service Level Procedure for Metering Providers*) and the processes of meter reading, data collection, data processing, adjustment, aggregation and delivery of metering data (*Service Level Procedure for Metering Data Providers*).

SCER's proposed model may necessitate changes to these procedures to make sure that they appropriately reflect any changes to roles and responsibilities of parties under the NER, in particular the creation of the Metering Coordinator role. SCER has also asked that AEMO develop criteria and processes for accrediting a Metering Coordinator to carry out metering and related services.

#### Market Settlement and Transfer Solution

The Market Settlement and Transfer Solution (MSATS) is AEMO's system for settling retail electricity bought and sold in the NEM to fulfil its obligations under the NER. AEMO must establish, maintain and publish MSATS Procedures in consultation with Registered Participants in accordance with the Rules Consultation Procedures. All Registered Participants, Metering Providers and Metering Data Providers must comply with the MSATS procedures. The Consumer Administration and Transfer Solution (CATS) Procedures form part of the MSATS procedures, and contain the principles that govern consumer transfer, the registration of metering installations and the management of standing data.

It is likely that the MSATS Procedures, in particular the CATS Procedures, will need to be amended to ensure consistency with any rule changes made. For example, parties currently entitled to access metering data held in the MSATS database are outlined in Rule 7.7(a) of the NER. It may therefore be necessary for AEMO to update its MSATS Procedures to reflect any changes to clause 7.7(a), ie to allow Metering Coordinators to access this data.

#### Information Exchange Committee and B2B arrangements

If the Metering Coordinator role is established, there may be a need to consider the arrangements regarding the composition of the Information Exchange Committee and the development of the B2B Procedures.

The Information Exchange Committee is established under the NER to manage the ongoing development of the B2B Procedures. According the NER, the members of the committee are:

- three Distribution Network Service Provider members;
- three Local Retailer/Market Customer members; and

• two Independent members.<sup>158</sup>

The B2B Procedures prescribe the content of, processes for and information to be provided to support communication between retailers and distribution network businesses regarding the supply of electricity to a consumer.<sup>159</sup>

The AEMC is currently considering a rule change request submitted by AEMO that considers the governance arrangements for the Information Exchange Committee and the ongoing development of B2B procedures. As such, we will not consider broader issues regarding the membership of the Information Exchange Committee and the governance of B2B procedures as part of this rule change request. However, we will have regard to what amendments may need to be made to the Information Exchange Committee and B2B Procedures to incorporate the role and responsibilities of the Metering Coordinator.

#### AEMO guidelines

SCER has also proposed that AEMO develop guidelines and other material to help Metering Coordinators and other market participants understand their roles and meet their obligations under the new framework, for example as in AEMO's guide to the role of the Responsible Person.<sup>160</sup>

## Question 30 Are there any other systems, procedures or guidelines that might need to be amended to support competition in metering and related services?

#### 9.4 Implementation

The arrangements required to implement SCER's proposed model will require significant changes to Chapter seven of the NER. They may also require changes to the NERR and guidelines and procedures established to support the provision of metering and related services in the NEM. We will need to consider how these changes will come together when the final Rule commences, and whether a staged approach to implementation of the various changes and requirements would be appropriate. We will also need to take into account the time that AEMO will need to make the necessary changes to its systems and procedures.

The AEMC will develop an implementation plan that sets out the actions necessary to move to the new framework.

<sup>158</sup> Clause 7.2A.2 of the NER.

<sup>159</sup> AEMO 2014, AEMO, Sydney, viewed 26 March 2014, http://www.aemo.com.au/Electricity/Retail-and-Metering/B2B/BB-Procedures.

<sup>160</sup> AEMO, A guide to the role of the Responsible Person, AEMO, 15 October 2009.

#### 10 Lodging a submission

The Commission has published a notice inviting written submissions on the rule change proposal. Submissions are to be lodged online or by mail by 29 May 2014 in accordance with the following requirements.

Where practicable, submissions should be prepared in accordance with the Commission's Guidelines for making written submissions on Rule change proposals.<sup>161</sup> The Commission publishes all submissions on its website subject to a claim of confidentiality.

All enquiries on this project should be addressed to Lisa Nardi on (02) 8296 7800.

#### 10.1 Lodging a submission electronically

Electronic submissions must be lodged online via the Commission's website, www.aemc.gov.au, using the "lodge a submission" function and selecting the project reference code "ERC0169". The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated.

Upon receipt of the electronic submission, the Commission will issue a confirmation email. If this confirmation email is not received within 3 business days, it is the submitter's responsibility to ensure the submission has been delivered successfully.

#### 10.2 Lodging a submission by mail

The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated. The submission should be sent by mail to:

Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

Or by Fax to (02) 8296 7899.

The envelope must be clearly marked with the project reference code: ERC0169.

Except in circumstances where the submission has been received electronically, upon receipt of the hard copy submission the Commission will issue a confirmation letter.

If this confirmation letter is not received within 3 business days, it is the submitter's responsibility to ensure successful delivery of the submission has occurred.

<sup>&</sup>lt;sup>161</sup> This guideline is available on the Commission's website.

#### Abbreviations

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operation
AER	Australian Energy Regulator
B2B	Business to Business
Commission	See AEMC
IEC	Information Exchange Committee
MSATS	Market Settlement and Transfer Solutions
NECF	National Energy Customer Framework
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Rules
NERL	National Energy Retail Law
NERO	National Energy Retail Objective
NERR	National Energy Retail Rules
NMI	National Meter Identifier
ROLR	Retailer of Last Resort
SCER	Standing Council on Energy and Resources

#### A Interactions between metering and related projects



### B Issues arising from the Open Access review that will be addressed as part of this rule change request

Recommendation / Area	Dependencies or relevant issues
for further development	
Define and assign the gate	The gate keeper manages access, congestion and security
keeper role.	at the point of entry to smart meter functions. This is an
	enhancement of the existing access, security and
	congestion responsibilities under the NER because there
	will be multiple parties requiring access to smart meter
	functionality and differing levels of access. Clarification
	is also required that the gate keeper also manages
	security (eg managing passwords) in relation to access
	through a Home Area Network or other market
	protocols and points of entry other than through the
	shared market protocol.
Define and clarify the	Currently metering providers and metering data
accreditation requirements	providers are accredited by AEMO in accordance with
for the person carrying out	requirements under the NER. The gate keeper role
the gate keeper role.	should also be accredited by AEMO. Consideration of
	the existing accreditation arrangements and the extent to
	which they should be extended to include the gate
	keeper functions is required.
Clarify service level	Under the NER, metering providers and metering data
requirements.	providers are subject to meeting certain service levels as
	defined under the service level procedures.
	Consideration of these requirements is required to
	determine the extent to which additions or amendments
	should be incorporated to take into account functionality
	provided by smart meters. This may include the ability
	to prioritise services such as under emergency situations.
Define and clarify	In clarifying the provisions of the functionality
restriction of services.	specification, consideration is required on whether any
	functions should have restricted access (e.g. network
	functions such as supply capacity control). The gate
	keeper will then need to ensure it can apply the
	appropriate restrictions.
Transitional arrangements	Consideration to be given as to whether transitional
for the regulatory	arrangements may be required for open access will be
framework.	considered as a part of the competition in metering rule
	change request in addition to any transitions
	requirements that will arise out of the existing rule
	change requirements. Issues identified to date for further
	analysis include arrangements for cost recovery
	provisions under a distribution determination where the
	open access framework is introduced part way through a
	distribution determination period and network
	businesses will be required to commercially negotiate for
	access to smart meter functionality. For existing load
	control functions that are to be maintained by network

	businesses, consideration may also need to be given to
	clarify the access, and any charges that may be imposed
	for access, to the functionality under a competitive
	framework.
Review access regulation	Review assumptions and scenarios for access regulation
assumptions considered in	considered in this final report and whether they remain
this final report.	valid. If not, revisit the recommendations and consider
_	whether any of the options for regulation discussed in
	this final report should be implemented.

Source: AEMC, *Framework for open access and common communication standards*, final report, AEMC, 31 March 2014, pp 62-63.