

**Introducing a new framework in the National  
Electricity Rules that provides for increased  
competition in metering and related services**

**Rule change request**

**October 2013**

## **1. Name and address of rule change request proponent**

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## **2. Description of the proposed rule change**

This rule change request seeks to establish the arrangements for increased competition in metering and related services in the National Electricity Market (NEM). The objective of the new arrangements is to support the uptake of efficient demand side participation (DSP) by residential and small business customers, by making it easier to arrange for the metering needed to support choices of electricity products and services. The new arrangements will also make it easier for large customers to manage their own metering requirements.

The rule change request seeks to amend Chapter 7 of the National Electricity Rules (NER), and make other consequential changes as required, so that:

- no party has the exclusive right to provide a particular type of meter, unless a jurisdiction prescribes otherwise,
- responsibility for coordinating metering services is separated from the roles of the Financially Responsible Market Participant or the Local Network Service Provider, by creating a new Metering Coordinator role, and
- customers may engage a Metering Coordinator directly.

The rule change request also seeks to codify a smart meter minimum functionality specification through the NER. This would provide the option for Metering Coordinators to identify to market participants which of these capabilities are available at a particular connection point, allow for standardised procedures that take advantage of these capabilities, and if adopted by jurisdictional policy, may be referred to as a requirement for meters in defined situations such as new connections and replacements.

To support this framework, the Standing Council on Energy and Resources (SCER) has requested advice from the Australian Energy Market Commission (AEMC) on open access and common communication standards to support contestability in demand side participation end user services enabled by smart meters. The framework presented in this rule change proposal should be sufficiently flexible to accommodate any outcomes of the AEMC's advice.

The proposed changes are not intended to impact the intent of any existing metering related derogations specified in Chapter 9 of the NER.

### **3. Background to the rule change request**

#### **3.1 Energy market reform package**

In December 2012, the Council of Australian Governments (COAG) and SCER agreed to a broad energy market reform package to support investment and market outcomes in the long term interests of consumers. This included consideration of demand side participation in the electricity market.

As part of this package, SCER agreed that officials should prepare rule change proposals for consideration by the AEMC addressing expansion of competition in metering and related services to all customers, consistent with a business-led, optional approach to adoption of more advanced metering in states where a widespread roll-out is not underway<sup>1</sup>.

#### **3.2 Power of Choice review**

In November 2012, the Australian Energy Market Commission (AEMC) published its Final Report of the Power of Choice (PoC) review.<sup>2</sup> The purpose of the review was to investigate and identify the market and regulatory arrangements needed across the supply chain to facilitate efficient investment in, operation and use of DSP in the NEM.

The PoC review examined opportunities 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 customers' choices. 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 options.

The AEMC made a number of recommendations intended to support the efficient uptake of DSP in the NEM. A key area of focus in the final report related to enabling technology. As part of the reforms in this area, the AEMC recommended that a new framework be introduced into the NEM that provides for competition in the provision of meters and related services for residential and small business customers.

The PoC review final report contained a set of draft specifications that outlined the changes to the NEM required to implement the AEMC's recommendations.

SCER officials have considered the AEMC's recommendations and draft specifications in preparing this rule change request.

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<sup>1</sup> SCER Communique, 14 December 2012, <https://scer.govspace.gov.au/files/2012/12/Final-SCER-Communique-14-December-2012.pdf>

<sup>2</sup> Australian Energy Market Commission, *Power of choice review – giving consumers options in the way they use electricity*, Final Report, AEMC, 30 November 2012

#### **4. Nature and scope of the issues the rule change request will address**

In the electricity market, the fundamental purpose of metering is the measurement of electricity flows to allow financial settlement of the market and billing of customers.

Metering can also provide a platform for additional outcomes which allow customers and other participants to make decisions about how they engage in the market, for example by supporting:

- improved information about the timing and quantity of electricity consumption to support decisions about managing consumption and costs,
- innovative product offerings to customers, including an increased range of tariff options and products such as direct load control,
- new business practices that reduce costs, such as remote reading and remote connection and disconnection, and
- grid management technologies such as outage and supply quality detection.

SCER officials consider that the current arrangements for metering services in the NEM are a barrier to realising these additional opportunities from metering as an enabling technology.

#### **4.1 Current arrangements for metering services**

The original NEM principles for investment in metering were based on competition in metering responsibility, metering installation and data services<sup>3</sup>.

##### *Arrangements for large customers*

Currently, competition in this area has been restricted in a practical sense to large and medium sized customers in the NEM, where remotely read interval metering is used (known as type 1-4 meters<sup>4</sup>). For these customers, the Financially Responsible Market Participant (FRMP) for a connection point (generally a retailer) can become the ‘responsible person’<sup>5</sup>, who must ensure that a meter and data services are provided at the connection point, unless it accepts an offer from the local distribution business, also known as the Local Network Service Provider (LNSP)<sup>6</sup>, to act in this role and accept responsibility for the connection

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<sup>3</sup> The original design principles for the NEM metering arrangements are summarised in Appendix A ‘Original design principles used in developing the metering arrangements (chapter 7) of the National Electricity Rules’ of the AEMC’s Supplementary Paper ‘Principles for metering arrangements in the NEM to promote installation of DSP metering technology’, published with the draft report for the Power of Choice review.

<sup>4</sup> Type 1-4 meters are required for customers where energy flows across a connection point are above a threshold set by jurisdictions, generally 100 or 160 MWh.

<sup>5</sup> Under clause 7.2.2 the FRMP may elect to be the responsible person for a type 1-4 metering installation. Alternatively, the FRMP may accept an offer from the LNSP to be the responsible person.

<sup>6</sup> For consistency this rule change request uses the term Local Network Service Provider, including in contexts where the National Electricity Rules use the term Distribution Network Service Provider.

point. Where the FRMP is responsible for metering and data services, it must ensure that an accredited Metering Provider (for the physical metering equipment) and Metering Data Provider (to collect, manage and deliver the metering data) are engaged for the connection point. The FRMP can procure these services from competing providers.

SCER officials understand that these arrangements are not satisfactory where a ‘large’ customer (in terms of consumption, company size or number of sites) wants to arrange its own metering services. A large customer can contract directly with a Metering Provider at present<sup>7</sup>, but may still face some barriers because, for example:

- the FRMP remains the legally liable responsible person, even though it is not a party to the contract between the customer and its metering service providers, and/or
- a customer with a number of ‘small’ sites (in terms of consumption) is restricted by the metering services provided by the LNSP at each site.

SCER officials intend that this rule change request will make it easier for large customers to manage their own metering requirements.

### *Arrangements for small customers*

For residential and small business customers that have locally read interval meters (type 5) and accumulation meters (type 6), the LNSP has responsibility for managing meter provision and related services on the customer’s behalf<sup>8</sup>. Other potential providers are not able to compete to provide type 5 and 6 meters to these customers. This was originally adopted as a transitional measure so that customers had effective metering services at the commencement of full retail competition. This transitional measure has remained in the NER to date.

The existing NER arrangements are inhibiting market participants, metering companies and customers from investing in more innovative metering technology which supports DSP products. Under the existing arrangements, a customer or FRMP (generally the retailer for the connection point) can seek to upgrade a metering installation from that provided by the LNSP, but may face several barriers in doing so.

In particular, an LNSP currently has certainty that it will be the provider of a type 5 or 6 meter and will receive regulated returns to recover the cost of providing metering assets and related services. If a customer or FRMP chose to upgrade to a remotely read meter, the LNSP’s metering company would need to compete with other companies to provide the meter and related services. This represents a less certain outcome for the LNSP because:

- it cannot be sure that its offer to provide a meter would be successful, and

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<sup>7</sup> Under rule 7.2.5(a)(2), a responsible person must allow another person to engage a Metering Provider for an installation.

<sup>8</sup> Under clause 7.2.3(a), the responsible person for type 5 and 6 metering installations is the LNSP. The situation is different in Victoria, where derogations from the NER (9.9B) mean that meters which meet Victoria’s Advanced Metering Infrastructure specification are designated as type 5 or 6 meters (in spite of being remotely read) and are therefore exclusively provided by LNSPs.

- if its offer was successful, the LNSP's meter company would need to agree to a commercial (rather than a regulated) arrangement with the FRMP.

As a result, an LNSP has a disincentive to assist in customer or FRMP decisions about upgrading a meter. SCER officials understand that this results in coordination problems where small customers or their FRMPs want to change the type of meter, between the FRMP procuring a meter on behalf of the customer (or the customer procuring a meter directly) and the incumbent LNSP meter provider.

Other aspects of the current arrangements for small customer metering are also affecting decisions about metering, including:

- bundling of LNSP metering costs with general network charges in some jurisdictions so that, if a FRMP replaces a metering installation, the customer would be paying both the charges passed on by the FRMP for the new meter, and the LNSP's metering charges bundled in the general network charge.
- uncertainty about the framework for negotiating exit fees between a FRMP and an LNSP if the FRMP seeks to replace an existing LNSP metering installation; a high exit fee would be a disincentive for retailers to invest in replacement metering technology, while a low fee may under-recover the LNSP's costs of providing metering services.
- uncertainty over who has rights to use the non-metering functions included in the meter.
  - SCER is addressing this issue through a parallel request to the AEMC for advice on open access to metering infrastructure by authorised parties.
- 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 National Energy Retail Rules, and this rule change request asks the AEMC to make or advise of additional consumer protection arrangements needed in light of the new framework.
- investment uncertainty resulting from the power under the National Electricity Law (NEL) and NER for jurisdictions to mandate a roll out of smart meters by the LNSP(s) in their state or territory.
  - In the PoC review, the AEMC recommended that the possibility of a mandated roll-out of smart meters in the NEL be removed.<sup>9</sup> SCER has agreed to this recommendation<sup>10</sup>.

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<sup>9</sup> AEMC, *Power of choice review – giving consumers options in the way they use electricity*, Final Report, 30 November 2012, p 86.

<sup>10</sup> SCER response to the Power of Choice review, March 2013, <http://www.scer.gov.au/workstreams/energy-market-reform/demand-side-participation/>. The recommendation is being implemented through the Statutes

## 4.2 Proposed arrangements for metering services

Market arrangements for metering services should support choices based on the costs and benefits accruing to the various decision makers, including:

- customers' choices about their electricity tariffs and other products, which will help them manage their electricity consumption and costs,
- FRMPs, for example from the faster access to metering data provided by remotely read meters, from more accurate load profiles, or from options to remotely connect and disconnect loads,
- LNSPs, for example where a demand side program is a more efficient network management solution than building network infrastructure,
- jurisdictions, where policy can assist in overcoming barriers such as split benefits or coordination issues. For example, a cost benefit analysis might indicate that requiring use of certain types of meters in new and replacement situations would mean that economic benefits are realised more quickly, or would avoid sunk costs being incurred through the continued use of lower functionality meters.

To address the issues identified under the current arrangements, this rule change proposal seeks to introduce a new framework for the competitive provision of metering and data services that builds on the original principles for metering in the NEM.

A detailed specification of the proposed rule is provided in **Attachment A** to this rule change request.

### 4.2.1 Scope of the proposal

#### *Roles and responsibilities*

The proposed new arrangements include:

- a. for clarity, replacing the term 'responsible person' with 'Metering Coordinator', a role that would have the same responsibilities and liabilities as are currently attached to the 'responsible person' role, and that would be performed by any person registered with and accredited by AEMO. The existing Metering Provider and Metering Data Provider roles would be unchanged. If registered with AEMO as a Metering Coordinator, a FRMP or LNSP could also perform this role.
- b. No party would have the exclusive right to be or engage the Metering Coordinator for a particular type of meter, unless, in relation to residential or small business customers, a jurisdiction instrument prescribes that one or more specific Metering

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Amendment (Smart Meters) Bill 2013, which was introduced to the South Australian Parliament in September 2013.

Coordinators, or a class of Metering Coordinators, are exclusively responsible for coordinating metering services relating to one or more meter types in a particular network area.

- As described in section 4.4, it is not intended that this would allow a jurisdiction to mandate that a particular Metering Coordinator can deploy smart meters. Jurisdiction decisions should be based on the efficient provision of basic metering services.
- c. A FRMP would be responsible for ensuring that there is a Metering Coordinator at each of its customers' connection points.
- d. A FRMP would be responsible for engaging a Metering Coordinator on a customer's behalf, unless:
- the FRMP chooses to act as Metering Coordinator (if registered with AEMO); or
  - a Metering Coordinator is engaged directly by the customer; or
  - a jurisdiction prescribes that one or more specific Metering Coordinators, or a class of Metering Coordinators, are exclusively responsible for coordinating metering services in a particular network area.
- e. All customers would have the option to contract directly with any Metering Coordinator. In these circumstances, the FRMP would be required to respect the contract arrangements in place with the customer's chosen Metering Coordinator and could not charge the customer for metering services. The incumbent and new Metering Coordinator would manage the transition and inform the customer's retailer of any change.
- f. To simplify arrangements for small customers, the standard retail contract would include a clause specifying that the retailer is to arrange metering services on behalf of the customer.
- g. Small customers would still be able to engage a Metering Coordinator directly, but would need to enter a market retail contract with the retailer and a separate contract with a Metering Coordinator to do this.
- h. Where a FRMP or a Metering Coordinator proposes to change a meter or its functions, a customer must at least be informed prior to the change. If the change affects the customer's contracts, the customer must consent to the change.
- i. When changing a meter, the Metering Coordinator should only be required to inform the FRMP where the change in meter results in a material change to the services, costs, or contract terms. However, the Metering Coordinator would be required to inform the customer.



- j. A Metering Coordinator would be able to assign its responsibility to another Metering Coordinator so long as there were no changes to the customer's retail contract where the FRMP has engaged the Metering Coordinator, or the metering contract where the customer has engaged the Metering Coordinator. The FRMP or the customer (as applicable) must be informed of the change in responsibility.
- k. The new arrangements are intended to improve competition in metering services for end users of electricity. SCER officials expect that the proposed arrangements would be consistent with practices at other types of connection points, including generation-transmission and transmission-distribution connection points. However, SCER officials expect that the AEMC will make a final rule which ensures effective metering for connection points not involving an end user.

### ***Metering coordinator contract arrangements***

In the Power of Choice review, the AEMC recommended a framework for the competitive provision of metering services which it considered met the objectives of:

- reduced need for inefficient meter churn when a consumer switches retailer,
- metering arrangements that are as simple as possible for consumers,
- arrangements for engaging a Metering Coordinator that are simple and based on normal commercial agreements, and
- allowing parties to emerge alongside retailers and distributors that can independently accept financial liability for providing accurate metering installations to the consumer, including assessing the cost of that liability and the risk of the meter being replaced during its economic life.

Under the AEMC's proposal:

- the NER (or the National Energy Retail Rules) would regulate the standard contract between a FRMP (or customer) and a Metering Coordinator,
- if a customer exercised their choice to change retailers (e.g. from Retailer A to Retailer B), Retailer B would be required to honour the metering contract that was in place between Retailer A and the incumbent Metering Coordinator, and
- Retailer B could subsequently choose to replace the incumbent Metering Coordinator subject to the terms of that metering contract.

SCER officials consider that a standard contract between a FRMP (or customer) and a Metering Coordinator, if this approach is adopted by the AEMC, would be required to contain information on, but not limited to, contract length, termination fees and exclusivity restrictions.

SCER officials agree that having a framework that meets the objectives considered by the AEMC is important and it recognises that the AEMC's proposed approach is likely to achieve the desired outcomes.

However, in assessing this rule change request SCER officials expect that the AEMC will consider the implications of its recommended approach, including but not limited to whether:

- it introduces any potential barriers that may reduce competition in retail or metering services or innovation in retail or metering products,
- the Metering Coordinator is sufficiently incentivised to ensure its metering offer represents best value, and to provide a competitively priced offer to an incoming retailer,
- there are material commercial issues that may arise by deeming a contractual relationship between two competing retailers in circumstances where the incumbent Metering Coordinator is also the former retailer for the site,
- it is likely that an incoming retailer will continue the contractual relationship with the incumbent Metering Coordinator, noting that the incoming retailer will retain the right to choose another Metering Coordinator,
- a Metering Coordinator is likely to provide metering services that offer a good range of additional functions or can be easily upgraded so that its meters will not need to be replaced as new functions are taken up by retailers, distribution businesses or other service providers, and
- there are appropriate incentives for associated communications and data management systems to be interoperable with a range of parties.

#### ***Providing customers with information about the cost of metering services***

Large customers currently have a range of options to investigate the cost of metering, for example calling for tenders for metering services as part of their regular energy procurement processes. These options are not readily available to small customers.

SCER officials consider that for the proposed arrangements to be fully effective, customers who are interested in entering into a direct relationship with a Metering Coordinator need to be able to access information so that they can compare the costs and benefits of different arrangements. This includes ensuring that small customers can compare retail offers where they have a direct contract with a Metering Coordinator for their metering services.

SCER officials propose that, where this information is available because an LNSP has unbundled its metering charges or the retailer has engaged a Metering Coordinator other than the LNSP, a retailer must inform the customer of the metering services charges for that customer, and the retail tariff that would be offered to the customer if charges for metering services were removed.

The AEMC is asked to consider the best approach for a retailer to discharge this obligation, which may include: consideration of requiring metering services information on a customer's bill; to be separately identified in the tariffs and charges to be payable by the customer; to be included in the required information that a retail marketer is to provide to a small customer; or to be provided to the small customer on request.

### *Transitional arrangements*

At present, the LNSP is the responsible person for type 5, 6 and 7<sup>11</sup> metering installations. Where the AER classifies an LNSP's metering services as a direct control service, the LNSP's metering costs are regulated and the associated assets are included in its regulatory asset base.

This rule change request proposes that no party should have the exclusive right to be or engage a Metering Coordinator for a particular type of meter, including types 5, 6 and 7, unless a jurisdiction prescribes otherwise. The rule change proposes the following transitional arrangements where the LNSP is currently the responsible person:

- The LNSP will become the initial Metering Coordinator for the meters for which it is currently the responsible person. As long as the LNSP remains the Metering Coordinator, it has the full obligations of a Metering Coordinator, and in addition:
  - the AER would retain the ability to regulate fees where an LNSP is the Metering Coordinator because it was the incumbent responsible person for a meter, and in other situations, for example where the AER considers that there is not yet competition which would constrain the fees charged by the Metering Coordinator business unit of an LNSP.
  - its metering charges must be unbundled from Distribution Use of System (DUoS) network charges at the next regulatory determination, and
  - its metering company may compete with other Metering Coordinators to provide meters in the competitive market on a ring fenced basis.
- The FRMP will engage the LNSP as the initial Metering Coordinator for the meters for which the LNSP was the responsible person. In this situation:
  - the LNSP must not increase its charges to the FRMP for providing metering services, and
  - the LNSP must provide at least the same services to the FRMP as Metering Coordinator as it provided in its role as responsible person.

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<sup>11</sup> A type 7 metering installation does not have a meter. A type 7 metering installation is, for example, a public lighting connection which has a stable, predictable consumption pattern. An algorithm which makes assumptions about electricity usage is used to estimate total consumption.

- Where another party becomes the Metering Coordinator for a connection point that has an existing type 5 or type 6 metering installation, there is provision for a reasonable exit fee determined by the AER:
  - based on the average depreciated value of the stock of the LNSP's existing Type 5 or 6 meters (this is for simplicity and administrative ease, as an alternative to attempting to determine the age of the actual meter at each individual customer's premises);
  - which may include efficient and reasonable costs of processing the customer transfer to another Metering Coordinator; and
  - the AER should determine whether a cap on exit fees is appropriate and, if so, the level of the cap.
- Where a FRMP or the customer has arranged for the replacement of an existing LNSP meter and the LNSP is no longer the Metering Coordinator for the site, the LNSP must not recover metering service charges from the customer.

### ***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 option allows the DNSP to limit supply to residential hot water heaters during certain times such as peak periods. 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.

Such options have been justified under previous regulatory arrangements and generally still provide benefits through reduced energy generation and network costs. In some instances these schemes may be reducing the peak demand by hundreds of megawatts. Should the option cease to operate, there may be a need for additional capital expenditure to serve this load.

This rule change request proposes that the functionality of such existing load management options will be retained if a meter is replaced. That is, if the load management scheme 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, in order to preserve the benefits of the scheme.

In the proposed arrangements, the Metering Coordinator must ensure that existing functionality remains operational.

### ***Capturing network benefits***

Nothing in this rule change request would prevent an LNSP from offering payment for metering services to support a DSP program, for example to achieve operating efficiencies or to access grid management functions of meters.

### ***LNSP as Metering Coordinator***

An LNSP's subsidiary Metering Coordinator (or Meter Provider or Meter Data Provider) would be able to offer to provide metering services.

Ring fencing and competitive procurement requirements may be established by the AER to ensure competitive neutrality between the LNSP's subsidiary and any other Metering Coordinator that may wish to provide these services.

### ***Arrangements for the Victorian rollout of smart meters***

In the PoC final report, the AEMC considered the current arrangements in Victoria, where a mandated rollout of smart meters has been undertaken. The AEMC recommended that there should be some arrangements put in place that have regard to that rollout. SCER officials consider it is appropriate that arrangements are put in place to accommodate the Victorian rollout to the extent possible, noting that the transitional requirements will depend heavily on the AEMC's review into the open access and communication standards to support demand side services.

Hence, it is proposed that the following arrangements are introduced:

- In Victoria, where a smart meter rollout has been mandated, an LNSP would be the Metering Coordinator for the smart meters it has deployed, and may continue in this role to the exclusion of other parties for a defined period. This defined period may be established by the Victorian Government through a jurisdictional instrument.
- Until the provisions of the national framework apply in that jurisdiction, the LNSP may also continue to deploy smart meters in accordance with the Victorian mandate rules and may continue as the Metering Coordinator for these meters to the exclusion of other parties for a defined period.
- Upon expiry of the LNSP's exclusivity period, the regulated exit fee would apply, to allow a retailer or customer to subsequently replace a meter installed under a mandate.

### ***Consequential changes***

SCER officials anticipate that consequential changes to other aspects of the national frameworks for electricity may be required to support the changes outlined in the rule change request.

At a minimum, a provision will need to be added to the National Energy Retail Rules (NERR) such that a standard retail contract states that the retailer is to arrange for metering services on behalf of the customer.

The AEMC should make any further necessary consequential changes, which may include:

- **Consumer protections:** The NERR establish protections for customers in their relationships with electricity distributors and retailers. The NERR do not address a situation where a customer may have another relationship with a Metering Coordinator. The AEMC should make consequential changes to ensure consumer protections continue to be appropriate where competitive metering is more widely available.
- **Retailer of last resort:** The AEMC is asked to make any consequential changes needed to ensure that Retailer of Last Resort arrangements are appropriate and ensure the continued provision of metering services when a retailer fails. The AEMC should advise if any changes need to be considered further by SCER.
- **Enforcement:** The new arrangements, including the new role of Metering Coordinator, may require enforcement provisions. The AEMC should make, or advise of, any provisions required including any changes to civil penalty provisions.

#### **4.3 Including a minimum functionality specification in the NER**

The AEMC's Power of Choice review considered the minimum functionality of meters to support the proposed new arrangements for contestable meter provision. In its final report, the AEMC recommended that the Smart Metering Infrastructure Minimum Functionality Specification (SMI MFS) developed by the National Smart Metering Program, and endorsed by SCER in December 2011, should be codified in the NER.

The SMI MFS was originally developed to define the functionality requirements and associated performance levels for smart meters in the context of jurisdictions being given a power to mandate a rollout of smart meters. SCER has agreed that this power should be removed from the NEL.

The SMI MFS remains useful as it identifies important smart meter functions such as energy measurement and recording, remote and local acquisition of data, visible displays, load management functions, quality of supply event recording, and loss of supply detection.

SCER officials consider that there are likely to be broad market benefits if participants have access to an agreed minimum functionality specification and related performance levels that a

smart meter should provide<sup>12</sup>. This would support standardisation of meter functionality and the development of business-to-business procedures to support the use of these functions.

This rule change request proposes that AEMO establish, maintain and publish a smart meter minimum functionality specification, including an explanation or specification of those functions and related performance levels, in the form of a procedure or guideline.

Making AEMO responsible for maintaining the smart meter minimum functionality specification, rather than including the smart meter functions and performance levels directly in the NER, would avoid the need for an AEMC rule change process each time changes to the functions and performance levels are contemplated. However, as for other procedures maintained by AEMO, AEMO would be required to apply the rules consultation procedures in the establishment of, and in order to change, the smart meter minimum functionality specification.

The rule change request does not propose that the smart meter minimum functionality specification would override the basic metrology requirements in the NER, such as accuracy, design standards, inspection and testing, and the need to meet Australian or international standards.

This rule change request does not propose that any meters must contain all the functions listed in the national smart meter minimum functionality specification, unless required by a jurisdiction in its new and replacement meter policy.

The current version of the SMI MFS is at **Attachment B** to this rule change request. This is provided for information and it is not proposed that the smart meter minimum functionality specification established by AEMO would necessarily replicate the SMI MFS. In the final rule, the AEMC may give guidance to AEMO on the factors that should be considered in establishing the specification.

SCER officials propose that some or all of the functions in the smart meter minimum functionality specification must be included in new and replacement meters when required by a jurisdiction.

If a jurisdiction has not applied a new and replacement policy, the smart meter minimum functionality specification would apply at the discretion of the party procuring or installing a meter. When installing meters that comply with the smart meter minimum functionality specification, Metering Coordinators would identify to market participants that these functions are available at a particular connection point, and market participants would be able to use standardised procedures that take advantage of these capabilities.

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<sup>12</sup> In this context, ‘functions’ describes the things that a meter can do, such as supporting remote acquisition of data. ‘Performance levels’ describes the quality, quantity and timing of how the meter does those things, such as specifying that remote acquisition of data should be completed within a certain time limit.

### *Arrangements for the Victorian rollout of smart meters*

SCER officials note that the Victorian Government rollout of smart meters commenced prior to the SCER decision on the SMI MFS, and therefore has its own minimum functionality. The functionality of the Victorian smart meters is broadly similar to that endorsed by SCER but is not identical. Victoria may apply the Victorian smart meter functionality specification as part of its new and replacement meter policy yet to be determined through a jurisdictional instrument.

## **4.4 Jurisdiction policies**

### *New and replacement meters*

The new arrangements must not require that all new and replacement meters installed in a jurisdiction be advanced meters.

SCER has agreed that each jurisdiction should be able to decide whether smart meters must be installed in defined situations<sup>13</sup>. Examples of these situations might include when a meter is installed at a new connection, when an old meter is replaced, or when there is the potential for export of electricity from a site. This is known as ‘new and replacement’ policy.

A new and replacement policy provides an option to accelerate deployments of particular types of meters beyond that expected under a voluntary deployment. SCER officials expect that the deployment of meters will be driven primarily by customer and business choices based on the costs and benefits available to each party. However, there may be situations when the scale of benefits from advanced meters for all parties could be increased, or realised more quickly, if supported by an appropriate new and replacement policy.

This rule change request seeks to codify that jurisdictions have the ability to define whether advanced meters must be installed in new and replacement situations and if such advanced meters must meet, or be capable of meeting, the smart meter minimum functionality as maintained by AEMO.

Appropriate amendments should be made to the national framework to provide for jurisdictions to define their requirements through the jurisdiction metrology material in the metrology procedure.

If a jurisdiction requires that smart meters be installed in new and replacement situations, an exemption to the minimum functionality may be applied to existing type 5 metering installations that can be upgraded to type 4 by adding remote communications capability. This would reduce the need for these meters to be replaced unnecessarily.

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<sup>13</sup> SCER response to the *Power of Choice* review, March 2013, <http://www.scer.gov.au/workstreams/energy-market-reform/demand-side-participation/>



### ***Reversion of meters***

A jurisdiction's meter reversion policy clarifies whether an existing meter can be replaced with a lower-functionality meter. It is a means of ensuring that deployments are 'sticky'.

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.

Jurisdiction reversion policies are currently defined through the jurisdiction metrology material in the metrology procedure, and this arrangement is proposed to remain unchanged.

### ***Exclusive provision of meters by a Metering Coordinator***

SCER officials note that in some situations a jurisdiction may wish to provide that one or more, or a class of, Metering Coordinator(s) would be exclusively responsible for coordinating metering services for some types of meters.

For example, if a jurisdiction is implementing a new and replacement policy for more advanced meters, there would be few occasions where basic type 6 metering is installed. A jurisdiction might consider that there is benefit in retaining the existing exclusive arrangements for basic type 6 metering as a transitional measure. For example, LNSPs currently are able to take advantage of significant economies of scale to provide basic type 6 metering at low cost to consumers, and it may be unlikely that competition would provide consumers with lower cost metering where there is a decreasing number of basic type 6 meters being installed.

A jurisdiction might also consider that there is little prospect of different business models to provide type 7 metering services (i.e. maintaining registers of unmetered connections and calculating their energy use), and little benefit in opening this sector to competition.

This rule change request seeks to establish a default national framework so that no party has the right to be or engage the Metering Coordinator for a particular type of meter.

However, the rule change request proposes to allow for a jurisdiction to prescribe, in relation to residential and small business customers, Metering Coordinator exclusivity for one or more meter types to support the efficient provision of basic metering services.

## **4.5. Communications infrastructure platform for remote access to a metering installation**

The current version of the Rules contains minimal regulation of the provision of remote communications to a metering installation. Rule 7.11.3 provides the following high level requirements:

- “7.11.3(c): Metering Data Providers must maintain electronic data transfer facilities in order to deliver metering data from the metering data services database to the metering database in accordance with the relevant service level procedures.
- 7.11.3(h): Metering Data Providers must maintain electronic data transfer facilities in order to deliver metering data from the metering data services database to Market Participants and Network Service Providers who are entitled to receive metering data.
- 7.11.3(i): The Metering Data Provider’s rules and protocols for the collection of metering data from a metering installation must be approved by AEMO and AEMO must not unreasonably withhold such approval.
- 7.11.3(j): The Metering Data Provider must arrange with the responsible person to obtain the relevant metering data if remote acquisition, if any, becomes unavailable.”

The Glossary defines electronic data transfer in the following way:

- “The transfer of data by electronic means from one location to another.”

Rule 7.3.1(a)(3) currently places a mandatory requirement for certain metering installations to contain the following functionality:

- “A metering installation, unless it is classified as an unmetered connection point in accordance with schedule 7.2, must [for] metering installations types 1, 2, 3, or 4, have electronic data transfer facilities from the metering installation to the metering data services database”

Rule 7.7(a) provided for specified people to obtain access to energy data (amongst other data). Rule 7.7(b) allows these people to gain electronic access to the energy data from the metering installation providing that certain conditions are met. These provisions together ensure that AEMO can collect data from a meter by remote acquisition should this be necessary if the market is under duress for any reason. They also allow other parties (including a customer) to access the energy data directly from the meter should this be requested for any reason.

The Glossary defines telecommunications network in the following way:

- “A telecommunications network that provides access for public use or an alternate telecommunications network that has been approved by AEMO for the remote acquisition of metering data”

In light of future deployments of meters with advanced functionality, SCER officials consider that the current rules on the provision of electronic data transfer facilities to metering installations is in need of revision.

The communication infrastructure to a metering installation must be provided in a way that:

- supports competition in metering data providers,

- provides open access at least for the collection of energy data,
- encourages open access for all functions included in the minimum functionality specification,
- ensures communications with a meter, including transfer of data, are secure,
- encourages competition in the provision of the infrastructure,
- does not unnecessarily limit the infrastructure to one local area,
- permits existing public telecommunication infrastructure providers to offer services if they so choose,
- permits any meter that complies with the NER to be connected to the infrastructure,
- encourages an international standard meter software ‘language’ to be adopted for meter and communications interoperability, and
- allows metering data services to be provided at an efficient cost.

The AEMC review of the framework for open access and communication standards is considering the related issue of how protocols and standards support use of the communication infrastructure to provide services to customers.

## **5. How the proposed rule will or is likely to contribute to the achievement of the National Electricity Objective.**

The Rule making test contained in section 88 of the National Electricity Law requires that the AEMC may only make a Rule if it is satisfied that the Rule will or is likely to contribute to the achievement of the National Electricity Objective (NEO). The NEO is set out in section 7 of the NEL and is as follows:

“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—

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.”

The proposed Rule is intended to support the uptake of efficient demand side participation by residential and small business customers, by making it easier to arrange for the metering needed to support choices of electricity products and services. This is likely to advance the NEO in the following ways.

### ***Improving overall market efficiency***

Arrangements for metering in the NEM currently perform the basic function of measuring electricity flows to support settlement of the market. Larger customers may also have metering with additional functionality that provides additional benefits to those customers as well as their retailers and network businesses.

The proposals in this rule change request are intended to enhance the uptake of more advanced metering at the estimated 88 per cent of residential and small business sites where meters are being read on an accumulation basis<sup>14</sup>. SCER officials consider that the take up of more advanced meters for these customers will provide a platform which supports customers and other participants in the market to make more efficient decisions about how they use and invest in the electricity system. This outcome is expected to arise from effects including:

- allowing engaged customers to better manage the quantity, timing and cost of their electricity use. For example, a customer could accept a flexible pricing offer supported by an advanced meter, and choose to shift some of their consumption to a time when demand is lower and electricity is cheaper. The cumulative effect of similar customer decisions is likely to improve the allocative efficiency of the electricity market and reduce the costs to customers for an efficient level of consumption.
- more efficient network investment decisions where efficient price signals to customers lead to deferred or avoided network capital or operating costs by reducing peak demand.
- more efficient operation of generation, and participation in financial markets, where retailers have access to actual customer load profiles and where operation of peaking generation can be avoided.

### ***Promoting efficient investments in metering and related services***

SCER officials expect that the arrangements proposed in this rule change request would lead to efficient investment decisions about metering. In a competitive environment, customers, FRMPs, network businesses and Metering Coordinators are expected to make decisions about metering based on the costs and benefits accruing to the various decision makers. A decision to deploy advanced meters would only be expected to occur where the benefits throughout the supply chain (i.e. to retailers, third party energy service providers, network businesses and to customers) exceed the costs of the deployment. In the long term it would be expected that the benefits to retailers, third party energy service providers and network businesses would be captured by customers in the form of lower costs, through competition and the operation of the economic regulation undertaken by the AER.

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<sup>14</sup> AEMC, *Power of Choice Review – giving consumers options in the way they use electricity*, 30 November 2013, p.76.

The proposed arrangements to allow any accredited person to be a Metering Coordinator would increase competition in the provision of metering and related services, which would be expected to reduce metering costs to customers. In addition, competition for the provision of metering and related services is likely to promote future innovations that would further reduce metering costs in the long term and increase the range of functions and associated services that can be offered to customers.

The proposed arrangements also allow the separation of the provision of metering and related services from the activities of retailers and other third party energy service providers. This is expected to reduce the need for the meter to be replaced when a customer changes retailer or moves premises where an advanced meter is installed. This reduces 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 through the competitive provision of metering and related services.

### ***Reducing the costs of maintaining quality, reliability and security of the supply of electricity***

The proposed arrangements are likely to increase the uptake of advanced metering in the NEM, since advanced meters will be deployed when they are needed to support customer choices and the business cases of network businesses, retailers and other parties. The increased penetration of advanced metering with network functions is expected to assist the network businesses to monitor reliability and quality of supply, allowing these businesses to respond more promptly to power outages or poor quality. The increased penetration of advanced meters is expected to also enable functions like direct load control and remote connection and disconnection, which provide additional options for the network businesses to manage reliability and security of supply more effectively and at a lower cost.

The cost savings and increased ability to monitor the operation of the network will potentially improve the quality and reliability of supply to customers.

## **6. AEMO's declared network functions**

The proposed rule will not affect the Australian Energy Market Operator's declared network functions.

## **7. Expected costs, benefits and impacts of the proposed rule**

The proposed rule is likely to result in benefits across the electricity supply chain. Benefits are likely to include:

- better information on a customer's energy consumption that can help in managing costs.

- allowing retailers to settle in the wholesale market on their customers' actual consumption, as opposed to the average load profile of customers in a distribution area, improving the accuracy of the settlements arrangements.
- improving the speed of customer switching, and the possibility of more frequent billing which could help to reduce customer exposure to bill shock.
- a high degree of flexibility for retail tariff options that can be offered to customers, and the possibility of cost reflective flexible pricing to encourage efficient use of networks.
- opportunities for market development and business operational efficiencies.

### *End use customers*

Electricity end use customers are expected to benefit from the proposed Rule in the following ways:

- greater choice of pricing offers and DSP products, with the potential to save on electricity costs.
- the ability to engage directly with a Metering Coordinator for the provision of metering and related services. This is expected to be relevant to large and medium sized customers in particular, allowing them to arrange metering services to minimise costs or maximise opportunities to monitor and manage energy use.
- increased competition in the short term and increased innovation in the longer term, potentially leading to reduced costs for the provision of metering and related services.
- more efficient allocation of network costs, and potentially reduced capital and operating network costs being passed through to all consumers, as more cost-reflective tariff structures are developed.
- an improved service in terms of quality, reliability and security of supply, through the ability for network businesses to use additional meter functionality.

End use customers may face additional metering service costs for an advanced meter compared to the charges for their existing accumulation meter. However, additional costs are expected to be minimised because:

- retailers have an incentive to minimise the costs of metering services procured for their customers, otherwise their price offers become uncompetitive, and/or
- in making a decision to switch to an advanced meter, the customer considers that additional benefits will outweigh additional costs.

The AER will also retain the ability to regulate the metering fees of an LNSP, for example where the AER considers that there is not yet competition which would constrain the fees charged by the Metering Coordinator business unit of an LNSP.

### ***Retailers and third party energy service providers***

Retailers and third party energy service providers are likely to benefit from the proposed Rule in the following ways:

- the opportunity to offer customers an increased range of pricing offers and DSP products,
- the opportunity to fill the new role of Metering Coordinator to organise metering and related services on behalf of customers.
- the availability of a range of competitive offers to provide metering services, leading to increased innovation and lower costs.
- certainty about exit fees when replacing an existing LNSP responsible person's meter.

### ***LNSPs***

Local network service providers would:

- no longer have the exclusive right to provider provide type 5, 6 or 7 metering services, unless other arrangements are specified by a jurisdiction.
- be required to compete with other accredited metering service providers to supply metering services to small customers.
- have minimal stranding risk on their existing metering assets given an appropriate exit fee that has been approved by the AER.
- have access to a range of grid management functions enabled by smart meters, which can reduce capital and operating expenditure.

### ***Potential providers of metering and related services***

Potential providers of metering and related services are likely to benefit from the proposed Rule by developing a business case based on:

- the ability to provide metering and related services to retailers, third party energy service providers and directly to customers, rather than only through the LNSPs or retailers, and
- the ability to develop a business case which includes offering to take on the legal responsibilities associated with metering services, rather than this being limited to LNSPs or retailers.

### *The AER*

The AER would be required to:

- develop a process to assess the LNSPs' unbundling of metering charges from other network charges.
- develop criterion and processes for determining appropriate exit fees for existing LNSP meters.

### *AEMO*

AEMO would be required to:

- amend its Metrology Procedure to reflect changes in the proposed Rule, and
- develop criterion and processes for accrediting Metering Coordinators, and
- develop guidelines and other material to assist Metering Coordinators and other market participants to understand their roles and meet their obligations.

While AEMO and the AER would have additional obligations, the costs are not likely to be significant. Any additional costs would occur initially when setting up the new processes, while there may be some additional on-going costs as the processes are undertaken.

## **8. Summary of consultation**

Stakeholder consultation on the issues associated with the metering arrangements was undertaken throughout the various stages of the AEMC Power of Choice review. Submissions were received from stakeholders during each stage of the review. Generally, stakeholders supported the arrangements.

The detailed views of stakeholders are in Appendix G of the AEMC's final report on the Power of Choice review, which is available on the AEMC's website.



## Description of the proposed rule

### 1. Introduction

1.1. This attachment is intended to provide a description of the form of the final rule that SCER officials expect would result from this rule change request. The description is presented in the following sections:

- the role of the Metering Coordinator and the relationship between the Metering Coordinator and other parties,
- arrangements for LNSPs,
- nature, governance and application of the minimum functionality specification,
- jurisdictional new and replacement policies, and
- responsibilities regarding the communications infrastructure platform for remote access to a metering installation.

#### *Principles that apply to the competitive metering approach*

1.2. The following principles should be reflected in the final rule:

- 1.2.1. These rules apply generally across the National Electricity Market (NEM).
- 1.2.2. The existing rules in Chapter 7 of the National Electricity Rules (NER) remain unless altered by the intent of this rule change request.
- 1.2.3. For clarity, the term ‘responsible person’ should be changed to Metering Coordinator, a role which as a minimum would have the same responsibilities and liabilities as are attached to the current ‘responsible person’ role.
- 1.2.4. Any person may perform the role of Metering Coordinator when registered with and accredited by the Australian Energy Market Operator (AEMO) for this role.
- 1.2.5. No party may have the exclusive right to be or engage the Metering Coordinator for a particular type of meter, unless in relation to residential or small business customers, a jurisdiction instrument prescribes that one or more specific Metering Coordinators, or a class of Metering Coordinators, are exclusively responsible for coordinating metering services relating to one or more meter types in a particular network area.

- 1.2.6. A customer may directly engage a Metering Coordinator.
- 1.2.7. A Financially Responsible Market Participant (FRMP) must ensure a Metering Coordinator is engaged at each of its customers' connection points.
- 1.2.8. A FRMP is responsible for engaging a Metering Coordinator on a customer's behalf, unless or until a Metering Coordinator is engaged directly by the customer.
- 1.2.9. To simplify arrangements for small customers, the standard retail contract will include a clause specifying that the retailer is to arrange metering services on behalf of the customer.
- 1.2.10. Small customers may still engage a Metering Coordinator directly, but would need to enter a market retail contract with the retailer and a separate contract with a Metering Coordinator to do this.
- 1.2.11. The arrangements should support retention of the existing meter, where a customer changes retailer, if the meter supports the chosen retail product and there is no metering cost reduction to the customer for changing meters.
- 1.2.12. The assignment of a Metering Coordinator to a metering installation is a commercial arrangement, and the terms of engagement are matters for commercial negotiations. However, a standard contract could be provided to assist parties, or the final rule could include any principles necessary to define the minimum content of contracts for metering services.
- 1.2.13. The AER will retain the ability to regulate fees where an LNSP is the Metering Coordinator.
- 1.2.14. This rule change request will not impact the intent of any existing metering related derogations in Chapter 9 of the NER.

## **2. The role of the Metering Coordinator and the relationship between the Metering Coordinator and other parties**

### ***The role of the Metering Coordinator***

- 2.1 A party who is registered in the role of 'responsible person' for a metering installation before the final rule commences must be registered by AEMO in the role of Metering Coordinator at the commencement of these rules, and is to continue in that role for each assigned metering installation until either:
  - a. a new Metering Coordinator is engaged for that connection point, or
  - b. the party transfers its Metering Coordinator role for that connection point to another Metering Coordinator.

- 2.2 Any person may become a Metering Coordinator. Before becoming a Metering Coordinator, the person must register with and be accredited by AEMO for that role to ensure compliance with the NER.
- 2.3 For the removal of doubt:
- a. a FRMP or an LNSP may also be a Metering Coordinator, and
  - b. a Metering Coordinator may also be a Metering Provider and/or a Metering Data Provider.
- 2.4 The Metering Coordinator may assign its responsibility under the Rules and its commercial agreement to another Metering Coordinator on the provision that no change is made to the commercial arrangements in place with the FRMP or the customer other than the change in Metering Coordinator. The FRMP or the customer (as applicable) must be informed of the change in responsibility.

### ***Responsibilities of the Metering Coordinator***

- 2.5 The Meter Coordinator has the same responsibilities as in the current clause 7.2.1(a) for ensuring:
- a. provision, installation and maintenance of a metering installation, and
  - b. collection of metering data from each metering installation for which it is responsible, the processing of that data and the delivery of the processed data to the metering database and to parties entitled to that data.
- 2.6 For the removal of doubt, the Metering Coordinator is legally liable for the accuracy of the metering installation, the integrity of the metering data, and its delivery to NEM stakeholders.
- 2.7 The Metering Coordinator will also be responsible for the other functions and obligations of a responsible person contained in Chapter 7, where they are retained, as well as the new provisions contained in this specification, including the following key requirements:
- a. When engaged for this purpose, ensuring that a connection point has and maintains a NER compliant metering installation and a National Metering Identifier (NMI).
  - b. 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.
  - c. Engaging and coordinating the availability, dispatch and performance of the Metering Provider and the Metering Data Provider (whose roles will not change)

to ensure that metering data is provided to parties entitled to receive the data in accordance with requirements such as quality and timeliness.

- d. Paying the Metering Provider and the Metering Data Provider for the services performed.
- e. Ensuring the maintenance and testing of metering installations.

2.8 The Metering Coordinator must ensure any existing load control functionality at the connection point remains operational when a metering installation is changed.

***Loss of accreditation for Metering Coordinator, Metering Provider or Metering Data Provider***

2.9 A Metering Coordinator, Metering Provider or Metering Data Provider will automatically lose its accreditation if it is placed in receivership.

2.10 Any metering installation components owned by the Metering Coordinator, Metering Provider or Metering Data Provider at the time of declaring receivership must remain available for operational use by other Metering Coordinators, Metering Providers and/or Metering Data Providers (as the case may be) and AEMO until alternative arrangements for a handover of those components are made by the Receiver.

2.11 The FRMP at a connection point that is the subject of a declaration of receivership for a Metering Coordinator must arrange for another Metering Coordinator to be appointed in place of the former party, or must ensure that a Metering Coordinator will be appointed by a customer without undue delay, depending on the commercial arrangements in place prior to the declaration of receivership.

2.12 The Metering Coordinator at the metering installation that is the subject of a declaration of receivership of a Metering Provider or a Metering Data Provider must arrange for another Metering Provider or a Metering Data Provider to be appointed without undue delay.

***Relationship between a Metering Coordinator and a FRMP***

2.13 A FRMP must ensure that there is a Metering Coordinator at each of its customers' connection points.

2.14 A FRMP is responsible for engaging a Metering Coordinator on a customer's behalf, unless:

- a. the FRMP chooses to act as Metering Coordinator (if registered with AEMO); or
- b. a Metering Coordinator is engaged directly by the customer; or

- c. a jurisdiction prescribes that a Metering Coordinator, or a class of Metering Coordinators, are exclusively responsible for coordinating metering services in a particular network area.
- 2.15 When changing a meter, the Metering Coordinator should only be required to inform the FRMP where the change in meter results in a material change to the services, costs, or contract terms. However, the Metering Coordinator would be required to inform the customer.
- 2.16 Where the FRMP has engaged the Metering Coordinator, the FRMP may request its Metering Coordinator for a metering installation to change the features of that metering installation. A Metering Coordinator must not unreasonably block a request so long as functions being used by other parties remain available.
- 2.17 Where a FRMP has engaged the Metering Coordinator, the Metering Coordinator must inform the FRMP 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.

***Relationship between the FRMP and a customer in regard to metering services***

- 2.18 Where a FRMP has requested a change to a metering installation as at 2.16, and the change has not been requested on behalf of the FRMP's customer, the FRMP must:
- a. where there is no change to the costs charged to the customer or the services available to the customer, adequately inform the customer of the change, in writing prior to the change, or
  - b. where the change results in changes to the costs charged to the customer or the services available to the customer, obtain the prior consent of the customer to the change.
- 2.19 A FRMP must action a request by its customer to change the features of a metering installation for which the FRMP has engaged the Metering Coordinator. In this case the FRMP:
- a. must request that the Metering Coordinator change the features of the metering installation,
  - b. must inform its customer of any additional cost resulting from the customer's request, and obtain the customer's consent to the additional costs prior to instructing the Metering Coordinator to proceed with the change, and
  - c. may recover any additional cost from its customer in a transparent manner.
- 2.20 Where the FRMP is also the Metering Coordinator, a FRMP must action a request by its customer to change the features of a metering installation. In this case the FRMP:

- a. must inform its customer of any additional cost resulting from the customer's request, and obtain the customer's consent to the additional costs prior to proceeding with the change, and
  - b. may recover any additional cost from its customer in a transparent manner.
- 2.21 A retailer's standard retail contract for small customers must include a clause specifying that the retailer is to arrange metering services on behalf of the customer.
- 2.22 Where this information is available because an LNSP has unbundled its metering charges or the retailer has engaged a Metering Coordinator other than the LNSP, a retailer must inform the customer of the cost of metering services for that customer, and the retail tariff that would be offered to the customer if charges for metering services were removed.
- 2.23 A FRMP must not prevent its customer from engaging a Metering Coordinator directly, and must inform the customer of any changes required to the customer's retail contract.
- 2.24 A FRMP must respect any metering services agreement entered into between its customer and a Metering Coordinator, and must not recover costs for metering services from that customer.

***Relationship between a customer and a Metering Coordinator***

- 2.25 Where a Metering Coordinator changes a metering installation, or the functions available in the metering installation, and the change has not been requested by the customer or the FRMP, the Metering Coordinator must:
- a. where there is no change to the costs charged to the customer directly or via the FRMP, or to the services available to the customer, adequately inform the customer in writing of the change, either directly or via the FRMP, prior to the change.
  - b. where the change results in changes to the costs charged to the customer or the services available to the customer, obtain the prior consent of the customer to the change, either directly or via the FRMP.
- 2.26 A customer may enter into an agreement directly with a Metering Coordinator for the provision of metering services, which must include the requirement that the Metering Coordinator ensures that a metering installation is installed and maintained, metering data is collected, processed and delivered to NEM stakeholders, and the FRMP is advised of the agreement.
- 2.27 Where a customer has engaged a Metering Coordinator, the customer may request its Metering Coordinator for a metering installation to change the features of that metering installation. A Metering Coordinator must not unreasonably block a request that does not affect the functions being used by other parties.

- 2.28 Where a customer has engaged the Metering Coordinator, the Metering Coordinator must inform the customer 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.

### **3 Arrangements for LNSPs**

#### ***Distribution Use of System (DUOS) tariffs***

- 3.1 From the date the final rule commences, an LNSP must unbundle the metering charges for any meters included in its regulatory asset base from its DUOS tariff at the next regulatory review.

#### ***Exit fees***

- 3.2 Where the LNSP is the Metering Coordinator because it was the responsible person for a type 5 or 6 meter, and the FRMP or customer (as the case may be) changes to a new Metering Coordinator, the LNSP may recover an exit fee as determined by the AER for that LNSP. In this situation:
- a. the AER must consider the following criteria when making an exit fee determination:
    - (i) the fee must be reasonable,
    - (ii) the fee should be based on the average depreciated value of the existing *meter* and operating costs,
    - (iii) the fee may include reasonable costs of processing the customer transfer to another Metering Coordinator,
    - (iv) the exit fee for the type 5 metering installation may differ from the exit fee for the type 6 metering installation,
    - (v) where a jurisdiction requires that new and replacement meters be of a higher functionality than the existing meter, exit fees must not be determined by the AER and must not be recovered by the LNSP for meters not compliant with the specified functionality installed after the commencement of that policy.
  - b. The AER may consider whether a cap on exit fees is appropriate and, if so, the level of the cap.

#### ***Capturing network benefits***

- 3.3 Nothing in this rule change request would preclude an LNSP from offering payment for metering services or purchasing services enabled by a smart meter to support a DSP program, achieve operating efficiencies or access grid management functions of meters.

### ***LNSP as Metering Co-ordinator***

- 3.4 An LNSP's subsidiary Metering Coordinator (or Meter Provider or Meter Data Provider) would be able to offer to provide metering services.
- 3.5 Ring fencing and competitive procurement requirements may be established by the AER to ensure competitive neutrality between the LNSP's subsidiary and any other Metering Coordinator that may wish to provide these services.

### ***Arrangements when a metering installation is changed***

- 3.6 In the case where:
- a. a customer or FRMP requests a change to a metering installation, and
  - b. the Metering Coordinator is an LNSP, and
  - c. the LNSP had commenced recovering the cost of the metering installation (or parts of that installation) from the regulated tariff approved by the AER prior to the upgrade, then
    - i. the LNSP must establish a new commercial agreement with the requesting party for the metering services provided at the connection point, and
    - ii. a new metering service fee may be recovered by the LNSP from the requesting party based on commercial considerations, along with an exit fee for the meter as separately determined by a submission to the AER.
- 3.7 Where a FRMP or the customer has arranged for the replacement of an existing LNSP meter and the LNSP is no longer the Metering Coordinator for the site, the LNSP must not recover metering service charges from the customer.

## **4 Nature, governance and application of the minimum functionality specification**

- 4.1 The term 'smart meter minimum functionality specification' will be included in Chapter 10 of the NER and is to refer to a guideline or procedure established, published and maintained by the Australian Energy Market Operator (AEMO).
- 4.2 The final rule should reflect that the smart meter minimum functionality specification defines, at least:
- a. the functions that must be supported by a smart meter, and
  - b. the performance levels associated with each function.
- 4.3 AEMO must apply the rules consultation procedures when establishing and changing the smart meter minimum functionality specification.



- 4.4 When specified by a participating jurisdiction, some or all of the smart meter minimum functionality specification must apply:
- a. to all or a class of new or replacement meters, and/or
  - b. where an appliance has the potential to, or does, inject electricity into a connection point.
- 4.5 Jurisdiction policy on application of the smart meter minimum functionality specification will be specified through the jurisdiction metrology material in the metrology procedure.
- 4.6 The smart meter minimum functionality specification will not, however, be a binding minimum standard unless prescribed by a jurisdiction. The specification would also not override basic metrology requirements in the NER.

## **5. Jurisdiction new and replacement policy**

- 5.1. The final rule will provide that jurisdictions may define the functions of meters that must be installed in new and replacement situations.
- 5.2. Jurisdictions may require that new and replacement meters must meet or be capable of meeting the smart meter minimum functionality specification.
- 5.3. A jurisdiction may require that new and replacement meters provide some of the functions in the smart meter minimum functionality specification, or different functions.
- 5.4. Jurisdiction policy on new and replacement meters will be specified through the jurisdiction metrology material in the metrology procedure. Appropriate amendments should be made to the national framework to provide for this outcome.
- 5.5. Jurisdictional new and replacement policy would also not override basic metrology requirements in the NER.

## **6. Victorian transitional arrangements**

- 6.1. In Victoria the LNSP would be the Metering Coordinator for the smart meters it has deployed, and may continue in this role to the exclusion of other parties for a defined period. This defined period may be established by the Victorian Government through a jurisdictional instrument.
- 6.2. Until the provisions of the national framework apply in that jurisdiction, the LNSP may also continue to deploy smart meters in accordance with the Victorian mandate rules and may continue as the Metering Coordinator for these meters to the exclusion of other parties for a defined period.

- 6.3. Upon expiry of the LNSP's exclusivity period, the regulated exit fee would apply, to allow a retailer or customer to subsequently replace a meter installed under a mandate.
- 6.4. Victoria may determine that the Victorian smart meter functionality specification is to continue to apply in Victoria through jurisdictional instrument.

## **7. Responsibility for changes to meter settings**

- 7.1 AEMO is responsible for authorising alterations to any changes to parameters or settings in a meter but only to the extent that the parameters or settings are associated with the measurement and recording (including associated log entries) of energy data. Note that rule 7.8.3(a) will be modified to restrict AEMO to the role originally intended by the existing rules.
- 7.2 The Metering Provider is responsible for implementing parameter or setting changes in the meter in accordance with rule 7.8.3(b), subject to AEMO's authorisation where required, providing those parameter or setting changes:
- a. have been authorised to the extent that they affect the measurement or recording (including associated log entries) function of the meter;
  - b. which are designated as 'FRMP settings' in an AEMO procedure, have been requested by the FRMP who is registered against the connection point to which the metering installation is assigned; and
  - c. which are designated as 'LNSP settings' in an AEMO procedure, have been requested by the LNSP who is registered against the connection point to which the metering installation is assigned.
- 7.3 AEMO must establish and maintain a procedure (which may be the metrology procedure) on the arrangements by which changes to all parameters and settings in a meter may be requested by a FRMP or other authorised party, and the method of receiving and actioning those requests by an appropriate Metering Provider.

## **8 Responsibilities regarding the communications infrastructure platform for remote access to a metering installation.**

### ***Open access to the meter measurement function***

- 8.1 The measurement and recording function and, where available, the remote acquisition function in a meter must, be configured to enable open access to the energy data held in the meter by parties authorised to access the data, in addition to any requirements in the NER associated with these functions.
- 8.2 For the removal of doubt, the remote acquisition function may be configured to support individual open access to a meter as well as operator facilitated access to that meter, providing that open access is always available to a person who is entitled to access the energy data in that meter.

### *Electronic data transfer infrastructure*

- 8.3 Any person may provide a telecommunications network between a metering installation and a metering data services database and/or the metering database.
- 8.4 A person who performs the connection between a metering installation and a telecommunications network must be registered and accredited by AEMO for that role as provided by rule S7.4.2(a) and Table S7.4.3.
- 8.5 A telecommunications network that does not provide public access (an alternate telecommunications network) must ensure that:
- a. its interface to the metering installation does not prevent open access to the energy data in the metering installation being available to any party who has this right under rules 7.7(a);
  - b. its interface to the metering installation does not prevent another party from providing an alternate telecommunications network to that metering installation should that be desirable for any reason.
- 8.6 The change of a meter or its communication interface by a Metering Provider to increase the number of communication ports at the meter must not interfere with the connection and operation of an existing telecommunications network at that metering installation.
- 8.7 In providing its approval to the alternate telecommunications network AEMO must confirm, at least, that:
- a. open access to energy data and the relevant meter logs is preserved for the collection of energy data;
  - b. either operator facilitated access, or open access, is available for all meter functions that don't relate to the collection of energy data.
  - c. the provision for multiple communication ports at the metering installation is not inhibited by any one alternate telecommunications network;
  - d. where an operator facilitated access is to be provided, a User Manual is publically available that explains how the facilitated access would operate, the rights and obligations of all parties who seek or provide access to that telecommunications network, and in AEMO's opinion the User Manual is reasonable (in that it provides the necessary guidance to parties seeking to use the telecommunications network);
  - e. communications with the meter, including transfer of data, are secure.

- 8.8 The Metering Provider assigned to a metering installation must manage electronic data transfer congestion at that metering installation in accordance with rule 7.7(c1), should there be a potential for this to occur.
- 8.9 Charges for the use of a telecommunications network (whether public or alternate) are to be based on commercial considerations.

## **9 Consequential changes**

- 9.1 The AEMC should make consequential changes necessary to support the new arrangements proposed in this rule change request, which may include ensuring that:
- consumer protections continue to be appropriate where competitive metering is more widely available,
  - Retailer of Last Resort arrangements are appropriate and ensure continued provision of metering services when a retailer fails, and
  - enforcement provisions ensure parties fulfil their obligations.