



Australian Energy Market Commission

DRAFT RULE DETERMINATION

National Electricity Amendment (Expanding competition in metering and related services)
Rule 2015

National Energy Retail Amendment (Expanding competition in metering and related services)
Rule 2015

Rule Proponent
COAG Energy Council

26 March 2015

**RULE
CHANGE**

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About the AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

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Executive summary

This draft determination sets out significant changes to the National Electricity Rules and National Energy Retail Rules in relation to the provision of metering services.

The draft rule will facilitate a market-led approach to the deployment of advanced meters where consumers drive the uptake of technology through their choice of products and services. This competitive framework for metering services is designed to promote innovation and lead to investment in advanced meters that deliver the services valued by consumers at a price they are willing to pay.

This draft determination is part of a series of changes recommended in the Commission's Power of Choice review to support demand side participation in the National Electricity Market (NEM), including network pricing arrangements and access to energy consumption information. Improved access to advanced metering services provides the missing link in this broader market reform program to give consumers opportunities to better understand and take control of how they use electricity and the costs associated with their usage decisions.

The Commission has made this draft determination in response to a rule change request from the Council of Australian Governments' (COAG) Energy Council. The Commission's draft rule is a more preferable rule, but contains many of the elements of the COAG Energy Council's rule change request.

The draft rule provides for the role and responsibilities of the existing Responsible Person to be performed by a new type of Registered Participant - a Metering Coordinator. Any person can become a Metering Coordinator subject to satisfying certain registration requirements. Retailers are required to appoint the Metering Coordinator for their retail customers, except where a large customer has appointed its own Metering Coordinator. The draft rule includes a number of other features to support the competitive framework for the provision of metering services, such as minimum requirements for new and replacement meters for small customers and obligations on the Metering Coordinator that are in addition to the existing obligations on the Responsible Person.

Why is there a need to change the current rules regarding metering services?

Only a small number of advanced meters have been deployed for small customers in the NEM outside of Victoria.

Accumulation meters are the most common type of meter used in residential and small business premises. Accumulation meters perform only a basic metering function – they record the total amount of electricity used, but not the time at which it is used. These meters must be read manually at the premises by a meter reader and the consumer is billed for the difference between meter readings over a period of time. Accumulation meters give consumers limited ability to understand and manage how they use electricity.

Technological innovation has meant that meters can now do much more than just measure the flow of electricity. Advanced meters measure both how much electricity is used and when it is used – in near real time. Depending on the functionality of the meter, the ability to send and receive data remotely enables data on electricity consumption, electricity outages and other information on the performance of the distribution network to be obtained almost instantaneously. A variety of services such as remote meter reading, remote access to appliances and different pricing options can also be enabled by advanced meters.

Like a mobile phone or a pay TV box, an advanced meter is an enabling technology which consumers can use to access a service that they value. These services can help consumers monitor, manage and adjust their electricity consumption in a way that better meets their usage and price preferences. Importantly, the draft rule does not introduce any requirement for consumers with an advanced meter to take up a different electricity tariff. Consumers may choose to remain on a flat tariff where this is offered by their retailer.

An increase in the availability of advanced meters, and the uptake of the energy products and services that they enable, can offer a wide range of benefits for all parties across the electricity supply chain. Advanced meters may provide retailers and distribution network service providers (DNSPs) the opportunity to access services that support the efficient operation of the electricity system, allowing them to provide lower cost and higher quality services to consumers.

Despite the benefits advanced meters may offer, the National Electricity Rules (NER) allow and potentially encourage the continued installation of accumulation meters. The NER and National Energy Retail Rules (NERR) also do not currently contain specific provisions to address consumer protections related to advanced meters, or detailed requirements around the security of advanced meters and access to the services they provide and the energy data they contain.

Some of the issues with the current NER and NERR provisions that were identified in the rule change request include:

- The NER currently limit who can be the "Responsible Person" and therefore have overall responsibility for the provision of metering services. Only the local network service provider (LNSP) can be responsible for metering services where manually read accumulation and interval meters are in place at a small customer's premises. Depending on the arrangement between the retailer and the LNSP, either of these parties can be responsible for providing metering services where advanced meters are in place at a small customer's premises.¹ No other party is able to be responsible for metering services for small customers, which restricts competition and reduces incentives to innovate and invest.
- In some jurisdictions, metering charges are currently bundled into distribution use of system charges. Further, at the time of the rule change request there was

¹ In Victoria, only DNSPs can perform this role.

uncertainty around how an LNSP will recover residual costs where it provides metering services that are subject to economic regulation by the Australian Energy Regulator (AER) and a meter is replaced by a retailer. This creates disincentives for retailers to invest in advanced metering and could result in consumers whose accumulation meters are replaced with advanced meters effectively "paying twice" for metering services.

- The NER currently does not contain minimum requirements regarding the services that advanced meters must be capable of providing.
- There are not sufficiently detailed requirements in place so that the services enabled by advanced meters are only accessed by parties that are authorised to do so. This raises potential risks of unauthorised access to the services enabled by advanced meters, such as remote disconnection or load control services.
- Retailers, LNSPs and energy service companies also lack certainty over the regulatory framework for accessing services from advanced meters, which creates investment uncertainty.

Overview of the draft rule

The issues described above need to be addressed in order to promote efficient investment and consumer choice in advanced meters and the services they enable. The changes to the NER and NERR set out in this draft determination relate primarily to increasing competition in the provision of metering services, introducing additional minimum requirements for new and replacement meters installed at small customers' premises, and maintaining appropriate consumer protections.

The key features of the draft rule are summarised below:

- The draft rule changes who has overall responsibility for metering services under the NER to promote competition in the provision of metering and related services by:
 - providing for the role and responsibilities of the existing Responsible Person to be provided by a new type of Registered Participant - a Metering Coordinator;
 - allowing any person to become a Metering Coordinator, subject to meeting the registration requirements;
 - permitting a large customer to appoint its own Metering Coordinator; and
 - requiring a retailer to appoint the Metering Coordinator, except where a large customer has appointed its own Metering Coordinator.
- It requires a Metering Coordinator to take on roles additional to those currently performed by the Responsible Person so that the security of, and access to, advanced meters and the services provided by those meters are appropriately managed.

- It specifies the minimum services that a new or replacement meter installed at a small customer's premises must be capable of providing.
- It provides for the circumstances in which small customers may opt out of having a new meter installed at their premises.
- It clarifies the entitlement of parties to access energy data and metering data in order to reflect the changes to roles and responsibilities of parties providing metering services.
- It provides for LNSPs to continue to get the benefit of network devices installed at customers' premises that assist them to monitor and operate their networks.
- It permits a retailer to arrange for a Metering Coordinator to remotely disconnect or reconnect a small customer's premises in specified circumstances.
- It makes changes to the model terms and conditions of standard retail contracts to reflect the changes to the roles and responsibilities of parties providing metering services under the draft rule.

The following sections outline the key features of the new competitive framework in further detail.²

Retailer responsibility to appoint a Metering Coordinator

The current roles and responsibilities of the Responsible Person will be performed by the Metering Coordinator under the draft rule. The Metering Coordinator also has additional responsibilities related to advanced metering services.

The Financially Responsible Market Participant at a connection point will be responsible for appointing a Metering Coordinator for that connection point, other than where a large customer has appointed its own Metering Coordinator. The retailer is the Financially Responsible Market Participant for the connection points of its retail customers and will therefore be responsible for appointing Metering Coordinators at these connection points.

As is currently the case with the Responsible Person, the Metering Coordinator will arrange for the installation, provision and maintenance of the metering installation, and the collection, processing and delivery of metering data.

Currently, only retailers and LNSPs can be the Responsible Person for small customer metering installations. Under the draft rule, any party that meets the applicable registration requirements will be able to perform the Metering Coordinator role. Establishing a framework to facilitate increased competition for the provision of

² This summary only provides an overview of the draft determination and draft rule. Stakeholders should review the more detailed description of the draft determination and draft rule that is set out in the appendices. Stakeholders should also closely review the draft rule. In particular, retailers, DNSPs, TNSPs, Metering Providers and Metering Data Providers should review the draft rule to understand how their rights and obligations would change under the draft rule.

metering services for small customers is a key feature of the draft rule, and is expected to increase innovation and the choice of electricity products and services available to consumers.

As a transitional measure, the relevant LNSP will become the initial Metering Coordinator for connection points where it is currently the Responsible Person for existing accumulation and manually read interval meters. LNSPs will continue in this role until another Metering Coordinator is appointed or these services cease to be classified by the AER as direct control services.

Consumer appointment of a Metering Coordinator

Small customers will deal solely with their retailer with respect to the supply of energy and metering services and will not be permitted or required to appoint their own Metering Coordinator. This approach has been adopted so that the arrangements are simple and practical from a small customer's perspective. Small customers will continue to be covered by existing consumer protection provisions and jurisdictional ombudsman schemes that apply to retailers.

The Commission recommends that the ability of small customers to appoint their own Metering Coordinator is reviewed three years after the commencement of the new Chapter 7 of the NER under the final rule (if made).

The draft rule allows large customers to appoint their own Metering Coordinator if they wish to do so. Large customers stand to benefit from being able to appoint their own Metering Coordinator to provide bespoke metering services.

Roles and responsibilities for the provision of metering services

Under the draft rule, the Metering Coordinator has overall responsibility for providing metering services at a connection point.

As the Responsible Person does today, the Metering Coordinator will engage a Metering Provider to carry out the installation and maintenance of the metering installation, and a Metering Data Provider to provide metering data services.

While the same party may become registered and accredited to perform all three roles, the Metering Coordinator, Metering Provider and Metering Data Provider roles have been retained as separately defined roles. These separate roles reflect the nature of each party's responsibilities and the different capabilities and registration or accreditation requirements needed for each role. Retaining separate roles allows the most appropriately resourced and qualified parties to perform the role.

Minimum services specification

The draft rule includes a minimum services specification, which all new and replacement meters that are installed for small customers must meet. This specification sets out a list of services that a meter must be capable of providing, rather than focussing on the technical components that must be included in the meter.

To meet the minimum services specification, a meter must be capable of providing the following services:

- remote disconnection service;
- remote reconnection service;
- remote on-demand meter read service;
- remote scheduled meter read service;
- meter installation inquiry service;³ and
- advanced meter reconfiguration service.

The meter must also be connected to a telecommunications network which enables remote access to the meter.

AEMO may grant an exemption to the requirement to meet the minimum services specification where there is no existing telecommunications network which enables remote access to the meter. The effect of such an exemption is that the meter must still be capable of providing the services listed above, but it does not need to be connected to a telecommunications network.

The services included in the minimum services specification are those considered most likely to deliver benefits to most small customers at a relatively low cost. In determining not to prescribe a more exhaustive list of minimum services, the Commission is conscious of the risk of misjudging which services consumers and other parties accessing services enabled by advanced meters would value. The Commission considers that consumers and those other parties will be better placed to determine the services they want and are willing to pay for. Prescribing a broader list of services in the specification could result in all small customers paying higher costs for meters to be capable of providing services that may never be used by many consumers.

Many of the advanced meters currently available are capable of providing a number of services in addition to those listed above, such as load control. Parties will also be able to negotiate for these other services that are not included in the minimum services specification to be included in meters. The Commission expects many advanced meters at small customers' premises to exceed the minimum services specification as retailers, DNSPs and energy service companies negotiate for additional services.

It is anticipated that a minimum services specification will lower the cost of negotiations between Metering Coordinators and parties seeking access to services that are enabled by advanced meters and provide a starting point from which small customers and other parties can choose additional services that they value.

³ The metering installation must be capable of providing the following types of information at a minimum: supply status; voltage; current; power; frequency; average voltage and current; and the contents of the meter log including information on alarms.

Remote disconnection and reconnection services

The draft rule gives both retailers and DNSPs the ability (subject to negotiating access to the service with the Metering Coordinator) to arrange remote disconnection and reconnection services directly with the Metering Coordinator in certain circumstances. To manage potential safety risks associated with remote disconnection and reconnection, the draft rule requires retailers and DNSPs to share information regarding life support registers and to notify each other regarding changes to the status of customers' supply. Jurisdictional safety regulators may also develop additional requirements with respect to safely disconnecting and reconnecting customers.

Opt out arrangements

Small customers will have the ability to opt out of having an advanced meter that meets the minimum services specification installed at their premises where a retailer proposes to install a meter to replace an existing working meter. More specifically, if a retailer proposes to undertake a "new meter deployment" (as defined in the draft rule), the draft rule requires the retailer to allow a small customer to opt out of having their meter replaced as a part of that deployment.⁴ The retailer must, among other things, notify a small customer of the expected date and time of the replacement of their meter and the customer's ability to opt out of having a new meter installed as part of that deployment.

However, there are certain scenarios where a right to opt out of having an advanced meter that meets the minimum services specification installed will not apply, for example where a faulty meter requires replacement, or where testing results indicate that it is necessary or appropriate in accordance with good electricity industry practice for the meter to be replaced to ensure compliance with the NER.⁵ This is appropriate because in these circumstances:

- it is important that faulty meters are replaced quickly so that the consumer is not billed on the basis of estimated consumption for a prolonged period of time, which would not be in the best interests of consumers or retailers;

⁴ This draft rule is contained in the NERR. The NERR does not currently apply in Victoria so this opt out right will not apply in Victoria unless it adopts the NERR. The Victorian Government and Essential Services Commission should consider whether to make amendments to the Electricity Retail Code for consistency with the amendments to the NERR contained in the draft rule. If made, these amendments would provide for Victorian consumers to opt out of receiving a new meter that meets the minimum services specification where their retailer plans to replace their existing working advanced meter which was deployed under the AMI Program. The NERR will apply in Queensland from 1 July 2015, meaning that the opt out provisions in the draft rule, if made, would apply in Queensland when the draft rule commence on 1 July 2017.

⁵ These scenarios are discussed in further detail in Appendix C2.

- the incremental costs of installing an advanced meter that meets the minimum services specification are relatively low compared with a new accumulation meter;⁶ and
- the installation of an advanced meter that meets the minimum services specification provides considerable potential benefits to the consumer, such as the ability to receive more regular bills, avoid estimated meter reads, and the choice of new products, services and pricing options.

The installation of an advanced meter may increase the range of services and pricing options that are available to consumers. However, consumers will continue to have the ability to choose the services and pricing options on offer from retailers and other service providers that best meet their needs. Depending on what price structures are offered by retailers, a consumer with an advanced meter could choose to remain on a flat-rate retail price or could choose from a range of other offers from its current retailer or another retailer.

Ring-fencing arrangements

The draft rule requires the AER to develop and publish distribution ring-fencing guidelines. These guidelines have a broader scope than just metering services, and cover the accounting and functional separation of the provision of direct control services from other services provided by DNSPs.

As part of the process of developing the guidelines, the AER may determine ring-fencing arrangements for a DNSP taking on the Metering Coordinator, Metering Provider and/or Metering Data Provider roles. Ring-fencing measures that may be considered include legal separation, accounting separation, operational separation, information sharing requirements or non-discriminatory access provisions. The AER has the flexibility to decide which types of ring-fencing measures would apply to DNSPs in different situations.

Access to Metering Coordinator services

While the Metering Coordinator is appointed by a customer's retailer, the Metering Coordinator may, subject to certain limitations, also provide services using a metering installation to other parties on a commercial basis including DNSPs and parties providing energy management services.

However, there will be no obligation on the Metering Coordinator to provide metering services and no regulation of the price of these services.⁷ Subject to certain

⁶ Metering charges for consumers that retain an accumulation meter may increase as more advanced meters are deployed, particularly if the consumer is in an area where very few manual meter reads are required. It is therefore likely that, over time, the incremental costs of a meter that meets the minimum services specification will be less than the costs of manual meter reads for the life of the meter.

⁷ The Commission recommends that a review into whether some form of access regulation is required should be conducted three years after the commencement of the new Chapter 7 of the NER under the final rule (if made).

requirements with regard to access and security of meters and the services and data they provide, the provision and the price of services will be subject to commercial negotiations between the Metering Coordinator and the parties seeking those services.⁸

Advanced meters can provide services which assist DNSPs to defer the need for network augmentation and encourage more efficient utilisation of the network and manage the reliability, quality, safety and overall performance of the network.

Subject to the opt out requirements referred to above, DNSPs can facilitate the installation of advanced meters through the Metering Coordinator and seek to recover the costs of doing so through the existing regulatory process.

The draft rule also provides DNSPs with an ability to continue to use their existing network devices or install new network devices at or adjacent to a meter. However, certain restrictions apply to how DNSPs may use such devices, including (amongst other things) only being able to use the devices in connection with the operation or monitoring of their network.

The Metering Coordinator must not remove, damage or render inoperable a network device, except with the DNSP's consent. The Metering Coordinator must also cooperate with a DNSP who wishes to install a new network device.

Subject to the restrictions referred to above, Victorian DNSPs can continue to use the meters they have installed under the AMI program as network devices if the retailer appoints a new Metering Coordinator and installs a new meter.

Issues currently being addressed by the AER

There are a number of AER decisions that may affect the incentives to invest in advanced meters in a market-led deployment of advanced meters under the draft rule including:

- the unbundling of metering charges from distribution use of system charges; and
- the AER's determination of what are the appropriate means for a DNSP to recover the residual costs associated with the provision of metering services where a new Metering Coordinator replaces an existing meter in respect of which the DNSP is the initial Metering Coordinator.

The AER is considering these issues as part of its current round of distribution determinations.

Expected outcomes of the rule change

The draft rule establishes a framework to facilitate increased competition for the provision of metering services to small customers. An increased availability of advanced meters for small customers, and the uptake of energy products and services

⁸ Where a DNSP acts as the initial Metering Coordinator under the transitional arrangements, the price for metering services will continue to be regulated by the AER.

that advanced meters enable, is expected to result in a wide range of benefits for all parties across the electricity supply chain, including consumers.

Consumers who choose to use the information and services enabled by their advanced meter will experience a number of benefits. Many of the benefits will be shared by all consumers, regardless of their level of engagement.

For example, the increased availability of advanced meters may enable:

- consumers to better understand their electricity consumption and, if they choose, to take up products and services that better reflect their needs and preferences. Depending on what price structures are offered by retailers, a consumer with an advanced meter could choose to remain on a flat rate retail price or could choose from a range of other offers from its current retailer or another retailer;
- consumers to switch electricity retailers more quickly, to choose to receive retail bills more regularly to help with household budgeting, and to always be billed based on actual rather than estimated meter readings;
- more efficient retail services including remote meter reading and faster disconnection and reconnection services, for example when consumers move house. This is also expected to help consumers get reconnected as quickly as possible after a period of disconnection.
- the introduction of network prices that better reflect the costs of providing network services to individual consumers and allow consumers to make more informed decisions about how they want to use energy services. Analysis contained in the Commission's recent distribution network pricing rule change final determination⁹ estimated that up to 80 per cent of consumers will face lower network charges over the medium term under cost reflective network prices, with average network charges estimated to fall by up to \$57 a year. The full benefits of the new network pricing rules cannot be realised without advanced meters;
- DNSPs to respond more quickly, and at lower cost, to power outages or poor supply quality where advanced meters are used to support grid management technologies, which may lead to improved reliability and quality of electricity supply and/or lower network charges.

Victorian arrangements

Victoria is in a different position to other jurisdictions having undertaken a government mandated rollout of advanced meters (the AMI program) beginning in 2006. The Victorian DNSPs were required to deploy advanced meters, in accordance with a prescribed minimum specification, to almost all Victorians consuming up to 160 megawatt hours of electricity per annum. The program is now largely complete with approximately 2.8 million meters installed across the state.

⁹ See <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>.

With the technology already in place in Victoria to enable small customers to make more informed decisions about their consumption and product choice, and for industry to offer more innovative products and achieve a range of efficiencies, the focus is now on realising the expected benefits of the AMI program.

The draft rule contains arrangements to support a smooth transition from the existing arrangements put in place under the AMI program to the NEM-wide competitive framework for metering services:

- At the commencement of the new Chapter 7 of the NER under the final rule (if made), the Victorian DNSPs will become the initial Metering Coordinator for the advanced meters they deployed under the AMI program and will continue in this role until another Metering Coordinator is appointed to the site by the retailer or a large customer, or those services cease to be classified by the AER as direct control services.
- The current Victorian derogation will be extended so that it ends on the date the new Chapter 7 of the NER commences. After that date, the Victorian DNSPs will no longer be exclusively responsible for metering services for AMI meters.
- If a new Metering Coordinator is appointed to replace the DNSP, an exit fee may be payable. Until 31 December 2020, the exit fee payable will be determined by the AER in accordance with the AMI Cost Recovery Order. After 2020, the AER will determine the level of any exit fee in accordance with the regulatory framework in Chapter 6 of the NER that applies to other jurisdictions.
- As noted above, Victorian DNSPs will be able to retain and continue to use the meters they deployed under the AMI program as network devices, if they choose to do so as a result of being unable to reach an agreement with a new Metering Coordinator to access equivalent services through the new meter.
- The national minimum services specification will take effect in Victoria when the new Chapter 7 of the NER commences.

Implementation

The draft rule contains a commencement date of 1 July 2017 for the new Chapter 7 of the NER and amendments to the NERR.¹⁰ In the interim period between the final rule being made and the commencement of the new Chapter 7 of the NER and amendments to the NERR, a range of parties will need to undertake a number of steps including:

- AEMO and the Information Exchange Committee to develop, consult on and publish new and updated procedures by 1 April 2016;

¹⁰ Some other provisions of the draft rule will commence earlier, including, for example, changes to Chapter 2 of the NER, some definitions and transitional provisions under the NERR requiring retailers to make the requisite changes to their standard retail contracts by July 2017. See the draft rule for more details.

- the AER to develop, consult on and publish a distribution ring-fencing guideline by 1 July 2016;
- AEMO to publish information on the process for applying for registration as a Metering Coordinator by 1 October 2016; and
- retailers to publish amended standard retail contracts by 1 July 2017.

Leading up to the commencement of the new Chapter 7 of the NER and certain amendments to the NERR, AEMO, industry, governments and other parties will also be required to meet a range of other implementation requirements, which are outlined in this draft determination.

Consultation

We invite stakeholders to provide submissions on this draft determination, which we will consider before making a final determination in July 2015.

We will hold a public forum in late April or early May 2015. The date and location of the public forum will be confirmed shortly.

Submissions on the draft determination will close on 21 May 2015.

Once we have reviewed submissions, we may also decide to hold a public workshop to discuss legal drafting and implementation matters related to the draft rule. We will advise stakeholders after the close of submissions if we decide to hold such a workshop and, if so, the details of the workshop.

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1 The COAG Energy Council's rule change request

1.1 The rule change request

In October 2013, the Council of Australian Governments' (COAG) Energy Council (formerly the Standing Council on Energy and Resources) submitted a rule change request to the Australian Energy Market Commission (the AEMC or Commission) seeking to establish arrangements that would promote competition in the provision of metering and related services in the National Electricity Market (NEM).

The rule change request sought amendments to the National Electricity Rules (NER) and the National Energy Retail Rules (NERR).

The COAG Energy Council stated in its rule change request that the objective of the proposed arrangements is to support the uptake of efficient demand side participation by residential and small business consumers by making it easier to arrange for the metering needed to support choice in electricity products and services. The COAG Energy Council also considers that the proposed arrangements would make it easier for large customers to manage their own metering requirements.¹¹

The rule change request was submitted in response to recommendations made by the AEMC in its Power of Choice review.¹²

1.2 Rationale for the rule change request

The primary purpose of a metering installation is to record the production or consumption of electricity to allow financial settlement of the NEM and billing of customers. However, the rule change request recognises that advanced meters can also provide a platform for consumers and other parties to make more informed decisions about how they participate in the electricity market, for example through:

- access to improved information about the timing and quantity of electricity consumption to support decisions about managing consumption and costs;
- innovative product and service offerings, including an increased range of tariff options and services 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.¹³

11 COAG Energy Council, rule change request, October 2013, p4.

12 See <http://www.aemc.gov.au/Markets-Reviews-Advice/Power-of-Choice-Stage-3-DSP-Review>.

13 COAG Energy Council, rule change request, October 2013, p4.

1.2.1 Current arrangements

Box 1.1: Metering installation types and terminology

A range of different types of metering installations are currently available and defined in the NER. This box summarises the different types of metering installations and the terminology used to describe them in the NER and this draft determination.

"Accumulation metering installations" only record the total amount of electricity used over a specified period. Consumption data is generally retrieved manually from the metering installation at a consumer's premises periodically, typically every three months to match the retailer's billing cycle. This data does not record when electricity is used.

"Interval metering installations" record consumption over half hour intervals, or potentially over shorter periods. These metering installations can be used to provide information about the timing of a consumer's consumption. These metering installations can be manually read at the premises or remotely read using a communications network.

"Advanced metering installations" are remotely read interval metering installations that can also provide a range of advanced metering services beyond simply measuring electricity consumption or generation. The services available depends on the functionality of the advanced metering installation.

Types of metering installations in the NER

The NER currently refers to the following types of metering installations:

Type 1-3 metering installations are remotely read interval metering installations that are used at connection points with a load size above 750MWh (eg large factories or power stations).

Type 4 metering installations are remotely read interval metering installations that are used at connection points with loads up to 750MWh (eg medium size factories).

Type 5 metering installations are generally manually read interval metering installations that are used at connection points with loads up to 160 MWh (eg residential and small businesses). This load size threshold can be amended by individual jurisdictions. The AMI metering installations deployed by DNSPs in Victoria are also currently deemed to be type 5 metering installations.

Type 6 metering installations are accumulation metering installations that are used at connection points with loads up to 160 MWh (eg residential and small businesses). This load size threshold can also be amended by individual jurisdictions.

Type 7 metering installations do not involve a physical metering installation. Instead, there is a reconciliation between the LNSP and the user of the service using an algorithm to determine energy usage. Type 7 metering installations apply, for example, to public lighting and traffic lights.

Advanced meters are therefore generally classified as a type 1, 2, 3 or 4 metering installations in the NER depending on the size of the load at the connection point.

Under the current NER provisions, a Market Participant must ensure there is a metering installation at each of the connection points in respect of which it is participating in the NEM and that the metering installation is registered with AEMO.¹⁴ The retailer is the Market Participant required to satisfy these requirements with respect to the connection points of its retail customers.

There must also be a Responsible Person for each such connection point that arranges for the installation, provision and maintenance of the metering installation, and the collection, processing and delivery of metering data.¹⁵ The Market Participant is required to be the Responsible Person for a type 1-4 metering installation unless it has requested, and subsequently accepted, an offer from the Local Network Service Provider (LNSP) to take on this role. Under the NER, an LNSP is required to make an offer to act as the Responsible Person for a connection point with a type 1-4 metering installation when requested to do so by the Market Participant.¹⁶

For small customers using type 5 metering installations (typically manually read interval meters) and type 6 metering installations (typically accumulation meters), the role of the Responsible Person is exclusively performed by the LNSP.

All residential customers are considered small customers under the National Energy Retail Law (NERL). Business customers who consume energy at a business premise below the upper consumption thresholds set by jurisdictions, and outlined below, are also considered to be small customers under the NERL. Accordingly, metering services for retail customers is currently the responsibility of either the customer's retailer or LNSP, depending on the metering installation type.

The AER may classify distribution services provided by a DNSP, including metering services, as a direct control service or a negotiated distribution service. Direct control services are price regulated and divided into two subclasses – standard control services, which are paid for by all users of the network, and alternative control services, which are generally only paid for by the users of that service. If a service is not classified by the AER it will not be subject to economic regulation under the NER.

Services provided in respect of manually read interval meters and accumulation meters have to date generally been classified by the AER as a standard control service. This

14 Current clause 7.1.2 of the NER.

15 Current clause 7.2.1 of the NER.

16 Current clause 7.2.3(c) of the NER.

means that DNSPs' charges for these metering services form part of distribution use of system charges that all users of the network pay, regardless of whether the consumer uses the service. The AER is currently in the process of unbundling charges for metering services from the distribution use of system charges. This is discussed in Appendix D1.

Table 1.1 General overview of metering installation types under the current NER

Metering installation type	Description	When used	Responsible Person
Type 1-3	Remotely read interval metering installation	Load size is greater than 750MWh.	Market Participant, unless it has arranged for the Local Network Service Provider to be the Responsible Person.
Type 4	Remotely read interval metering installation	Load size is up to 750MWh.	Market Participant (for retail customers this is their retailer), unless it has arranged for the Local Network Service Provider to be the Responsible Person.
Type 5	Typically a manually read interval metering installation	Load size is up to 160MWh (depending on the jurisdiction). Victorian AMI metering installations are also deemed to be type 5 metering installations ¹⁷	Local Network Service Provider
Type 6	Typically an accumulation metering installation	Load size is up to 160MWh (depending on the jurisdiction).	Local Network Service Provider
Type 7	No physical metering installation	Usage pattern is predictable and small, eg street lights.	Local Network Service Provider

Consumption thresholds for business customers

Business customers who consume at or above the upper consumption threshold are large customers under section 5(b) of the NERL. The National Energy Retail Regulations sets this upper consumption threshold at 100 MWh per annum¹⁸, which has been adopted by the ACT¹⁹, Queensland²⁰ and NSW²¹. Varying thresholds have

¹⁷ Advanced meters installed as part of the Victorian AMI program were deemed to be type 5 metering installations so that the LNSP's exclusive ability to perform the Responsible Person role with respect to these metering installations could be maintained according to current clause 7.2.3(a)(2) of the NER.

¹⁸ Section 7(2) *National Energy Retail Regulations*.

¹⁹ Section 7(2) *National Energy Retail Regulations*.

been set in the other jurisdictions. There is an upper threshold of: 160 MWh per annum in South Australia and 150 MWh per annum in Tasmania. The equivalent threshold in Victoria is 40 MWh per annum.

1.2.2 Issues identified with the current arrangements

The COAG Energy Council considers that the current arrangements for metering in the NER are inhibiting consumers, metering service providers and other participants from investing in metering technology that can support the outcomes listed at the start of section 1.2.²² While the current arrangements do not prevent a retailer from installing an advanced meter, the rule change request identifies a number of barriers that are affecting decisions about metering services, which are described below.

Competition for the provision of metering services for small customers is restricted

As discussed above, currently the role of the Responsible Person for type 5 and type 6 metering services is exclusively performed by the LNSP. Accordingly, the NER provides LNSPs with the certainty of being the exclusive provider of these services and, subject to the AER regulatory determination process, receiving regulated revenues²³ to recover the costs of doing so.

The provision of type 1-4 metering services are currently not subject to economic regulation by the AER and the LNSP does not have certainty that the Market Participant will request that the LNSP take on the role of Responsible Person for those metering installations.

The COAG Energy Council notes that if a small customer or its retailer decides to upgrade from a type 5 or 6 metering installation to a type 4 metering installation, the LNSP risks losing its role as the Responsible Person. The COAG Energy Council is of the view that the current rules create a disincentive for DNSPs to help consumers and retailers take up more advanced metering technologies.

Metering charges are bundled with distribution use of system charges

In some jurisdictions, charges for metering services are bundled into distribution use of system charges that all network users pay. As a result, if a consumer's metering installation is upgraded to an advanced meter, the consumer may pay both the charges passed on by the retailer for the new metering installation and the charges passed on by the DNSP for the old metering installation and related services through distribution use of system charges.²⁴ The COAG Energy Council is of the view that this arrangement is a disincentive for installing advanced meters.

20 Clause 30O *Electricity Regulation 2006* (Qld).

21 Section 4(1)(a) *National Energy Retail Law (Adoption) Regulations* (NSW) 2013.

22 COAG Energy Council, rule change request, October 2013, p5.

23 The AER has currently determined these services to be direct control services and are therefore price regulated.

24 This residual amount for the old metering installation would be paid by all customers.

The framework for negotiating exit fees is uncertain

Under the current rules, compensation may be payable by the retailer to the DNSP if it seeks to alter a type 5 or 6 metering installation which leads to a reclassification of that metering installation as a type 4 metering installation.

The rule change request refers to this compensation as an "exit fee" and states that a high exit fee can be a disincentive for retailers to invest in new metering technology, while a low fee might under-recover the residual costs to the distribution network business of a metering installation that is no longer required.

The COAG Energy Council considers that the current requirement in the rules for these two parties to negotiate in good faith so that the distribution network business is reasonably compensated for an alteration to a metering installation creates uncertainty and hinders investment in more advanced metering technology.

Regulation governing access to non-metrology functions of metering installations is unclear

The COAG Energy Council is of the view that there is uncertainty regarding who has a right to access the non-metrology functions of advanced meters, which may limit a business's case to invest in advanced metering. These issues were explored in the AEMC's advice to the COAG Energy Council on a framework for open access and common communication standards for advanced meters, published in April 2014.²⁵

Advanced meter consumer protections are still being established

The rule change request notes that appropriate consumer protections for advanced meters are still being developed and their implications are uncertain. The COAG Energy Council is addressing some consumer protection issues through parallel amendments to the NERR.²⁶ The rule change request asks the AEMC to make or advise of any necessary additional consumer protection arrangements to support the proposed arrangements.

The NEL provision allowing a mandated rollout of advanced meters causes investment uncertainty

At the time of writing the rule change request, there was a provision in the National Electricity Law (NEL) allowing jurisdictions to mandate a rollout of advanced meters by DNSPs. In its Power of Choice review, the AEMC noted that the risk created by the possibility of a government-mandated rollout was stalling investment in advanced meters and recommended that it be removed. The COAG Energy Council supported this recommendation, and legislation to remove the provision from the NEL was passed by the South Australian Parliament, as lead legislator, in 2013.²⁷

²⁵ <http://www.aemc.gov.au/Markets-Reviews-Advice/Framework-for-open-access-and-communication-standa>

²⁶ This amendment to the NERR is being led by the COAG Energy Council and any rule changes would be made by the South Australian Minister and not by the AEMC.

²⁷ Statutes Amendment (Smart Meters) Act 2013 (SA).

1.3 Solution proposed in the rule change request

In its rule change request, the COAG Energy Council proposes the following amendments to the NER (and relevant provisions of the NERR) to resolve the issues outlined above and other related issues:

- separate the responsibility for metering services from the roles of the retailer and the DNSP so that no party has the exclusive right to provide these services;
- replace the term Responsible Person with Metering Coordinator;
- allow any party that is accredited with AEMO to become a Metering Coordinator;
- allow all consumers to engage a Metering Coordinator directly;
- determine what accreditations, if any, might be required for the Metering Coordinator role;
- establish arrangements to support the ongoing provision of metering services in the event a Metering Coordinator fails;
- require unbundling of metering charges from distribution use of system charges at the next regulatory reset, in jurisdictions where this has not already occurred;
- require the AER to set clear exit fees for existing, regulated meters using a set of defined criteria, including consideration of whether a cap on exit fees is appropriate;²⁸
- introduce the term 'smart meter minimum functionality specification' to refer to a guideline or procedure that is 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 and replacement and reversion policies, and to prescribe exclusivity to a particular Metering Coordinator to provide certain metering installation types;
- 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;
- revise the current arrangements regarding the provision of electronic data transfer facilities to a metering installation; and
- establish appropriate transitional and implementation arrangements, including for Victoria where advanced meters are already in place.

²⁸ "Regulated meters" refer to direct control services which are price regulated by the AER.

The rule change request also asks the AEMC to consider whether the proposed arrangements are adequately supported by the existing arrangements regarding:

- ring-fencing for DNSPs;
- consumer protections; and
- retailer of last resort (ROLR) provisions.

The COAG Energy Council is of the view that the proposed arrangements would enhance the uptake of more advanced metering. It expects that this would support the uptake of new products and services that promote consumer participation and choice, and allow for the benefits of demand side participation to be captured across the supply chain.

Further detail on the rule change request is set out in the consultation paper published by the AEMC on 17 April 2014, which is available on the AEMC website.²⁹

1.4 Background

1.4.1 The Power of Choice review

In December 2012, COAG endorsed a comprehensive package of national energy market reforms, developed by the COAG Energy Council, to support investment and market outcomes in the long term interests of consumers.³⁰ One area of reform seeks to address the impediments to, and promote the commercial adoption of, demand side participation in the NEM. The COAG Energy Council developed a work program to implement this reform, comprising three policy objectives:

1. *Improving pricing and incentives.* This objective recognises that consumers need clear signals about the cost of their energy consumption in order to efficiently manage their demand, and supply chain businesses need appropriate incentives to implement and facilitate demand side participation options.
2. *Informing choice.* This objective recognises that consumers and demand side providers need a range of information so that they can identify and implement efficient demand options.
3. *Enabling response.* This objective recognises that a range of technologies, skills, and frameworks are needed to support pricing, information, and demand management options, and to enable timely responses to market signals.³¹

As part of these reforms, COAG and the COAG Energy Council agreed to implement a number of the recommendations made by the AEMC in its Power of Choice review.³²

²⁹ <http://www.aemc.gov.au/Rule-Changes/Expanding-competition-in-metering-and-related-serv>

³⁰ <http://www.scer.gov.au/workstreams/energy-market-reform>

³¹ <http://www.scer.gov.au/files/2014/02/Demand-Side-Participation-Update-table.pdf>

The review, published in November 2012, identified opportunities for consumers to make more informed decisions about how they use electricity. The review also addressed the market conditions and incentives required for network businesses, retailers and other parties to maximise the potential of efficient demand side participation and respond to consumer choice.

An area of focus in the review related to the role of enabling technology, including advanced meters, in supporting these outcomes. The review examined the existing market and regulatory arrangements that govern investment in metering, and questioned whether these arrangements support a consumer's decision to take up a range of electricity products and services. The review also looked at whether the existing arrangements enable the full value of demand side participation and end use services to be captured across the supply chain.

The review found that the current regulatory framework is inhibiting the ability of consumers and Market Participants to invest in metering technology that supports the uptake of efficient demand side participation. The AEMC recommended that the NER be amended to introduce a framework that encourages commercial investment in advanced meters to promote consumer participation and choice in electricity products and services.³³ The COAG Energy Council's rule change request is based on this recommendation.

The rule change request forms part of a broader package of reforms recommended in the Power of Choice review, as illustrated in Table 1.2. Several of these projects are described in further detail in section 1.4.2.

Table 1.2 Power of Choice rule changes and reviews

Mechanism	Reform	Status
Rule changes	Customer access to information about their energy consumption ³⁴	Final determination published 6 November 2014
	Distribution network pricing arrangements ³⁵	Final determination published 27 November 2014
	Improving demand side participation information provided to AEMO by Registered Participants ³⁶	Final determination published 26 March 2015.
	Reform of the demand	Consultation paper published 19

³² In March 2013, the COAG Energy Council published its response to the recommendation in the AEMC's Power of Choice review. See

<http://www.scer.gov.au/workstreams/energy-market-reform/demand-side-participation>

³³ AEMC, Power of Choice review, final report, AEMC, 30 November 2012, Sydney, p69.

³⁴ <http://www.aemc.gov.au/Rule-Changes/Customer-access-to-information-about-their-energy>

³⁵ <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>

³⁶ <http://www.aemc.gov.au/Rule-Changes/Improving-Demand-Side-Participation-information-pr>

Mechanism	Reform	Status
	management and embedded generation connection incentive scheme ³⁷	February 2015.
	Embedded networks ³⁸	Consultation paper expected to be published in late April/early May 2015.
	Multiple trading relationships ³⁹	Rule change request received December 2014
	Demand response mechanism ⁴⁰	Rule change request being prepared by COAG Energy Council.
Reviews and advice	Electricity customer switching ⁴¹	Final advice provided to COAG Energy Council April 2014. Rule change request being prepared by COAG Energy Council.
	Framework for open access and common communication standards for smart meters ⁴² and implementation advice on a shared market protocol ⁴³	Final advice provided to COAG Energy Council March 2014. Consultation Paper on Implementation Advice on the Shared Market Protocol published on 18 December 2014.

1.4.2 Related reforms

This rule change is the missing link between distribution network pricing arrangements and other reforms to promote and enable consumer choice in energy markets. It is therefore closely linked to a range of issues that are being considered by the AEMC and other parties.

In developing the draft determination and draft rule we have considered the interactions between these projects, including which issues are best addressed in this rule change and which are better dealt with in other processes, for example because

³⁷ <http://www.aemc.gov.au/Rule-Changes/Demand-Management-Embedded-Generation-Connection-I>

³⁸ <http://www.aemc.gov.au/Rule-Changes/Embedded-Networks>

³⁹ <http://www.aemc.gov.au/Rule-Changes/Multiple-Trading-Relationships>

⁴⁰ On 11 December 2014, the COAG Energy Council asked its officials to prepare a rule change request to propose a demand response mechanism based on voluntary participation by Market Participants and a staged implementation. See <https://scer.govspace.gov.au/workstreams/energy-market-reform/demand-side-participation/w/wholesale-market-demand-response-mechanism-in-the-national-electricity-market>

⁴¹ <http://www.aemc.gov.au/Markets-Reviews-Advice/Review-of-Electricity-Customer-Switching>

⁴² <http://www.aemc.gov.au/Markets-Reviews-Advice/Framework-for-open-access-and-communication-standa>

⁴³ <http://www.aemc.gov.au/Markets-Reviews-Advice/Implementation-advice-on-the-Shared-Market-Protoco>

they raise broader issues. We have also considered the extent to which implementation of these projects could be coordinated. This is discussed further in Chapter 5.

Projects of particular relevance are outlined below.

Advanced meter consumer protections

The COAG Energy Council is considering a range of measures to implement the recommendations of its National Smart Meter Consumer Protections and Safety Review, published in November 2012. The COAG Energy Council recognises that advanced meters create opportunities for businesses to offer new products and services to consumers, and is therefore looking at ways to ensure that consumer protections are appropriate where consumers have an advanced meter installed. This includes developing rules to provide additional consumer protections around supply capacity control, direct load control and customer billing.⁴⁴

New products and services in the NEM

In December 2014, the COAG Energy Council's Energy Market Reform Working Group published a consultation paper seeking public comment on the regulatory implications of new products and services in the electricity market.⁴⁵ The paper recognises that a range of parties can offer products and services to consumers to help them manage their electricity consumption and costs, particularly where advanced meters are installed. However, some of these parties are not currently regulated under the National Electricity Customer Framework (NECF).

Submissions to the consultation paper closed on 20 March 2015 and will be used to inform a discussion paper that will be presented to Ministers at the next COAG Energy Council meeting.

Some of the issues in scope of this work have also been raised as part of this rule change request, in particular, implications for load control as it relates to network management. This issue is discussed in Appendix A4.

Establishing an energy information hub

In August 2012, the Australian Government published the results of a scoping study on the potential need for an energy information hub to provide consumers with easier access to their energy data.⁴⁶ Ministers at the COAG Energy Council meeting in December 2014 committed to working with industry to support consumer understanding and uptake of new tariff structures. COAG officials are considering ways to improve the ability of consumers to access their energy consumption data online and enable the development of information tools and services to assist

⁴⁴ <http://www.scer.gov.au/workstreams/energy-market-reform/demand-side-participation/smart-meters/consumer-protections>

⁴⁵ <https://scer.govspace.gov.au/workstreams/energy-market-reform/demand-side-participation/new-products-and-services-in-the-electricity-market>

⁴⁶ <http://www.industry.gov.au/energy/Documents/energyMarket/CEdata-scoping-study.pdf>

consumer decision making. This is being considered in the context of the competition in metering rule change, the shared market protocol and broader considerations of the role of data in market operations.

Open access and common communication standards for advanced meters

In April 2014, the AEMC published its advice to the COAG Energy Council on a framework for open access and common communication standards for advanced meters.⁴⁷ The advice made recommendations on a framework to provide certain parties with the required level of access to the functionality of advanced meters. An open access framework provides the ability for service providers to offer new products and services to consumers, which would empower consumers to better manage their electricity consumption.

Shared market protocol

The AEMC's advice to the COAG Energy Council on a framework for open access and common communication standards for advanced meters recommended that a shared market protocol be adopted for advanced meter communications. A shared market protocol is an electronic platform that allows parties to communicate with each other regarding the services that will be offered by advanced meters.

The AEMC recommended that the establishment, maintenance and governance of the shared market protocol be determined through an additional rule change request once the final determination on competition in metering and related services had been made. In June 2014, the COAG Energy Council asked AEMO to develop a proposed shared market protocol, in consultation with interested parties, as the basis of this rule change proposal.⁴⁸ AEMO submitted the first part of its advice to the COAG Energy Council on 11 March 2015 and is due to submit further advice by May 2015.

In December 2014, the AEMC published a consultation paper seeking stakeholder feedback on governance arrangements and related issues regarding implementation of the shared market protocol. Together with the advice provided by AEMO, submissions received on the consultation paper will help inform the development of a rule change request for implementing a shared market protocol, for consideration by the COAG Energy Council.⁴⁹

Interactions between the shared market protocol and this rule change are discussed in Chapter 4 and Appendix C1 in relation to the minimum services specification.

⁴⁷ <http://www.aemc.gov.au/Markets-Reviews-Advice/Framework-for-open-access-and-communication-standa>

⁴⁸ <https://scer.govspace.gov.au/files/2014/12/Terms-of-Ref-MFS-Market-Protocol-June-2014.pdf>

⁴⁹ <http://www.aemc.gov.au/Markets-Reviews-Advice/Implementation-advice-on-the-Shared-Market-Protoco>

Meter replacement process

In January 2015, the AEMC received a rule change request from ERM Power relating to the obligations of various parties during the meter replacement process.⁵⁰ ERM Power considers that existing provisions in the NER are ambiguous about the rights and obligations of prospective participants at a connection point in relation to when a metering installation can be replaced, ie before a retail transfer, on the day of a retail transfer, or at another time following a retail transfer. They propose that this ambiguity be rectified by introducing new transitional roles for prospective participants and clarifying the timing of participant rights and obligations at a connection point.

We will consider the interaction between the two rule changes and how best to coordinate implementation of any changes.

Review of electricity customer switching

In April 2014, the AEMC published a review of electricity customer switching arrangements.⁵¹ The purpose of the review was to determine whether any modifications are required to the existing arrangements for retail customer switching in the NEM, with regard to future technologies that may affect the switching process, eg advanced meters. The AEMC found that, in general, customer transfers in the NEM occur efficiently, but that some customers experience lengthy or inaccurate transfers. The review made several recommendations on how the consumer transfer process can be made more timely and accurate. These recommendations were considered by Ministers at the COAG Energy Council meeting in December 2014, who agreed to officials finalising:

- a draft rule change request to improve the timing of the transfer process by allowing the use of estimated meter reads for customers switching to a new retailer but not changing address; and
- a draft rule change request to improve the accuracy of the transfer process through the development of address standards, and improving obligations to resolve erroneous customer transfers.

The market-led provision of more advanced metering technology, as contemplated for by this draft determination, is likely to lessen some of the issues identified with the electricity customer switching process for consumers with manually read meters. For example, the time taken to process a transfer is largely determined by the current practice of transferring a customer only after an actual meter read for their electricity consumption has been recorded. Advanced meters with remote read capability may allow this process to occur much faster.

⁵⁰ ERM Power, Rule change request: Facilitating an efficient meter replacement process, 19 January 2015. See: <http://www.aemc.gov.au/Rule-Changes/Meter-Replacement-Processes>.

⁵¹ <http://www.aemc.gov.au/Markets-Reviews-Advice/Review-of-Electricity-Customer-Switching>

Customer access to information about their energy consumption

In November 2014, the AEMC made new rules to make it easier for retail customers to obtain information about their historical electricity consumption in an easy-to-understand, affordable and timely way.⁵² The new rules:

- allow retail customers to obtain their electricity consumption data from their DNSP as well as their retailer;
- allow parties authorised by retail customers to obtain the customer's electricity consumption data from their retailer and DNSP; and
- require retailers and DNSPs to comply with minimum requirements relating to the format, time frames and reasonable charges when a retail customer, or party authorised by that customer, requests their electricity consumption data.

By making this information more accessible, the Commission is of the view that retail customers will be able to make more informed decisions about the energy products and services they use, particularly those that are enabled by advanced metering technologies. The rule change largely related to historical data, such as access to the last two years of usage data. In contrast, this draft determination considers how to improve access by consumers and other authorised parties to close to real time data to support emerging products and services.

Distribution network pricing arrangements

In November 2014, the AEMC made a new rule to require DNSPs to set prices that reflect the efficient cost of providing network services to individual consumers.⁵³ This will allow consumers to compare the value they place on using the electricity network against the costs caused by their use of it.

The competition in metering rule change is closely related to the new rule for distribution network pricing, as a greater take up of advanced meters by consumers will provide DNSPs with an opportunity to introduce more advanced network tariff structures that better reflect consumers' individual usage. A greater penetration of advanced meters in the NEM, as enabled by the competition in metering rule change, can allow for more sophisticated ways of measuring and pricing a consumer's electricity use. In particular, these technologies offer much better ways to send signals about the network costs caused by a consumer's usage and promote more efficient use of the network to the benefit of all consumers.

⁵² <http://www.aemc.gov.au/Rule-Changes/Customer-access-to-information-about-their-energy>

⁵³ <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>

1.5 Commencement of rule making process and extension of time

On 17 April 2014, the Commission published a notice under section 95 of the NEL and section 251 of the NERL advising of its intention to commence the rule making process and the first round of stakeholder consultation on the proposed rule change.

On the same date the Commission gave notice under section 107 of the NEL and section 266 of the NERL to extend the time for making a draft determination on the rule change request to 18 December 2014. The extension was sought in recognition of the large scope of issues raised by the rule change request and to allow the Commission time to adequately consider and consult with stakeholders on all relevant issues.

On 20 November 2014 the time for making a draft determination was further extended to 26 March 2015. This extension was sought to allow the Commission time to work through several complex policy issues and associated legal drafting and hold an additional stakeholder workshop.⁵⁴

1.6 Consultation on the rule change request

On 17 April 2014, the Commission published a consultation paper to facilitate stakeholder comment on the issues raised by the rule change request. The Commission received 33 submissions to the consultation paper, which are available on the AEMC website.⁵⁵ Where appropriate, issues raised by stakeholders in their submissions have been addressed throughout this draft rule determination. A summary of issues that have not been explicitly addressed in Appendices A to F, and the Commission's response to each, is provided in Appendix H.

Between June 2014 and January 2015 the Commission held six stakeholder workshops to explore the issues raised by the rule change request in more detail and give stakeholders an opportunity to share their views on the proposed arrangements. The workshops held and topics covered are outlined in Table 1.3.

Table 1.3 Stakeholder workshops

	Topics covered	Date	Location
1	The Metering Coordinator role: <ul style="list-style-type: none">• Proposal for independent Metering Coordinator• Gate keeper functions	26 June 2014	Sydney

⁵⁴ Further information about the reasons for seeking this additional extension is available here: <http://www.aemc.gov.au/getattachment/95798420-3338-4780-b38c-2d5b68218843/Information-sheet---extension-of-time-for-draft-de.aspx>

⁵⁵ <http://www.aemc.gov.au/Rule-Changes/Expanding-competition-in-metering-and-related-serv>

	Topics covered	Date	Location
	<ul style="list-style-type: none"> Registration, accreditation and compliance obligations 		
2	Network regulatory arrangements: <ul style="list-style-type: none"> Cost recovery for regulated meters Deployment of advanced meters by DNSPs Ring-fencing arrangements Existing load control capability 	1 August 2014	Brisbane
3	Relationships between parties: <ul style="list-style-type: none"> Retailer-consumer Retailer-Metering Coordinator 	28 August 2014	Melbourne
4	Supporting arrangements: <ul style="list-style-type: none"> Minimum core model arrangements Consumer-Metering Coordinator 	24 September 2014	Sydney
5	Transitional and implementation: <ul style="list-style-type: none"> Arrangements for Victoria Governance of the minimum services specification Jurisdictional arrangements Requirements for implementation 	9 October 2014	Melbourne
6	Outstanding policy issues: <ul style="list-style-type: none"> The minimum services specification, including governance Opt out arrangements Access to Metering Coordinator services Remote provision of disconnection and reconnection services Network security issues related to load control Stakeholder views on timeframes for implementation 	22 January 2015	Sydney

Presentations and other materials from the workshops are available on the AEMC website.⁵⁶

The Commission also held separate information sessions with consumer groups and met individually with many stakeholders.

1.7 Consultation on draft rule determination

The Commission invites submissions on this draft rule determination, including the draft rule, by 21 May 2015. In order for the AEMC to meet its statutory deadline for publication of the final rule determination and final rule in July 2015, it is important that submissions are provided by this date.

The Commission will hold a public forum on the draft rule determination in late April or early May 2015. A date and location for the public forum will be confirmed shortly and further information about the forum will be made available on the AEMC website.

In accordance with section 101(1a) of the NEL and section 258(2) of the NERL, any person or body may request that the Commission hold a hearing in relation to the draft rule determination. Any request for a hearing must be made in writing and must be received by the Commission no later than 2 April 2015.

Submissions and requests for a hearing should quote project number “ERC0169” and may be lodged online at www.aemc.gov.au or by mail to:

Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

⁵⁶ <http://www.aemc.gov.au/Rule-Changes/Expanding-competition-in-metering-and-related-serv>

2 The draft rule determination

2.1 Commission's draft determination

In accordance with section 99 of the NEL and section 256 of the NERL, the Commission has made this draft rule determination in relation to the rule proposed by the COAG Energy Council.

The Commission has determined that it should make a more preferable rule, but it contains many elements of COAG's rule change request.⁵⁷ Aspects of the draft rule that differ from COAG Energy Council's rule change request are discussed further in section 2.2.3.

The Commission's reasons for making this draft rule determination are set out in Chapters 3 to 5 and Appendices A to H.

A draft of the rule that the Commission proposes to make (draft rule) is attached to and published with this draft rule determination. Its key features are summarised below and described in more detail in Chapter 4 and the appendices.

Key features of the draft rule:

- The draft rule changes who has overall responsibility for metering services under the NER to promote competition in the provision of metering and related services by:
 - providing for the role and responsibilities of the existing Responsible Person to be provided by a new type of Registered Participant - a Metering Coordinator;
 - allowing any person to become a Metering Coordinator, subject to meeting the registration requirements;⁵⁸
 - permitting a large customer to appoint its own Metering Coordinator; and
 - requiring a retailer to appoint the Metering Coordinator, except where a large customer has appointed its own Metering Coordinator.
- It requires a Metering Coordinator to take on roles additional to those currently performed by the Responsible Person so that the security of, and access to,

⁵⁷ Under section 91A of the NEL and section 244 of the NERL the Commission may make a rule that is different (including materially different) from a market initiated proposed rule if it is satisfied that, having regard to the issues or issues that were raised by the market initiated proposed rule, the more preferable rule will or is likely to better contribute to the NEO and the NERO, respectively.

⁵⁸ Currently the LNSP has overall responsibility for provision of metering services to most small customers and either the LNSP or the retailer is responsible for the provision metering services to other customers.

advanced meters and the services provided by those meters are appropriately managed.

- It specifies the minimum services that a new or replacement metering installation installed at a small customer's premises must be capable of providing.
- It provides for the circumstances in which small customers may opt out of having a new metering installation installed at their premises.
- It clarifies the entitlement of parties to access energy data and metering data in order to reflect the changes to roles and responsibilities of parties providing metering services.
- It provides for LNSP to continue to get the benefit of network devices installed at customers' premises that assist them to monitor and operate their distribution networks.
- It permits a retailer to arrange for a Metering Coordinator to remotely disconnect or reconnect a small customer's premises in specified circumstances.
- It makes changes to the model terms and conditions of standard retail contracts to reflect the changes to the roles and responsibilities of parties providing metering services under the draft rule.

2.2 Rule making test

2.2.1 Assessment of the draft rule against the NEO

Under section 88(1) of the NEL the Commission 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 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 draft rule supports the development of a market for the provision of advanced metering services, and subsequently the uptake of efficient demand side participation

by residential and small business customers.⁵⁹ The Commission is satisfied that the draft rule will, or is likely to, contribute to the achievement of the NEO for the reasons set out below.⁶⁰

Efficient investment in metering services

The draft rule will enable a market-led deployment of advanced meters. In a market-led deployment, competition and consumer choice, rather than regulation, will drive the uptake and penetration of advanced meters. Investment in metering services driven by consumers choosing products and services they value at a price they are willing to pay can be expected to result in efficient investment.

The draft rule supports the development of a NEM-wide market for the provision of advanced metering services.⁶¹ This framework has the potential to reduce regulatory costs and complexity for businesses operating across jurisdictional boundaries. Under a consistent framework, consumers can be expected to benefit from lower costs for metering services, including any advanced metering services provided to them.

The Commission anticipates that under the draft rule, metering installations will only be replaced where efficient to do so, such as at the end of their useful life or where a new meter can support additional services that consumers wish to take up. Unnecessary meter churn is unlikely to occur as competitive pressures are likely to drive retailers to seek efficient, lower cost outcomes to attract and retain customers.

These arrangements are expected to increase competition and support better informed decision making about investment in advanced meters based on the expected price and service outcomes for parties across the supply chain, eg retailers, DNSPs, energy service companies and consumers.

Consumer participation and choice in electricity products and services

The draft rule will support the efficient deployment of advanced meters for residential and small business customers across the NEM. Advanced meters can provide a platform for consumers to take up products and services that help them make decisions about how they use electricity. For example, better consumption information, which may be available through advanced meters, can help consumers compare retail pricing offers and choose an offer that reflects their electricity needs and usage preferences. Increasing competition for products and services, such as load control or

⁵⁹ This refers to 'small customers' as defined in the NERL, being a residential customer or a business customer that consumes energy below the upper consumption threshold (100MWh per annum). Some jurisdictions have set a different threshold.

⁶⁰ Under section 88(2), for the purposes of section 88(1) the AEMC may give such weight to any aspect of the NEO as it considers appropriate in all the circumstances, having regard to any relevant MCE statement of policy principles.

⁶¹ The extent to which there is a fully consistent national framework will depend on whether jurisdictions introduce or retain existing jurisdictional requirements, and the extent to which the AER's distribution determination decisions vary between jurisdictions. In addition, the NERR amendments under the draft rule will not apply in Victoria, which has currently not adopted the NECF.

time of use tariffs, is expected to place a downward pressure on the price of these products and services.

Competition for the provision of metering services is also likely to promote innovation, which will expand the technological capability of meters and consequently the range of electricity products and services that can be offered to consumers. A market with many service providers is expected to provide incentives for these parties to innovate and improve service offerings to consumers while driving prices down.

Further, the draft rule provides for a smooth transition from the existing rules to the new framework. The draft rule avoids unnecessary regulatory burden and instead promotes opportunities for consumers to become more active participants in the electricity market through engaging with a new range of products and services, should they wish to do so.

Efficiency of the national electricity system as a whole

Over time, the draft rule is expected to improve the efficiency of the national electricity system as a whole by influencing the decisions consumers and Market Participants make in respect of the electricity market. For example, the increased penetration of advanced meters may enable:

- consumers to better understand their electricity consumption and, if they choose, to change their usage to save money or take up new products and services that better reflect their needs and preferences. Depending on what price structures are offered by retailers, a consumer with an advanced meter could choose to remain on a flat rate retail price or could choose from a range of other offers from its current retailer or another retailer;
- DNSPs to implement network prices that better reflect the costs associated with each consumer's use of the electricity network. The Commission's recent final determination on distribution network pricing contained analysis that estimated that cost reflective network prices could result in 80 per cent of consumers facing lower network charges over the long term. This is on the basis of more informed consumer choices leading to more efficient utilisation of the network which would require less investment in network infrastructure over time;⁶²
- consumers to switch electricity retailers more quickly (through remote meter reading) and the more efficient disconnection/ reconnection of consumers' supply, resulting in a more efficient operation of the retail market; and
- DNSPs to respond more quickly, and at lower cost, to power outages or poor supply quality where the advanced meters are used to support grid management technologies, which may lead to improved reliability and quality of electricity supply.

⁶² See <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>.

2.2.2 Assessment of the draft rule against the NERO

Any changes to the NERR must satisfy two tests under the NERL.

Under section 236(1) of the NERL, the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the National Energy Retail Objective (NERO). The NERO is set out in section 13 of the NERL as follows:

“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.”

Under section 236(2)(b) of the NERL, the Commission must, where relevant, also 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.”

This second requirement is referred to as the 'consumer protections test'. Where the consideration of consumer protections test is relevant in the making of a rule, the Commission must be satisfied that both the NERO test and the consumer protections test have been met.⁶³ If the Commission is not satisfied that both tests have been met, the rule cannot be made.

NERO test

Because the requirement to promote efficiency in the investment in, and efficient operation and use of, electricity/energy services for the long term interests of consumers is a common requirement in both the NEO and the NERO, the Commission is satisfied that the draft rule will, or is likely to, contribute to the achievement of the NERO for the reasons set out in section 2.2.1.⁶⁴

Consumer protections test

A number of consumer protections are relevant to this rule change request, including those provided for by:

- the NERR;

⁶³ That is, the legal tests outlined in section 236(1) and 236(2)(b) of the NERL.

⁶⁴ Under section 236(2) of the NERL, for the purposes of section 236(1) the AEMC may give such weight to any aspect of the NERO as it considers appropriate in all the circumstances; and where relevant, the AEMC must 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; and the AEMC must have regard to any relevant MCE statement of policy principles.

- the general law, eg Australian Consumer Law;
- retail energy laws and regulations of jurisdictions participating in the NECF (which currently includes the ACT, NSW, Queensland (from 1 July 2015), South Australia and Tasmania) and, where relevant, of jurisdictions not yet participating in the NECF (Victoria).⁶⁵

The classes of consumer protections that are relevant to the draft rule amending the NERR are:

- safety and disconnection of the supply of electricity to a small customer's premises, given the potential ability for DNSPs and retailers to remotely disconnect or reconnect a small customer's premises;
- interruption of the supply of electricity to a customer's premises, where a customer's existing metering installation is replaced with a new one as part of a "new meter deployment";
- minimum standard terms and conditions for retail contracts, given that these will be amended to more clearly reflect the role of the retailer with respect to metering services;
- obtaining consent from customers, given the ability for customers to "opt out" of having their metering installations replaced under a new meter deployment, or alternatively to give their consent under a market retail contract to having their metering installation replaced; and
- provision of information to consumers, given that small customers will be notified of new meter deployments and their right to opt out of having their meter replaced as part of a new meter deployment.

The Commission is satisfied that the draft rule is compatible with the development and application of these consumer protections for small customers because it maintains existing relevant consumer protections and in relation to several areas, for example customers who require life support equipment, the draft rule enhances consumer protections.

2.2.3 More preferable rule

Under section 91A of the NEL and section 244 of the NERL, the Commission may make a rule that is different (including materially different) from a market initiated proposed rule if it is satisfied that, having regard to the issue or issues that were raised by the market initiated proposed rule, the more preferable rule will or is likely to better contribute to the NEO and the NERO, respectively.

⁶⁵ Relevant Victorian energy laws include the *Electricity Industry Act 2000* (Vic) and the Electricity Retail Code. Relevant Queensland energy laws include the *Electricity Act 1994* (Qld) and the Electricity Industry Code. We also considered relevant electrical safety legislation and regulations in NECF and non-NECF jurisdictions.

While the Commission's draft rule is a more preferable rule, it incorporates many elements proposed by the COAG Energy Council in the rule change request.

The Commission is satisfied that the draft rule will, or is likely to, better contribute to the NEO and the NERO than the COAG Energy Council's rule change request. Several aspects of the draft rule differ from what was proposed by the COAG Energy Council in its rule change request. In particular:

- In recognition that advanced meters can provide consumers and the market with significant long term benefits, the draft rule requires that all new metering installations installed for small customers meet the minimum services specification (subject to an ability for AEMO to grant an exemption in certain limited circumstances). The application of the minimum services specification to all metering installations installed at a small customer's premises differs to the COAG Energy Council rule change request which proposed that the minimum services specification be binding only if prescribed by a jurisdiction.⁶⁶
- The draft rule does not provide for jurisdictions to introduce regulation to prescribe exclusivity for one or more, or a class of, Metering Coordinators to coordinate metering services for some metering installation types.⁶⁷ The Commission considers that the COAG Energy Council's concerns will be addressed by alternative means in the draft rule.⁶⁸ Further, the purpose of this rule change is to facilitate competition in the provision of metering services. This objective is achieved in part by removing exclusivity arrangements, and allowing any party that meets the applicable registration requirements to be appointed to the Metering Coordinator role;
- Complexity for small customers is minimised by the draft rule by requiring retailers to appoint a Metering Coordinator for small customer connection points and not, as proposed by the COAG Energy Council, allowing small customers to appoint their own Metering Coordinator and imposing a range of obligations on retailers to facilitate that choice by small customers;
- The draft rule enables a smooth transition for Victorian consumers to the new arrangements by including Victoria in the national framework from the outset, rather than allowing for an additional period during which DNSPs could exclusively perform the role of Metering Coordinator at the connection points of small customers as proposed by the COAG Energy Council.

⁶⁶ COAG Energy Council, rule change request, October 2013, p15.

⁶⁷ *Ibid.*, p17.

⁶⁸ The Commission understands that the purpose of the COAG Energy Council's proposed exclusivity arrangements is to mitigate the risk that: competition does not emerge in a particular market segment of region; consumers could be adversely affected by competition because the costs of type 5 or 6 metering services are expected to increase; and/or a market could be created for the provision of type 5 and 6 metering services, if small customers are able to opt out of having a metering installation that meets the minimum services specification installed at their premises.

The draft rule establishes a consistent framework across the NEM for the provision of metering services, which can be expected to benefit:

- consumers, through potentially lower metering charges due to increased competition for the provision of metering services and more efficient operation of the electricity market;
- Market Participants, through potentially lower regulatory and transaction costs; and
- Metering Coordinators, through the ability to generate economies of scale across jurisdictional boundaries.

Appendices A to G explain in greater detail the reasoning for making the draft rule, and why the draft rule is expected to better contribute to the achievement of the NEO and the NERO than the rule proposed by the COAG Energy Council.

2.3 Assessment framework

This section sets out the analytical framework that the Commission has used to assess the rule change request.

The Commission's assessment approach is based on the NEO and the NERO. The requirement to promote efficiency in the investment, operation and use of electricity/energy services for the long term interests of consumers is common to both the NEO and the NERO. The criteria below have therefore been used to assess the proposed changes to both the NER and NERR.

To assess whether the draft rule promotes efficiency in the investment, operation and use of electricity/energy services for the long term interest of consumers, the Commission has applied the following assessment criteria:

- *Competition*: Whether the draft rule promotes incentives for parties to supply consumers with metering services and other energy products and services that consumers want at a price that reflects the efficient costs of doing so.
- *Transparency and predictability*: Whether the draft rule promotes confidence in the market by providing a regulatory framework under which roles and responsibilities are clearly defined, and parties, including consumers, have sufficient information to make decisions.
- *Administrative burden and transaction costs*: Whether the draft rule sets out a framework that is as simple and practicable as possible in the circumstances, and without excessive regulation that might impose unnecessary complexity, risks or costs for consumers.
- *System integrity*: Whether the draft rule upholds the operational objectives of the NEM, as outlined in the NEO, particularly with regard to the quality, safety,

reliability and security of energy supply and the national electricity system as a whole.

The Commission's application of each of these criteria is described below.

2.3.1 Competition

The Commission has assessed whether the draft rule supports the development of competition for the provision of metering services. In particular, whether the framework is likely to:

- provide sufficient incentives to establish a workably competitive market;
- support the development of a NEM-wide market by minimising jurisdictional differences where possible and recognising that in some circumstances, for example in regional or remote areas, competition may not emerge as quickly;
- encourage parties to negotiate regarding access to the services enabled by advanced meters;
- minimise distortions to competition which may arise due to interactions between the regulated and competitive segments of the market, eg where DNSPs are providing services in the competitive market; and
- support innovation and efficient investment in advanced metering and energy services and whether this, in turn, is likely to have the effect of:
 - encouraging retailers to offer consumers retail energy services that align with the consumer's needs and preferences at a price that reflects the efficient cost of doing so; and
 - encouraging energy service companies to offer consumers energy products and services that align with the consumer's needs and preferences at a price that reflects the efficient cost of doing so.

The Commission is of the view that the draft rule will support the development of a competitive market for the provision of metering services in the NEM that can achieve the objectives listed above. Through competition, the Commission expects that the benefits of advanced metering will accrue across the supply chain. A NEM-wide, competitive market would be expected to reduce transaction costs for Market Participants and increase efficiencies and economies of scale, which would be passed on to consumers in the form of lower costs, increased innovation and improved service outcomes.

2.3.2 Transparency and predictability

Transparency and predictability are integral to the success of a competitive market for the provision of metering services. The Commission has assessed whether the draft rule supports the development of a market that:

- provides Market Participants with the confidence and willingness to invest in advanced metering technologies and services;
- provides all parties, especially consumers, with sufficient information to make decisions; and
- encourages consumer participation and choice of energy products and services that reflect individual needs and preferences.

The draft rule is expected to provide a regulatory framework that is transparent and predictable for consumers and Market Participants to achieve these objectives. For example, the establishment of a minimum services specification will provide a clear understanding of the minimum service capability that is required to operate in the market.

2.3.3 Administrative burden and transaction costs

Transaction costs are those incurred when entering into an arrangement for the supply or purchase of a product or service. The Commission has assessed whether the draft rule:

- is a proportionate response to regulatory and administrative barriers to investment in, and uptake of, advanced meters and the services they enable; and
- is simple and practicable from a consumer's perspective, and allows them easy access to information to make decisions about the service offerings available to them.

A fundamental aspect of the proposed framework is the development of a competitive market for advanced metering services. The success of this market is undermined if regulation is excessive, complex or ambiguous. Such regulation can impose unnecessary risks and costs for businesses, which will inevitably be passed on to consumers in the form of higher prices.

While the model is complex, the Commission has sought to minimise changes to the current rules and keep the arrangements as simple as possible. The Commission is of the view that the draft rule provides the minimum regulation necessary to achieve the intended objectives of the rule change request. It also aims to promote consumer engagement with retailers and other energy service companies, which will encourage competitive discipline on the price and quality of services provided to them.

2.3.4 System integrity

The development of a market for the provision of metering services should not undermine the quality, safety, reliability and security of the national electricity system and the supply of energy services to consumers. The Commission has assessed whether the draft rule:

- is clear about the role that relevant parties have in helping to ensure the safe and efficient operation of the national electricity system and the provision of energy services to consumers; and
- allows DNSPs to continue to meet their obligations regarding the safety and operation of the network.

The Commission is of the view that the draft rule maintains, and in some cases strengthens, existing regulation to support the integrity of the national electricity system and the delivery of energy services to consumers.

2.4 Other requirements under the NEL and NERL

The Commission's consideration of other NEL and NERL requirements is described in Appendix G.

3 Expected outcomes for consumers

The new arrangements set out in the draft rule provide the foundation for a broad energy market reform program focussed on giving consumers opportunities to better understand and take control of how they use electricity and the costs associated with their usage decisions.

The AEMC and other parties are working on a number of changes to the regulatory framework to support this objective, including network pricing arrangements, consumer protections and access to energy consumption information. A number of these projects are described in further detail in Chapter 1. Under this new regulatory framework, retailers, DNSPs and energy service companies will be able to offer a greater range of services that meet consumers' preferences and needs.

Accumulation meters, the most common type of meter used in residential and small business premises across the National Electricity Market (NEM), give consumers little opportunity to understand and manage how they use electricity. Advances in metering technology, and the energy products and services this technology enables, can give consumers more choice and control. With the right technology, information and price signals, consumers are better able to make decisions about how and when they use electricity, and manage the costs of those decisions.

Greater consumer choice around energy use and the adoption of new technologies can influence the future direction of Australia's electricity system. New and emerging technologies like real-time energy usage displays and portals, smart air conditioners and in-home storage systems will facilitate a wider range of ways for consumers to manage their electricity consumption, particularly during peak demand periods. Electricity consumption decisions made at the household and small business level can lead to greater system efficiencies and cost savings for all consumers.

3.1 Outcomes for consumers under the current arrangements

The primary purpose of a metering installation is to measure the flow of electricity to generate data for settlement of the wholesale electricity market and customer billing.

The oldest and most common type of electricity meter used in residential and small business premises across the NEM is the accumulation meter. Accumulation meters perform only a basic metering function – they record the total amount of electricity used, but not the time at which it is used. These meters must be read manually at the premises by a meter reader. The consumer is billed for the difference between meter readings over a period of time, which is usually about three months to match the retail billing cycle.

As a consequence, the majority of residential and small business consumers in the NEM:

- are charged a flat rate for electricity consumption regardless of when the electricity is used, which, in many cases, will not reflect the actual cost of producing and transporting electricity at that time;
- have limited information available to them from which to make informed decisions about their electricity consumption and associated costs;
- are limited in the energy product and service offerings available to them;
- may experience lengthy transfers when switching retailers, because the current practice is to transfer the consumer only after an actual read of electricity consumption has been recorded;
- may be billed on an estimate of, rather than actual, electricity consumption, eg if the meter reader is unable to access the premises due to a locked gate or other obstacle.

The current NER provisions allow for, and potentially encourage, the continued installation of accumulation meters and therefore does not fully support a consumer's ability to monitor, manage and adjust their electricity consumption. On a larger scale, this restrains the efficient operation of the electricity system, which affects the prices that all consumers pay for the electricity they use.

3.2 Outcomes for consumers under the draft rule

Technological innovation has meant that meters can now do much more than just measure the flow of electricity. Advanced meters measure both how much electricity is used and when it is used – in near real time. Depending on the functionality of the metering installation, the ability to send and receive data remotely enables data on electricity consumption, electricity outages and other information on the performance of the distribution network to be obtained almost instantaneously. This information can help DNSPs lower costs and better manage the reliability of electricity supply. A variety of services such as remote meter reading, remote access to appliances and different pricing options can also be enabled by advanced meters.

Advanced meters are an enabling technology. Like a mobile phone or a pay TV box, they are the physical infrastructure that enables consumers to use a service that they value. Advanced metering technology is a tool that can help consumers monitor, manage and adjust their electricity consumption and, importantly, capture the value of doing so, if they so choose.

The draft rule establishes a framework to facilitate a market-led deployment of advanced meters. This approach is based on evidence that competition, as opposed to regulation, is more likely to drive innovation in products and services and facilitate the deployment of advanced meters and services to consumers at the lowest possible cost.

Under a competitive framework, consumer choices and preferences will influence the level of penetration of advanced meters and the types of products and services that are offered.

All new and replacement metering installations provided for small customers must meet the minimum services specification (subject to a limited AEMO exemption power). A small customer will have an advanced meter installed:

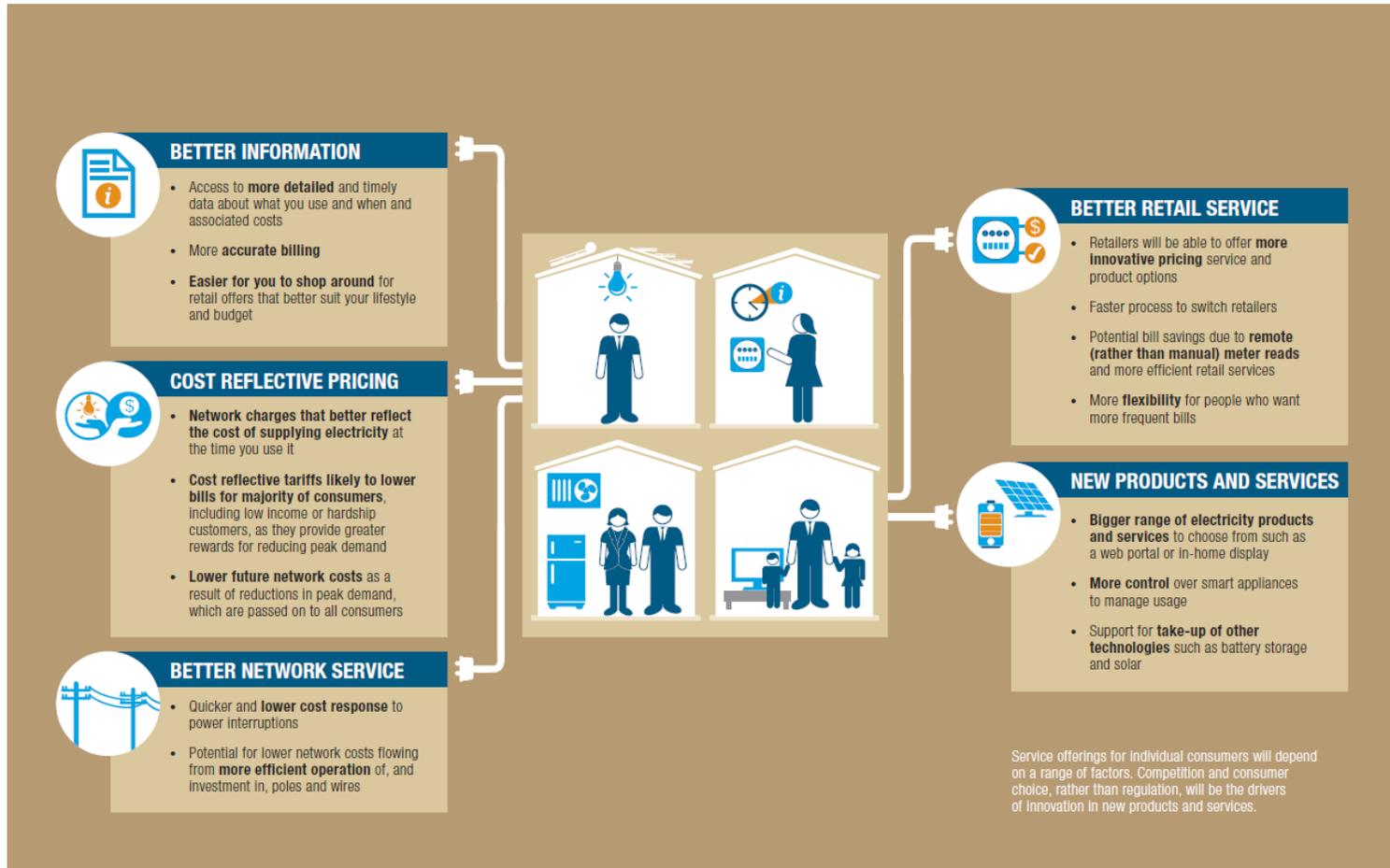
- when they choose a service or pricing option that necessitates the installation of a more advanced meter, eg an in-home display or a time of use tariff;
- where a retailer carries out a deployment of advanced meters to its retail customers, eg to achieve operational efficiencies through remote meter reading, and the consumer has not opted out;
- where the existing metering installation is faulty or needs to be replaced under a maintenance replacement (as defined in the draft rule); or
- where a new premises has a metering installation installed.

An increase in the penetration of advanced meters, and the uptake of energy products and services that this technology enables, may result in a wide range of benefits for all parties across the electricity supply chain, including consumers. The potential benefits for consumers are outlined in Figure 3.1 on the following page and described in more detail below.

Figure 3.1 Potential benefits to consumers from energy products and services enabled by advanced meters

CONSUMER BENEFITS

The draft rules enable the competitive deployment of advanced metering – allowing people to find new ways to monitor, manage and adjust their use of electricity to suit their budget.



Consumers who choose to use the information and services enabled by their advanced meter will experience a number of these benefits. However, many of the benefits may be shared by all consumers, regardless of their level of engagement.

Whether individual consumers receive the potential benefits discussed below will depend on a range of factors, including the extent and speed of deployment of advanced meters in the NEM, the range of new products and services offered by retailers and Metering Coordinators, and whether the consumer wishes to take up those new products and services.

The draft rule will not result in every consumer immediately receiving an advanced meter. All new and replacement metering installations for small customers must meet the minimum services specification, so there will be a gradual increase in the number of advanced meters over time. Under the draft rule, whether a small customer with a working metering installation⁶⁹ will have that metering installation replaced by their retailer will largely depend on whether retailers wish to deploy advanced meters for commercial reasons (such as enabling the offer of a broader range of products and services to customers).

If a retailer does wish to replace a small customer's working metering installation then under the draft rule the retailer must give the small customer an opportunity to opt out of having their metering installation replaced unless the customer has requested or otherwise agreed to the replacement.⁷⁰

All new and replacement metering installations for small customers must be "capable of providing" the services listed in the minimum services specification. In practice, however, which of those services are activated and offered will be dependent on the arrangements between the Metering Coordinator and the retailer that appointed it and negotiations with parties seeking access to those services. Parties may also negotiate with Metering Coordinators to offer additional services over and above the services in the minimum services specification.

The outcomes of the draft rule will therefore depend to an extent on which services are offered by Metering Coordinators and which services parties seeking access desire and are willing to pay for.

Although the points above mean that there is some uncertainty about the speed of the deployment of advanced meters and the services that will ultimately be offered by those meters, the Commission considers that this market-led approach best promotes the long term interest of consumers. This approach results in the extent of investment in advanced meters, and therefore the cost associated with such investment, being driven in a large part by the market and by consumer preferences so that advanced

⁶⁹ For the purposes of this draft determination, a working metering installation is taken to mean a metering installation of a small customer that is not faulty and is not considered likely to fail based on sample testing of a meter population.

⁷⁰ See Appendix C2 for further detail about these arrangements.

meters deliver the services that consumers and other parties value at a price they are willing to pay.

3.2.1 Better information

With an advanced meter, consumers may have access to more granular data about how much electricity they use and when. Consumers who access this information will be better able to understand the costs associated with their electricity use and, if they choose to, change their consumption behaviour to lower costs. An awareness of the costs associated with their electricity use may also support consumers decisions to buy more energy efficient appliances or invest in emerging technologies such as storage or smart appliances that could help them manage their energy costs.

Consumers are expected to be better able to shop around for a retail offer that suits their electricity needs and consumption preferences. As the number of advanced meters in the market increases, retailers are expected to develop offers that cater to a wider range of electricity needs and preferences.

The framework in the draft rule is intended to compliment a rule change made by the AEMC in November 2014 regarding a consumer's access to information about their energy consumption.⁷¹ That rule change makes it easier for consumers to access their historical electricity consumption information from their retailer or DNSP in an easy-to-understand, affordable and timely way. That rule change also allows consumers to authorise another party to access this data.

If a consumer has an accumulation meter, only a limited amount of information is available for them to access under the new rules regarding customer access to information about their energy consumption. The benefits from that rule change increase for consumers with advanced meters, who will be able to obtain more detailed and useful information to assist with their decision making.

Having an advanced meter may also enable consumers to access close to real time energy usage information remotely, for example through a web portal or in-home display. Results from the Smart Grid Smart City trial indicate that consumers highly value the ability to use in-home displays to see near real time information about their electricity use. Seventy nine per cent of consumers in the trial with an in-home display were able to reduce their overall electricity use.⁷²

Consumers will also be billed more accurately. Because advanced meters can be read remotely via a communications network, consumers will not be billed on an estimate of their electricity consumption.⁷³ In addition, the more granular information

⁷¹ See section 1.4.2 above.

⁷² Arup, Smart Grid Smart City: Shaping Australia's energy future, National cost benefit assessment, July 2014, p130.

⁷³ Retailers will bill consumers on an estimate of their electricity consumption if the meter reader is unable to access the meter.

provided by advanced meters allows retailers and consumers to resolve bill disputes more quickly.

3.2.2 Cost reflective pricing

The component of a consumer's electricity bill that represents network charges in most cases does not currently reflect the costs of supplying network services to that consumer. Some consumers pay more than the costs caused by their electricity use while others, particularly those that use a greater proportion of their energy at peak times, pay less than the costs caused by their electricity use. This is because in general, distribution network charges currently over-recover for off-peak use of the network and under-recover for peak use.

A rule change recently completed by the AEMC addresses this issue by requiring DNSPs to set prices that better reflect the efficient cost of providing network services to individual consumers.⁷⁴ The benefits of this rule change will be significantly increased if more consumers have an advanced meter that is able to support different pricing arrangements.

Cost reflective prices are expected to lead to lower bills for the majority of customers because they provide stronger signals for consumers to minimise peak demand, thereby lowering future network costs, which are passed on to all consumers. Research carried out for the AEMC in 2014 found that average network charges for residential consumers under cost reflective prices could be reduced by \$28 to \$145 per year. The same research found that a small business could save up to \$2,118, or 34 per cent of its total annual electricity network charges, by using less electricity at peak times for just 20 hours of the year when electricity networks are congested.⁷⁵

Research has also demonstrated that low income consumers and consumers in a hardship program can benefit significantly from cost reflective tariffs. For example, research by AGL based on data from 160,000 Victorian consumers shows that under current flat rate tariffs, consumers in a hardship program are the most likely of all consumer types to be paying more than the costs caused by their energy usage. AGL estimated that 79 per cent of consumers in a hardship program would pay lower charges under a cost reflective price structure.⁷⁶

In order to obtain the benefits of these cost reflective prices, consumers need the ability to access advanced metering services that can support more advanced price structures such as time-of-use, capacity or critical peak prices. Accumulation meters cannot support these types of tariffs, which means that these tariff structures are currently unavailable to most residential and small business consumers outside of Victoria.

⁷⁴ <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>

⁷⁵ This research was undertaken for the distribution network pricing arrangements rule change, and can be found at <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>.

⁷⁶ Simshauser, P., Downer, D., *On the inequity of flat-rate electricity tariffs*, AGL Applied Economic and Policy Research, Working Paper No. 41, June 2014.

Time of use pricing, or other forms of cost reflective pricing structures, encourage consumers to make more informed consumption decisions by comparing the value they place on using electricity with the cost of electricity at a particular time. For example, a consumer that has chosen a time-of-use tariff might delay turning on their dishwasher or washing machine on until the peak demand period is over and the cost of electricity is lower. However, it is important to note that the draft rule does not introduce any requirement for consumers with advanced meters to take up a time-of-use tariff. Consumers may choose to remain on a flat tariff where this is offered by their retailer.

3.2.3 New products and services

The Commission's draft rule will support the development of a market for the provision of advanced metering services. Effective competition will likely increase the range of electricity products and services available to consumers, and the number of parties offering them. A market with many service providers will give incentives for these parties to improve service offerings to consumers while driving prices down.

Under the draft rule, parties may offer services beyond those listed in the minimum services specification. Some of the possible products and services that could be enabled by advanced meters include:

- Viewing electricity usage through an in-home display or web portal: These products connect remotely to the consumer's advanced meter and are used to display near real time data about the consumer's electricity consumption. This means that consumers can see detailed information about their current usage, historic usage and associated costs. These products could also allow consumers to compare their usage with similar homes in the area, set electricity budgets, pay bills and get energy saving tips. This information can help consumers monitor their electricity use and manage costs.
- Load management. Consumers who take up this service authorise a third party, often their DNSP, to control components of their electricity load (eg their pool pump) at certain times in exchange for a lower tariff or other incentive. Many consumers already benefit from load management through off peak hot water services, in which their hot water system is turned on overnight at a lower electricity rate. Advanced meters could enable consumers to take up similar services for other household appliances.

Competition for the provision of metering services is also likely to promote innovation. Innovation will expand the technological capability of meters and consequently the range of electricity products services that can be offered to consumers.

Engaged consumers may be able to have their metering installations configured to communicate remotely with programmable devices like air conditioners to adjust their settings to use less power at certain times.

Advanced meters and cost reflective price structures can also send efficient signals to consumers regarding whether to take up of other technologies, such as solar PV and battery storage, that can help them manage their energy usage and costs. The uptake and efficient use of these technologies is reliant on consumers having the metering technology to support that choice.

3.2.4 Better retail service

The increased penetration of advanced meters in the NEM is expected to encourage retailers to offer more innovative pricing, product and service options to consumers.

A number of innovative pricing offers are now available to most consumers in Victoria, who already have advanced meters in place. For example, AGL offers its customers free electricity on Saturdays, which could potentially help consumers reduce electricity costs if they shift some of their consumption. Powershop offers its customers the ability to buy power 'in bulk' for use in the months ahead. Customers can see how much electricity they have bought and how much they have used using a mobile phone application. This can help consumers budget and smooth out the cost of their electricity use.

The service quality of retail energy services provided to consumers is also expected to improve. For example, Victorian consumers with advanced meters are able to switch retailers more quickly because the commands to do so are sent remotely in near real time via the advanced meter.

The functionality of advanced meters also enables retailers to disconnect and reconnect their customers quickly, for example when they move house. This is expected to help consumers get reconnected to the electricity network as soon as possible after a period of disconnection. The Smart Grid Smart City trial estimated that the avoided operational costs for manual connections and disconnections would have a net present value of around \$16 million under a national consumer-led deployment of advanced meters.⁷⁷

Advanced meters can also allow retailers to realise economic efficiencies through the remote reading of meters via a communications network. The Smart Grid Smart City trial estimated that the net present value of avoided operational costs for manual meter reading would total around \$11 million under a national consumer-led deployment of advanced meters.⁷⁸ These avoided costs would be expected to be passed on to consumers through bill savings and a more efficient retail service.

Remote reading capability also allows retailers to give their customers more flexibility over how often they are billed. For example, consumers may choose to be billed monthly or weekly, rather than three-monthly, to help reduce 'bill shock'.

⁷⁷ Arup, Smart Grid Smart City: Shaping Australia's energy future, National cost benefit assessment, July 2014, p194.

⁷⁸ Ibid.

3.2.5 Better network service

Over time, an increased penetration of advanced meters is expected to maximise the efficiency of the electricity system as a whole by influencing how consumers and Market Participants operate and engage in the electricity market.

Information provided by advanced meters can give DNSPs a better picture of electricity consumption patterns and enable them to make more efficient network investment decisions. Demand management technologies and consumers' responses to electricity price signals can help reduce peak demand which may, in turn, allow DNSPs to defer or avoid network expenditure. These outcomes would benefit consumers in the form of lower electricity costs.

Where it has entered into an agreement to purchase these services, advanced meters may be able to provide a DNSP with quicker notification of a power outage or distortions in the quality of electricity supply. This helps the DNSP respond to outage and supply quality distortions more quickly and a lower cost, leading to improved reliability and quality of electricity supply to consumers.

If negotiated for inclusion in the advanced meter, advanced metering technology could also provide safety benefits that existing accumulation meters do not, including the ability to automatically detect overheating or faulty wiring.

3.3 Consumer protections

The draft rule maintains existing consumer protections with regard to a retail customer's relationship with its retailer and DNSPs. It also introduces several additional protections for small customers who have an advanced metering installation that meets the minimum services specification.

In particular, under the draft rule the Metering Coordinator must ensure that access to services provided by, and metering data from, a metering installation of a small customer that meets the minimum services specification is only provided to certain parties. For example, in the case of the services listed in the minimum services specification, access must only be provided to an "access party".⁷⁹

Access to services provided by such metering installations that are in addition to those services set out in the minimum services specification can only be provided to a person or for a purpose to which the small customer has given its prior consent. Further details regarding these regulatory arrangements are set out in Appendix C1.

The draft rule introduces protections for small customers with regard to the replacement of working metering installations. Generally, small customers will be able to elect not to have their existing working metering installations replaced by a new metering installation. The draft rule requires retailers to provide their small customers with prior written notice of a proposed replacement of the customer's working

⁷⁹ An access party is a party listed in column 3 of table S7.5.1.1 of the NER in the draft rule.

metering installation, which must include (amongst other things) details regarding the customer's ability to opt out of having its metering installation replaced and the upfront charges the customer will incur under its retail contract as a result of the replacement.⁸⁰ Further details regarding these requirements are set out in Appendix C2.⁸¹

The draft rule gives both retailers and DNSPs the ability (subject to negotiating access to the service with the Metering Coordinator) to arrange remote disconnection and re-connection services directly with the Metering Coordinator in certain circumstances. However, the Commission is cognisant of the potential safety risks associated with remote disconnection and re-connection and in allowing multiple parties to arrange these services with the Metering Coordinator.

The draft rule requires both retailers and DNSPs to share information regarding life support registers and to notify each other regarding changes to the status of a shared customer's supply. In addition, jurisdictional safety regulators may develop further requirements with respect to safely disconnecting and reconnecting customers.

3.4 Expected outcomes for Victorian consumers

Victorian consumers are in a different position to those in other NEM jurisdictions because advanced meters have been installed in the majority of residential and small business premises under the Victorian Government's AMI program. The technology is therefore already in place to enable these consumers to make more informed decisions about their electricity use and for industry to offer more innovative products and services to them.

The focus must now be on realising the expected benefits of these advanced meters, but doing so in a way that enables new investment to support a range of products and services for Victorian consumers.

The draft rule will facilitate a smooth transition for Victorian consumers to the new framework. There remains a set of regulatory arrangements under Victorian jurisdictional instruments and the NER supporting the AMI program that mean it is unlikely that existing advanced meters rolled out under the AMI program will be replaced until they near the end of their useful lives, unless they are found to be faulty or have cause to be upgraded. As a result, the Commission expects that the majority of residential and small business consumers will continue to have their metering

⁸⁰ Metering charges for consumers that retain an accumulation meter may increase over time as more advanced meters are deployed, particularly if the consumer is in an area where very few manual meter reads are required. However, retailers will not be required to include information on possible future price changes that could occur as a consequence of opting out of having an advanced meter installed, as it will not be possible to accurately estimate those potential future price changes. This issue is discussed in Appendix C2.

⁸¹ The opt out provisions are contained in the NERR of the draft rule. The NERR does not currently apply in Victoria.

arrangements managed by their DNSP until the market develops to such a point that other parties see value in taking on this responsibility.⁸²

The draft rule will mean that if a Victorian small consumer requires a new metering installation, for example for a new house or where the existing metering installation is faulty, metering services for that customer will be provided under the new competitive framework. Rather than having new and replacement metering installations installed exclusively by the DNSP under the mandate of the AMI program, parties will compete to provide these services through the consumer's electricity retailer. The Commission considers a competitive approach to the provision of metering services to these consumers is more likely to deliver the services they value at a price they are willing to pay.

3.5 Expected outcomes for large customers

The draft rule allows large customers to appoint their own Metering Coordinator at their connection point. If a large customer chooses to exercise this option, its relationship with the Metering Coordinator will be a commercial arrangement with some supporting regulatory requirements.

Large customers often require a range of services and may therefore require bespoke metering arrangements. Under the draft rule, more service providers may enter the market for metering and advanced energy services, giving large consumers a greater range of providers from which to choose. Competition to provide metering services to large customers is expected to place competitive discipline on retailers and other metering service providers on the prices, terms and conditions of the services they offer.

⁸² The specific transitional arrangements for Victoria are discussed in Chapter 4 and Appendix F.

4 New framework for expanding competition in the provision of metering services

4.1 Introduction

This chapter provides an overview of the new regulatory arrangements for the provision of metering services.

The draft rule removes regulatory barriers to investment in advanced meters. It will facilitate a market-led approach to the deployment of advanced meters where consumers drive the uptake of technology through their choice of products and services. This competitive framework is designed to promote innovation and lead to investment in advanced meters that deliver services valued by consumers at a price they are willing to pay.

A more detailed explanation of the new regulatory arrangements and the Commission's reasons for the draft rule are provided in Appendices A to G of this draft determination.

The chapter is set out as follows:

- section 4.2 provides a high-level overview of the roles of the main parties involved in the provision of metering services under the draft rule;
- section 4.3 describes a retailer's responsibilities for appointing a Metering Coordinator and the circumstances in which consumers will be able to appoint their own Metering Coordinator;
- section 4.4 summarises the roles and responsibilities of the Metering Coordinator, Metering Provider and Metering Data Provider and their registration and accreditation requirements;
- section 4.5 discusses areas where the NER and NERR are updated in the draft rule to reflect changes in roles and technology, including new responsibilities of the Metering Coordinator in relation to advanced metering services;
- section 4.6 describes the minimum services specification and its governance arrangements;
- section 4.7 summarises situations in which a small customer will be able to opt out of having a new metering installation that meets the minimum services specification installed at its premises;
- section 4.8 sets out the Commission's views on competition issues with respect to access to Metering Coordinator services, and how DNSPs can access network-related services;

- section 4.9 outlines the draft arrangements to enable a smooth transition from the existing arrangements put in place in Victoria under the AMI program to the national framework;
- section 4.10 notes the other changes to the NER and NERR that are also contained in the draft rule.

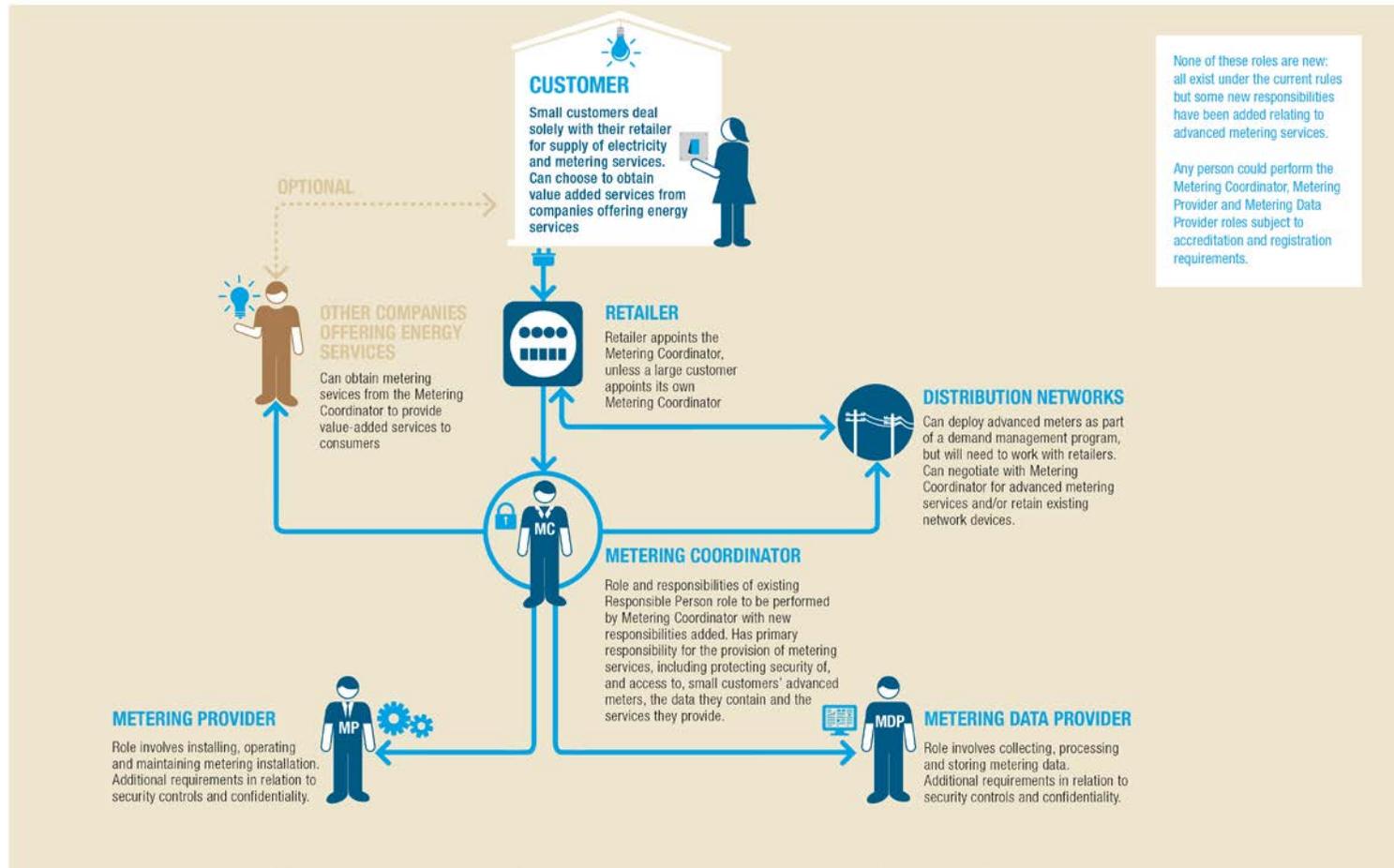
4.2 Overview of roles of the main parties involved in the provision of metering services under the draft rule

Figure 4.1 on the following page provides a high-level overview of the roles and responsibilities of parties under the new regulatory framework.

Figure 4.1 Overview of roles and responsibilities

ROLES AND RESPONSIBILITIES

Clarifying, expanding and opening up existing roles will promote competition in the provision of metering services to improve consumer choice and control while protecting customers.



Under the draft rule the Metering Coordinator will perform the role currently performed by the Responsible Person and certain existing exclusivity arrangements that previously applied to the Responsible Person role have been removed. This allows any party, subject to satisfying certain registration requirements, to act as a Metering Coordinator and, in turn, provide metering services in the NEM.

The Metering Coordinator also has obligations that are in addition to those that currently apply to the Responsible Person. These additional obligations relate to the provision of metering services at "small customer metering installations" (as defined in the draft rule) and address issues such as managing the security of metering installations and managing congestion of requests for access to metering services during emergency conditions.

The Commission does not consider the provision of metering services to have monopoly characteristics. It is possible to have multiple parties competing to provide metering services. Prospects are strong for a workably competitive market to develop in metering services in the NEM. Barriers to entry are low and the Commission is aware that a number of retailers and metering businesses are already considering establishing a Metering Coordinator business.

As such, the removal of existing exclusivity arrangements is anticipated to promote the development of a competitive market for the provision of metering services in the NEM and drive innovation, which is expected to be passed onto consumers in the form of lower costs and improved service outcomes.

The Commission supports a market-led, competitive approach to the investment in metering. The draft rule would put in place a regulatory framework to allow a market-led approach to the deployment of advanced meters. A market-led approach, in which consumers drive the uptake of technology through their choice of products and services, is more likely to lead to investment in advanced meters that delivers the services valued by consumers at a price they are willing to pay.

Other than in new and replacement situations, the draft rule does not mandate that advanced meters should be installed. This approach avoids inefficient investment in technology that is unlikely to be used or where there are likely to be less costly alternatives.

The Commission does not recommend mandating that a particular party must roll out advanced meters to all consumers. This approach would require that advanced meters are deployed whether or not there is a demand for services from consumers and more broadly across the supply chain from retailers, DNSPs and energy service companies.

More prescriptive standards and higher performance levels may also be required under a mandated approach, because competition cannot be relied on to drive innovation and performance. This approach may also require increased regulatory oversight of price, standards and performance in the absence of competitive pressures. The costs of higher standards and regulatory costs are likely to be ultimately passed through to consumers by way of higher charges for metering services.

Under the draft rule, the retailer will continue to be responsible for ensuring there is a metering installation at each of the connection points of its customers. The retailer (as the Financially Responsible Market Participant) will also be responsible for appointing a Metering Coordinator for each of its customers' metering installations, unless a large customer chooses to appoint its own Metering Coordinator. While a retailer may choose to establish a Metering Coordinator business, it may also procure these services on a commercial basis from another registered Metering Coordinator.⁸³

Small customers will not need to, nor be able to, appoint their own Metering Coordinator. However, large customers will have the ability to appoint their own Metering Coordinator if they wish to do so.

Under the draft transitional arrangements, the DNSP (in its capacity as the LNSP) will become the initial Metering Coordinator for small customers for existing type 5 and 6 metering installations. It will continue in this role until another Metering Coordinator is appointed to the connection point by the customer's retailer or those services cease to be classified by the AER as direct control services.

In Victoria, the DNSPs will become the initial Metering Coordinator for the advanced meters they deployed under the AMI program. They will continue in this role until the relevant retailer appoints another Metering Coordinator at the connection point or the services cease to be classified by the AER as direct control services.

The Metering Coordinator will take on the Responsible Person's existing responsibility for appointing a Metering Provider and Metering Data Provider for a connection point.

The Metering Coordinator, Metering Provider and Metering Data Provider operate together to provide metering services to the market. Each of these roles are existing roles under the current NER, but with the Metering Coordinator taking over the role that was previously performed by the Responsible Person.

While the same party may become registered and accredited with AEMO to perform all three roles, the Metering Coordinator, Metering Provider and Metering Data Provider roles have been retained as separately defined roles in the draft rule.

These separate roles reflect the differences in these parties' responsibilities and the different capabilities and registration and accreditation requirements required of each role. Retaining separate roles allows the most appropriately resourced and qualified parties to perform these roles. It may also reduce the barriers to entry increasing the number of parties competing to provide different aspects of metering services.

While the Metering Coordinator is appointed by the retailer in the case of small customers, it may also provide services to other parties on a commercial basis. This may include DNSPs and energy service companies.

⁸³ See section 4.4.2 below for details of which parties may register as a Metering Coordinator, including the prohibition against a Market Customer registering as a Metering Coordinator.

However, there will be no obligation on the Metering Coordinator to provide advanced metering services to other parties and no regulation of the price of those services. The provision and the price of services will be subject to commercial negotiations between the Metering Coordinator and the parties seeking those services.

4.3 Responsibilities for appointing a Metering Coordinator

4.3.1 Appointment of Metering Coordinators

Under the draft rule, the Financially Responsible Market Participant at a connection point is responsible for appointing a Metering Coordinator for that connection point, other than in circumstances where a large customer has appointed its own Metering Coordinator.

In a market-led deployment of advanced meters, the Commission considers that retailers, as the Financially Responsible Market Participant, should be responsible for appointing the Metering Coordinator for the connection points of their retail customers. The services consumers value are more likely to be offered when retailers hold this responsibility due to the direct relationship they have with the customer and given they will be incentivised to offer products and services to retain and attract customers.

Where a Market Generator, Market Customer (eg an aluminium smelter), Market Small Generation Aggregator or Market Network Service Provider is the Financially Responsible Market Participant, they are likely to require bespoke metering arrangements and are best placed to appoint a Metering Coordinator to provide their metering services.

Any party may act as a Metering Coordinator, provided it is registered with AEMO to perform that role. This is discussed in section 4.4.2.

- If a retailer wishes to perform the Metering Coordinator role itself, it will need to establish a separate legal entity (eg a subsidiary) to perform the role. The draft rule provides that a Market Customer may not be registered as Metering Coordinator.⁸⁴

⁸⁴ This restriction has been introduced under the draft rule to address concerns that if a retailer is also a Metering Coordinator at a connection point and the customer at that connection point changes retailers (but the Metering Coordinator does not change), the former retailer may have continued access to the customer's energy and metering data. In such circumstances, the former retailer would no longer be entitled to access that data under the NER in its capacity as a retailer or Financially Responsible Market Participant (as it would cease to hold these positions in respect of the connection point), but the Metering Coordinator would be entitled to access the data. If the Metering Coordinator and former retailer were part of the same legal entity, the Confidential Information provisions in the NER (see clause 8.6) would not be sufficient to ensure that such data collected by the Metering Coordinator business was not provided and used by the retail business being operated by the one entity. Access to this data could limit retail competition by creating an uneven playing field where retailers that were also Metering Coordinators would have access to valuable information that other retailers are not permitted to access under the NER.

- A DNSP may be a Metering Coordinator, provided that it complies with any ring-fencing requirements established by the AER which may include legal separation, accounting separation, operational separation, information sharing requirements or other measures (see Appendix D3).
- An existing Metering Provider or Metering Data Provider, or any other party, could also become a Metering Coordinator.

The relevant Financially Responsible Market Participant will enter into a commercial arrangement to appoint the Metering Coordinator. This arrangement will set out the terms and conditions on which the Metering Coordinator provides services, including the price for those services. Metering Coordinators may also enter into agreements to provide metering services to other parties (subject to requirements in the NER, for example in relation to consumer consent requirements and restrictions on the parties that can request access to certain services), and charge those parties for those services.

Transitional arrangements

Under the draft rule, the LNSP that was acting as the Responsible Person for type 5 and 6 metering installations immediately prior to the commencement of the new Chapter 7 of the NER will become the initial Metering Coordinator at that connection point.

The LNSP will continue in this role until the retailer appoints a different Metering Coordinator to the site or the services cease to be classified by the AER as a direct control service.

Similar transitional arrangements will apply in Victoria. The Victorian DNSPs will become the initial Metering Coordinator for the advanced meters they deployed under the AMI program. They will continue as the Metering Coordinator until a new Metering Coordinator is appointed or the relevant services cease to be classified by the AER as a direct control service.

To implement this initial appointment of the LNSP as Metering Coordinator, the transitional provisions in the draft rule provide that:

- at least three months prior to the commencement of the new Chapter 7 of the NER under the final rule (if made), the LNSP must provide each Financially Responsible Market Participant with a standard set of terms and conditions on which it will agree to act as the Metering Coordinator;
- unless the parties agree other terms and conditions prior to the commencement of the new Chapter 7 of the NER, the LNSP will be deemed to be appointed as the Metering Coordinator on the LNSP's standard terms and conditions.

The draft rule also sets out certain requirements for the terms on which the LNSP will be appointed as Metering Coordinator, addressing amongst other things, price, scope of services and termination of appointment. For example, the Metering Coordinator

must include terms as to price which are consistent with Chapter 6 (and, where relevant, Chapter 11) of the NER, ie the price will be the regulated price set by the AER. The requirements for the terms on which the LNSP will be appointed as Metering Coordinator are outlined in Appendix A1.

Transmission connection points and interconnectors

The requirement to appoint a Metering Coordinator will also apply to transmission connection points.

However, in relation to transmission network connection points, the draft rule provides that the Financially Responsible Market Participant may request that the LNSP offer to act as the Metering Coordinator.⁸⁵ This provision is equivalent to the current provisions that require the LNSP to offer to act as the Responsible Person in certain circumstances.

This requirement has been retained due to concerns that its removal could mean that there may not be any party with the appropriate capabilities and expertise available to provide metering services at transmission network connection points. This is because the technology for these metering installations is specialised and there are only a relatively small number of such connection points. The Commission also understands that the transmission network service provider (TNSP) is currently the Responsible Person for the majority of these connection points.

The arrangements for interconnectors are not changed under the draft rule. Under clause 7.2.1(c) of the NER in the draft rule, the TNSP (and not the Responsible Person) is responsible for the provision, installation and maintenance of metering installations for interconnectors.

The current NER provisions on joint metering installations are also not amended by the draft rule.⁸⁶

The Commission understands that these provisions are intended to address circumstances where an interconnector has two metering installations ie there is one connection point with a metering installation at either end of the interconnector.

Type 7 metering installations

LNSPs currently act as the Responsible Person for type 7 metering installations on an exclusive basis.⁸⁷ The draft rule requires the LNSP to take on the Metering Coordinator role for type 7 metering installations. The Commission does not see value in introducing specific arrangements to allow other parties to provide type 7 metering

⁸⁵ Clause 7.6.3 of the NER in the draft rule.

⁸⁶ Clause 7.8.12 of the NER in the draft rule.

⁸⁷ Type 7 metering installations are not a physical metering installation. Rather, there is a reconciliation between DNSPs and the users of that service using an algorithm to determine the throughput of energy, e.g. for public lighting and traffic lights.

installations where there is no evidence of significant potential for competition in this space.

4.3.2 Consumer appointment of a Metering Coordinator

The Commission has also considered whether consumers should be given the ability to engage their own Metering Coordinator. There are benefits in allowing consumers to engage their own Metering Coordinator. First, it supports consumers' choice of products and services enabled by advanced meters. Second, it may impose a competitive discipline on retailers and Metering Coordinators in terms of the price, terms and conditions of their product and service offerings.

However, providing customers with the ability to choose their own Metering Coordinator needs to be coupled with arrangements that ensure the continued provision of billing and settlements data to the market, as well as appropriate consumer protections.

Under the draft rule:

- large customers will be able to appoint their own Metering Coordinator; and
- small customers will not have the option of engaging their own Metering Coordinator.

Small customers

Small customers will not have the option of appointing their own Metering Coordinator under the draft rule. Rather a small customer's retailer will be required to appoint a Metering Coordinator and ensure there is a metering installation at the small customer's connection point.

Providing small customers with the ability to appoint their own Metering Coordinator would require additional regulatory arrangements to safeguard consumers and market integrity.

For example, additional consumer protections (such as price regulation) may be required to address circumstances where a retailer engages a new Metering Coordinator for a small customer's connection point following the customer's appointed Metering Coordinator becoming insolvent or otherwise being unable or unwilling to perform its functions.

Additional regulation to address these scenarios would be required to ensure there are sufficient processes in place to effect an efficient appointment of a Metering Coordinator by a retailer at the connection point to maintain the continued provision of metrology services essential for the operation of the electricity market. Examples of such scenarios include where:

- the contract between the Metering Coordinator and the small customer expires without replacement;
- the Metering Coordinator becomes insolvent; or
- the Metering Coordinator has not been paid for its services by the small customer and, as such, the Metering Coordinator ceases to provide services at the connection point.

Allowing small customers to directly appoint a Metering Coordinator also raises issues relating to how a market for Metering Coordinator services should be facilitated. If a small customer appoints a Metering Coordinator, it may be necessary for retailers to offer retail contracts that are both inclusive and exclusive of costs associated with the retailer appointing a Metering Coordinator at the connection point. This would most likely require the component price of Metering Coordinator services. Additional regulation may also be required to limit the ability of retailers to offer onerous terms and conditions that may discourage a small customer from appointing its own Metering Coordinator, which would introduce further regulatory complexity.

The development of substantial regulatory arrangements to provide for continuing market integrity and appropriate consumer protections risks a delay to implementing this rule change and the benefits that it is expected to bring consumers. Appointing a Metering Coordinator may also be overly complex for small customers at the commencement of the market for metering services.

Requiring the retailer, who is already subject to consumer protection provisions in the NERR, jurisdictional ombudsman schemes and Australian Consumer Law, to manage metering services on behalf of small customers will be simple and practical from a small customer's perspective and provides for a smooth transition from the existing rules to the new framework.

Despite the regulatory complexities involved, allowing small customers to appoint their own Metering Coordinator could provide a range of potential benefits for small customers. Therefore, the Commission recommends that the option for small customers to appoint their own Metering Coordinator is reviewed three years after the new Chapter 7 of the NER commences, when the market for metering services and consumer understanding of the market has had the opportunity to develop.⁸⁸

Large customers

The draft rule provides large customers the ability to appoint their own Metering Coordinator. Large customers may utilise a range of advanced metering services and therefore may require bespoke Metering Coordinator arrangements. As large customers are likely to have sufficient bargaining power to negotiate terms and conditions and resolve any disputes with a Metering Coordinator, the Commission has

⁸⁸ Terms of reference for this review would be agreed with the COAG Energy Council closer to the scheduled date for the review.

determined that contractual relationships between a large customer and its Metering Coordinators would be on commercial terms and therefore be largely unregulated.

The regulatory changes required to enable large customers to appoint their own Metering Coordinator and ensure the continuing provision of settlements data to the market are not as substantial as for small customers. The significant benefits to large customers of being able to appoint their own Metering Coordinator would outweigh the regulatory and administrative costs involved.

There is a risk that a Metering Coordinator appointed by a large customer may cease to provide metering services and a replacement Metering Coordinator will need to be appointed to protect the continued provision of billing and settlements data to the market. To address this risk, the draft rule introduces default arrangements under which:

- the large customer's retailer must appoint a new Metering Coordinator if:
 - a "Metering Coordinator default event" occurs;⁸⁹ or
 - the contract under which the large customer appoints the existing Metering Coordinator terminates or expires and the large customer does not appoint a new Metering Coordinator within the period specified by AEMO in procedures; and
- if the retailer must appoint a new Metering Coordinator and the existing contract between the retailer and the large customer does not deal with the appointment of a Metering Coordinator in these circumstances, the terms of the contract between the retailer and the large customer relating to the appointment of the Metering Coordinator must be fair and reasonable.

4.4 Roles and responsibilities for the provision of metering services

4.4.1 Responsibilities of the Metering Coordinator

The Metering Coordinator will take on all of the current responsibilities of the Responsible Person.

The Metering Coordinator is responsible for appointing a Metering Provider and Metering Data Provider to provide metering services in accordance with the NER. However, as is the case with the Responsible Person role under the current NER provisions, the Metering Coordinator retains overall responsibility for metering issues and will be accountable for the Metering Provider and Metering Data Provider's performance of their functions.

⁸⁹ See the new Chapter 10 definition of "Metering Coordinator default event" in the draft rule. This definition includes events such as the Metering Coordinator ceasing to be registered by AEMO.

For example, the Metering Coordinator must appoint a Metering Provider for the provision, installation and maintenance of each metering installation.⁹⁰ However, the Metering Coordinator remains responsible for ensuring that the metering installation is installed and maintained in accordance with the NER and relevant procedures.⁹¹

A Metering Coordinator may choose to become accredited as a Metering Provider and/or Metering Data Provider and also carry out those roles.

The Metering Provider retains the responsibilities it currently has under the NER (including those related to the installation, operation and maintenance of metering installations).

The Metering Data Provider retains the responsibilities it currently has under the NER (including those related to the collection, processing, storing and delivery of metering data from each metering installation).

The Metering Provider and Metering Data Provider have a small number of additional obligations as discussed in Appendix A2.

Table 4.1 provides a general overview of the core obligations of a Metering Coordinator. This table distinguishes between those obligations which are currently obligations imposed on the Responsible Person as well other additional obligations being imposed on the Metering Coordinator under the draft rule.

Table 4.1 General overview of core obligations of a Metering Coordinator

Obligations	Existing or new obligation
Existing obligations of the Responsible Person in relation to metering installations and data	
<p>Existing obligations of the Responsible Person in Chapter 7 of the NER with respect to the provision, installation and maintenance of metering installations. For example:</p> <ul style="list-style-type: none"> • Ensure the security of metering installations and the accuracy of metering data.⁹² • Appoint and coordinate the performance of the Metering Provider and the Metering Data Provider.⁹³ • Ensure that metering installations are provided, installed and maintained in accordance with the NER and procedures.⁹⁴ 	Existing

⁹⁰ Clause 7.3.2(a)(1) of the NER in the draft rule.

⁹¹ See clause 7.3.2(e)(1) of the NER in the draft rule.

⁹² Clause 7.3.2(e) of the NER in the draft rule.

⁹³ Clause 7.3.2(a) of the NER in the draft rule.

⁹⁴ Clause 7.3.2(e)(1) of the NER in the draft rule.

Obligations	Existing or new obligation
<ul style="list-style-type: none"> • Ensure that metering data services are provided in accordance with the NER and procedures.⁹⁵ • Ensure that energy data held in the metering installation is protected from direct local or remote electronic access by suitable password and security controls.⁹⁶ • Manage metering installation malfunctions, inspections, testing and auditing etc.⁹⁷ • Data obligations as required by AEMO procedures.⁹⁸ 	
Minimum services specification	
Ensure that any new or replacement metering installation for small customers is a type 4 metering installation that meets the minimum services specification (see Appendix C1). ⁹⁹	New
Security controls for managing access to small customer metering installations	
<p>For small customer metering installations (ie metering installations that meet or are required to meet the minimum services specification), ensure that:</p> <ul style="list-style-type: none"> • access to energy data held in the metering installation is only given to a person and for a purpose that is permitted under the NER; and • access to services provided by the metering installation and metering data from the metering installation is only given to: <ul style="list-style-type: none"> — in respect of a service listed in the minimum services specification, and metering data in connection with that service, an access party listed in Table S7.5.1.1 of the NER; or — a person and for a purpose to which the small customer has given its prior consent; or — a person and for a purpose that is permitted under the NER.¹⁰⁰ 	New
For small customer metering installations, ensure that the services provided by the metering installation are protected	New - extension of the current obligation that

⁹⁵ Clause 7.3.2(g)(2) of the NER in the draft rule.

⁹⁶ Clause 7.15.3(a) of the NER in the draft rule.

⁹⁷ Clause 7.8.10(a) of the NER (malfunctions) and clause 7.9.1 of the NER (inspection, testing and audit) in the draft rule.

⁹⁸ Clause 7.3.2(g) of the NER in the draft rule.

⁹⁹ Clause 7.8.3 of the NER in the draft rule.

¹⁰⁰ Clause 7.15.4(a) and (b) of the NER in the draft rule.

Obligations	Existing or new obligation
from local access and remote access by suitable password and security controls. ¹⁰¹	applies for all customers' metering installations in relation to energy data
Emergency management	
For all connection points for which the Metering Coordinator is responsible, ensure that access to the metering installation, services provided by the metering installation and energy data held in the metering installation are managed in accordance with emergency priority procedures to be developed by AEMO. ¹⁰²	New
Other obligations	
Cooperate with an LNSP who wishes to install a network device for the purposes of operating or monitoring its network, and provide all reasonable assistance to facilitate the installation of the network device at or adjacent to the metering installation. ¹⁰³	New
Not remove, damage or render inoperable a network device that has been installed by an LNSP at or adjacent to a metering installation, except with the LNSP's consent. ¹⁰⁴	New
Not prevent, hinder or otherwise impede an LNSP from locally accessing a metering installation or connection point for the purposes of reconnecting or disconnecting the connection point. ¹⁰⁵	New
Registration	
Be registered as a Registered Participant. ¹⁰⁶	New

4.4.2 Metering Coordinator, Metering Provider and Metering Data Provider registration and accreditation requirements

The purpose of registration and accreditation is to provide regulatory oversight of each party's ability to perform its role in the energy market. AEMO undertakes a comprehensive registration process for Market Participants¹⁰⁷ as part of its role in maintaining market integrity and security. Certain rights and obligations apply to all

¹⁰¹ Clause 7.15.4(c) of the NER in the draft rule.

¹⁰² Clause 7.8.5 of the NER in the draft rule.

¹⁰³ Clause 7.8.6(b)(1) of the NER in the draft rule.

¹⁰⁴ Clause 7.8.6(b)(2) of the NER in the draft rule.

¹⁰⁵ Clause 7.15.2(g) of the NER in the draft rule.

¹⁰⁶ Clause 2A.4.1 of the NER in the draft rule.

¹⁰⁷ A Market Participant is a person registered by AEMO as a Market Generator, Market Customer (eg a retailer or a large consumer of electricity, such as a smelter), Market Small Generation Aggregator or Market Network Service Provider.

Registered Participants under the NER.¹⁰⁸ In addition to these general rights and obligations, each category of Registered Participant has certain requirements that are specific to their role.

Under the draft rule, Metering Coordinators constitute a new category of Registered Participant.¹⁰⁹

Metering Providers and Metering Data Providers will continue to be required to obtain accreditation and be registered with AEMO.

Registration requirements for the Metering Coordinator

The Commission has considered the nature and scope of the role and responsibilities that the Metering Coordinator will undertake in order to determine what criteria an applicant must meet in order to become registered as a Metering Coordinator.

Under the draft rule, to be eligible for registration as a Metering Coordinator, a person must:

- not be a Market Customer;¹¹⁰
- satisfy AEMO that it is complying with and will comply with the NER and the procedures authorised under the NER;
- have appropriate processes in place to determine that a person seeking access to a service listed in minimum service specification is an "access party" in respect of that service;
- have an appropriate security control management strategy and associated infrastructure and communications systems for the purposes of preventing unauthorised access to metering installations, services provided by metering installations and energy data held in metering installations;
- have insurance as considered appropriate by AEMO; and
- pay the prescribed fee.

The Commission does not consider that exemptions to the registration criteria should be available for Metering Coordinators. The exception is TNSPs acting as Metering Coordinators for transmission network connection points within their transmission networks, where AEMO may grant an exemption in certain circumstances as discussed in Appendix A1.

¹⁰⁸ See Appendix A1 for a list of these general rights and responsibilities.

¹⁰⁹ Under the draft rule, Metering Coordinators are a category of Registered Participant other than for the purposes of Part A of Chapter 5 of the NER. See clause 2.4A.1(c) of the NER in the draft rule.

¹¹⁰ As discussed above, if a retailer wishes to perform the Metering Coordinator role itself, it will need to establish a separate legal entity (eg a subsidiary) to perform the role.

Accreditation requirements for the Metering Provider and Metering Data Provider

AEMO currently undertakes an accreditation process for Metering Providers and Metering Data Providers and carries out regular audits. Under the draft rule, parties are still required to be accredited and registered by AEMO before undertaking the Metering Provider and Metering Data Provider roles. Such accreditation and registration requirements do not require Metering Providers and Metering Data Providers to be registered as a category of Registered Participant.

However, under the draft rule, Metering Providers and Metering Data Providers will be deemed to be Registered Participants for the purposes of the confidentiality obligations in Part C of Chapter 8 of the NER.

Metering Providers and Metering Data Providers must also satisfy certain technical, capability and licensing requirements in order to be accredited and registered.

Metering Providers and Metering Data Providers for small customer metering installations will be required to meet an additional accreditation requirement. This additional requirement relates to the establishment of an appropriate security control management plan and associated infrastructure and communications systems for the purposes of preventing unauthorised local access or remote access to metering installations, services provided by metering installations and energy data held in metering installations.

4.5 Updating the rules to reflect changes in roles and technology

Under the new regulatory arrangements there may be a widespread deployment of advanced meters in the NEM. This will give rise to a number of issues related to the provision of advanced metering services which require existing roles and responsibilities of the Responsible Person (now the Metering Coordinator) to be expanded to safeguard consumers and network security from risks arising from an increase in the number of parties seeking to access advanced services.

The issues addressed in this section are:

- managing access by authorised parties to the metering installation, the services it can provide and the energy data it contains;
- managing access to the metering installation, the services it can provide and the energy data it contains during emergency conditions;
- remote disconnection and reconnection services; and
- access to energy and metering data.

4.5.1 Managing access by authorised parties

The Metering Coordinator has new obligations under the draft rule in relation to security controls for managing access to small customers' metering installations, services provided by the metering installation and energy data held in the metering installation.

Under the draft rule, the Metering Coordinator must ensure that:

- access to energy data held in the metering installation is only given to a person and for a purpose that is permitted under the NER; and
- access to services provided by the metering installation and metering data from the metering installation is only given to:
 - in respect of a service listed in the minimum services specification, and metering data in connection with that service, an access party listed in Table S7.5.1.1 of the NER; or
 - a person and for a purpose to which the small customer has given its prior consent; or
 - a person and for a purpose that is permitted under the NER.¹¹¹

The Metering Coordinator must also ensure that services provided by a small customer metering installation are protected from local access and remote access by suitable password and security controls in accordance with the NER.

4.5.2 Emergency management

Under the draft rule, a Metering Coordinator must ensure that access to a metering installation, services provided by the a metering installation and energy data held in a metering installation are managed in accordance with emergency priority procedures established by AEMO in the event of an emergency condition.

This requirement applies to all metering installations, not just small customer metering installations.

The draft rule requires AEMO to establish, maintain and publish such procedures, which must set out:

- the criteria for determining when an emergency condition is present and which metering installations will be affected by the emergency condition; and
- where a metering installation supplies services to a LNSP from a metering installation that is affected by an emergency condition, which services the Metering Coordinator may be required to prioritise at the request of the LNSP.

¹¹¹ See clauses 7.15.4(a) and (b) of the NER in the draft rule.

These requirements have been introduced to address situations where it may not be possible for the Metering Coordinator, Metering Provider or Metering Data Provider to process all service commands in line with its performance requirements during emergency conditions. This scenario is more likely to occur as the penetration of advanced meters increases and substantially more requests for services are processed.

4.5.3 Remote disconnection and reconnection services

Metering Coordinators that deploy advanced meters to small customers will have the ability to disconnect and reconnect customers remotely. This ability holds a number of benefits, particularly for retailers and consumers. Remotely disconnecting and reconnecting customers has the potential to provide much faster services and reduce the costs for retailers effecting the service, and therefore consumers.

To allow these benefits to be realised, the draft rule gives both retailers and DNSPs the ability (subject to negotiating access to the service with the Metering Coordinator) to arrange remote disconnection and reconnection services directly with the Metering Coordinator in certain circumstances. However, the Commission is cognisant of the potential safety risks associated with remote disconnection and reconnection and in allowing multiple parties to arrange these services with the Metering Coordinator.

The draft rule requires retailers and DNSPs to share information regarding life support registers and to notify each other regarding changes to the status of customers' supply. Jurisdictional safety regulators may also develop additional requirements with respect to safely disconnecting and reconnecting customers.

Managing safety risks, including the particular issues related to life support customers, are discussed further in Appendix A3.

4.5.4 Facilitating access to energy and metering data

The NER currently contains restrictions on who can access energy data and metering data.

Under the draft rule, the list of people who may be granted access to energy data or receive metering data has been updated to recognise the new Metering Coordinator role. Metering Coordinators may be granted access to energy data and receive metering data in relation to metering installations for which they are responsible.

To help consumers access the products and services enabled by advanced meters, the draft rule also provides that metering data in respect of a small customer metering installation (as defined in the draft rule) may be received by a person with the relevant small customer's prior consent.

These changes will assist in facilitating the provision of services by energy service companies that allow consumers to better understand their energy use, such as applications that allow consumers to view their energy usage on an in-home display,

mobile phone or tablet that is remotely connected to the metering installation. These services would be provided by energy service companies on a commercial basis.

The draft rule also provides that a large customer or its "customer authorised representative" (as currently defined in the NER) may receive data from a large customer's metering installation.

These arrangements are discussed in more detail in Appendix B3.

4.6 Minimum services specification

A key feature of the draft rule is the inclusion of a minimum services specification, which will apply to all new and replacement metering installations installed at a small customer's connection point.

This specification focuses on the services that a metering installation must be capable of providing rather than the technical functionality of the metering installation. This is expected to provide greater opportunity for innovation to help deliver customers and third parties the services that they want at a lower cost and in a technology neutral manner.

Existing specifications contained in the NER relating to requirements for metering installations, such as their components, will remain largely unchanged. These existing requirements specify the metrology-related components that all metering installations for large and small customers must contain so that they can accurately record, store and communicate energy consumption information.

The minimum services specification will sit alongside those existing component requirements and specify additional services that new and replacement metering installations for small customers must be capable of providing.

The purpose of a minimum services specification is to help capture the broader market benefits from advanced meters, particularly where the party installing the meters may not have an incentive to install a meter capable of providing services that would be of value to others. The minimum services specification, coupled with specified service levels and performance standards, provides a starting point for parties to negotiate access to services that benefit their customers.

A NEM-wide approach to the minimum services specification is expected to allow meters to be deployed efficiently across jurisdictional boundaries. A nationally applicable specification can be expected to generate economies of scale for Metering Coordinators working across jurisdictional boundaries, potentially resulting in cost savings to both consumers and Market Participants.

Under the draft rule, the minimum services specification does not apply to the connection points of large customers or consumers who are not retail customers. These consumers are better placed to negotiate for the advanced services they require. Some of the services included in the minimum services specification for small customers will

not be relevant for large customers. Also, given the potentially bespoke metering services that large customers may require it would be inappropriate to attempt to anticipate and prescribe the services they may require.

4.6.1 Governance

A description of the services that are contained in the minimum services specification are set out in Schedule 7.5 of the NER in the draft rule, with more detailed service levels and performance standards for each of the services to be developed by AEMO in procedures.

The purpose of the service levels and performance standards is to provide greater certainty to metering manufacturers and others regarding the specifications that the metering installation will be required to meet. Mandating service levels and performance standards for those services included in the minimum services specification may also reduce transaction costs associated with negotiating access to services. Finally, having a consistent set of service levels and performance standards may facilitate price comparisons between Metering Coordinators.

Under these governance arrangements, any person is able to propose a change to the minimum services specification via the rule change process. The Commission considers this is appropriate, given the variety of parties that will have an interest in the minimum services specification. Further, the rule change process involves a clearly understood, consultative approach whereby any changes are assessed having regard to the NEO.

Whenever a new or replacement metering installation is installed at a small customer connection point, it is the Metering Coordinator's responsibility under the draft rule to ensure the metering installation meets the minimum services specification (subject to the limited AEMO exemption power discussed below).

4.6.2 Services included in the minimum services specification

To meet the minimum services specification, a metering installation must be capable of providing the following services:

- *Remote disconnection service.* This service is the remote disconnection of a small customer's premises via the metering installation.
- *Remote reconnection service:* This service is the remote reconnection of a small customer's premises via the metering installation.
- *Remote on-demand meter read service:* This service is the retrieval of metering data from the metering installation for a specified point or points in time using remote acquisition and the provision of such data to the requesting party.¹¹²

¹¹² This includes the retrieval and provision of reactive energy metering data and/or active energy metering data (for imports and/or exports of energy measured by the meter), interval metering

- *Remote scheduled meter read service*: This service is the retrieval of metering data from a metering installation on a regular and ongoing basis using remote acquisition and the provision of such data to the requesting party.¹¹³
- *Meter installation inquiry service*: This service is the remote retrieval of information from, and related to, a specified metering installation and the provision of such information to the requesting party.¹¹⁴
- *Advanced meter reconfiguration service*: This service is the remote setting of the operational parameters of the meter. Schedule 7.5 of the NER in the draft rule sets out the four operational parameters that, as a minimum, must be capable of being set.¹¹⁵

The draft rule specifies the parties that are able to request access to each of these services.

This list of minimum services included in the draft rule have been developed using the minimum services specification recommended by AEMO to the COAG Energy Council. The Commission considers that having a relatively low minimum services specification allows the market to determine the services that consumers want at a price that they are willing to pay. Although regulating a comprehensive list of services would provide greater certainty for parties regarding the services that an advanced meter must be capable of providing, over-specifying the minimum services specification could result in consumers having to pay for meters that are capable of providing services that ultimately are not taken up, are of no benefit to them or could be provided in a more cost effective way through alternative technologies.

Therefore the Commission has only included services in the minimum services specification where it considers that, if provided, these services are likely to deliver benefits to the majority of consumers receiving those services at a relatively low cost.

Further, the Commission expects that many metering installations will exceed the minimum services specification as retailers, DNSPs and energy service companies may negotiate for additional services to be provided by the meter. Metering Coordinators may include additional services in the meter to anticipate demand for services and

data and cumulative total energy measurement for the metering installation, and accumulated metering data at the start and the end of the period specified in the request.

113 This includes the retrieval and provision of reactive energy metering data and/or active energy metering data (for imports and/or exports of energy measured by the meter), interval metering data and cumulative total energy measurement for the metering installation, and accumulated metering data at the start and the end of the period specified in the request.

114 The metering installation must be capable of providing the following types of information at a minimum: supply status; voltage; current; power; frequency; average voltage and current; and the contents of the meter log including information on alarms.

115 Parameters that must be capable of being set, as a minimum, include: the activation or deactivation of a data stream or data streams; altering the method of presenting energy data and associated information on the meter display; thresholds for alarms; and the parameters that specify how the voltage, current, power, supply, frequency, average voltage and average current measurements are calculated.

avoid the risk of meter churn. This approach allows customers and third parties to determine and pay for the services that they want at a price that they are willing to pay. Our understanding is that most advanced meters that are currently available are capable of providing a number of services in addition to those listed above, such as load control.

4.6.3 Meeting the minimum services specification

All new or replacement metering installations in respect of connection points for small customers must be a type 4 metering installation that meets the minimum services specification, subject to the exception noted below.

A metering installation meets the minimum services specification if it is capable of providing the services listed above and it is connected to a telecommunications network which enables remote access to the metering installation.

Several stakeholders noted that there may be instances where there is no telecommunications network to facilitate remote acquisition at a particular metering installation, such as in remote areas. As it may be prohibitively expensive for a Metering Coordinator to build a telecommunications network to provide remote acquisition (or pay a telecommunications operator to extend its network), Metering Coordinators will be able to apply to AEMO for an exemption to the requirement to provide this service.

AEMO may exempt a Metering Coordinator from complying with the requirement to install a type 4 metering installation that meets the minimum services specification in respect of a connection point if the Metering Coordinator demonstrates to AEMO's reasonable satisfaction that there is no existing telecommunications network to enable remote access to the metering installation at that connection point. An exemption may be for one or more periods of up to five years each.

If such an exemption is granted, any new or replacement metering installation for a small customer at that connection point must still be capable of providing all of the services listed above, but the requirement that the metering installation is connected to a telecommunications network which enables remote access to the metering installation would not apply.

Where AEMO grants an exemption from having to provide remote acquisition at a connection point, the metering installation would need to be manually read. For the reasons explained in Appendix C1, these metering installations will be classified as type 4A metering installations rather than type 5 metering installations.

While all new and replacement metering installations installed at a small customer's connection point must be capable of providing the services set out in the minimum services specification, there will be no obligation on Metering Coordinators to provide those services. Rather, the terms and conditions on which those services are provided, if at all, will be subject to commercial negotiation between the Metering Coordinator and third parties. The Commission's reasons for not regulating access to metering

services, including those services contained in the minimum services specification, are discussed in section 4.8.

4.6.4 Links to a shared market protocol

While there are other services that could be provided by advanced meters that have not been included in the minimum services specification, these other services may be captured by the shared market protocol on which AEMO is currently formulating technical advice to the COAG Energy Council. In addition, the AEMC is currently developing advice to the COAG Energy Council on the governance and implementation of the shared market protocol.

A shared market protocol is an electronic platform that allows parties to communicate with each other regarding the services that will be offered by advanced meters. It also defines the format of the associated messages sent between the parties to provide those services. A shared market protocol is a default method of communication and does not preclude parties from agreeing to alternative methods of communication.

The Commission's advice to the COAG Energy Council will need to consider how a shared market protocol could interact with services provided under the minimum services specification and by the market. The Commission's expectation is that the shared market protocol could set out a communication method for all commonly available advanced services.

4.7 Opt out arrangements

As discussed in section 4.6, the draft rule requires that all new and replacement meters installed at a small customer's connection point must meet the minimum services specification (subject to the limited AEMO exemption power discussed above). It is anticipated that this will result in the gradual deployment of advanced meters with substantial benefits to consumers and across the supply chain. That said, a cross-section of stakeholders including jurisdictions, retailers and consumer groups have emphasised the benefits of providing consumers a choice in whether their existing metering installation is replaced with an advanced meter.

To provide certainty to small customers and other parties, the draft rule includes provisions under which small customers will have an ability to opt out of having a new metering installation installed at their premises. This opt out applies where the new metering installation would replace an existing, working metering installation as part of a "new meter deployment" initiated by a retailer (in conjunction with the Metering Coordinator, and possibly in coordination with the LNSP or another party) as defined in section 4.7.2. This is a right that is not currently provided under the NER or NERR.

Providing small customers with the ability to opt out in this scenario will support consumer confidence by requiring retailers to notify the small customer of, amongst other things, the proposed replacement of their meter under the new meter

deployment and any upfront charges the customer will incur under its retail contract as a result of the deployment.

The scenarios in which the opt out provisions apply are discussed below and in further detail in Appendix C2.

4.7.1 Choice of products and services

Advanced meters enable greater consumer choice in relation to energy products and services.

However, consumers will continue to have the ability to choose from the services and pricing options on offer from retailers and other service providers that best meet their needs. Depending on what price structures are offered by retailers, a consumer with an advanced meter could choose to remain on a flat rate retail price or could choose from a range of other offers from its current retailer or another retailer.

Jurisdictions have certain powers to protect standing offer customers¹¹⁶ if there are any concerns relating to the choice of services or pricing offers available to these customers. For example, if jurisdictions are concerned that retailers may cease to offer flat rate pricing structures, the NERL contains a provision that allows jurisdictions to require retailers to offer particular standing offer tariff structures to small customers with an interval meter, eg a flat tariff. The COAG Energy Council is also consulting on changes to the NERR to provide additional consumer protections on the use of load control and supply capacity control services.

Where a small customer chooses a service or pricing offer that requires a new meter to be installed, there will be no ability for the consumer to opt out of the installation of that meter. In these circumstances, the consumer has requested the new product or service and, in turn, the installation of a new meter to enable that product or service.

This opt out requirement is contained in the NERR in the draft rule. The NERR does not currently apply in Victoria, which has not currently adopted the NECF. Accordingly, the NERR amendments, including this opt out right, will not apply in Victoria unless it adopts the NECF at a later date. The Victorian Government and Essential Services Commission (Victoria) should consider whether to make amendments to the Electricity Retail Code for consistency with the amendments to the NERR contained in the draft rule. If made, these amendments would provide for Victorian consumers to opt out of receiving a new meter that meets the minimum services specification where their retailer plans to replace their existing working meter, including advanced meters which were deployed under the AMI program.¹¹⁷

¹¹⁶ Standing offer customers are on a retail contract based on model terms and conditions set out in Schedule 1 of the NERR.

¹¹⁷ The NERR will apply in Queensland from 1 July 2015, meaning that the opt out provisions in the draft rule, if made, would apply in Queensland when the draft rule commence on 1 July 2017.

4.7.2 New meter deployment

Under the draft rule, a retailer and its appointed Metering Coordinator, possibly in coordination with the LNSP or another party, may undertake a new meter deployment of advanced meters to its customers. For example, a retailer may see operational efficiencies that could be achieved through remotely reading meters and providing consumers with faster disconnection and reconnection services at no extra cost to the consumer. In this situation, the new advanced meter would replace an existing, functioning meter.

As noted in Chapter 3, advanced metering has the potential to provide a number of benefits to consumers, the market and the electricity system as a whole. The deployment of advanced meters by retailers can help realise these benefits more quickly, and possibly at a lower cost, than what could be expected if consumers had to actively opt in through bundled energy and metering products and services, eg when a consumer selects a time of use tariff that requires an advanced meter be installed.

The Commission is of the view that retailers should be able to deploy meters that meet the minimum services specification to their customers where they see a business case to do so, but that consumers should be provided with an ability to opt out of the deployment and retain their existing working metering installation.

Therefore, under the draft rule small customers are able to opt out of having a new meter installed under a new meter deployment, which is defined in the draft rule as:

“new meter deployment means the replacement of the existing electricity *meter* of one or more small customers which is implemented by a retailer other than where the replacement is:

- (a) at the request of the relevant small customer or to enable the provision of a product or service the customer has agreed to acquire;
- (b) a *maintenance replacement*; or
- (c) as a result of a *metering installation malfunction*.”

In a new meter deployment there is no technical reason why the existing meter should be replaced – the metering installation has not failed, is still functioning and is compliant with the NER.

The draft rule requires retailers to provide an initial written notice to their small customers, notifying them of the proposed replacement of their meter no earlier than 60 business days and no later than 20 business days before the date of the proposed deployment. The initial notice must state, amongst other things, that the customer may elect not to have its meter replaced as part of the new meter deployment (opt out), the way in which they may exercise their right to opt out and any upfront charges the customer will incur under a retail contract as a result of the new meter deployment.

The retailer must provide a second written notice to its small customers (which must include the same details as set out in the first notice) no earlier than 10 business days after the first notice and no later than 10 business days before the retailer proposes to replace the meter.¹¹⁸

The retailer is not required to comply with the notification and opt out requirements if the retailer is authorised to undertake the new meter deployment under the terms of the customer's market retail contract.

4.7.3 Maintenance replacements, faults and new connections

Under the draft rule, any new metering installation provided as part of a maintenance replacement, where the existing meter is faulty or at a new connection must meet the minimum services specification. Providing an ability for small customers to opt out in these scenarios is neither practical nor appropriate, and may lock in old technologies that are of no long-term benefit to consumers or the market.

Small customers do not currently have the ability under the NER or NERR to opt out of having a metering installation provided that meets the requirements of the NER during a maintenance replacement or where an existing meter is faulty or a new connection is established.¹¹⁹ Not providing an opt out in these scenarios is therefore consistent with current arrangements.

Under the draft rule, a retailer can decide to replace meters as part of a maintenance replacement, which is defined in the draft rule as:

“maintenance replacement means the replacement of a small customer’s existing electricity *meter* by a retailer that is based on the results of sample testing of a *meter* population carried out in accordance with Chapter 7 of the NER:

- (a) which indicates that it is necessary or appropriate, in accordance with *good electricity industry practice*, for the *meter* to be replaced to ensure compliance with the *metering rules*; and
- (b) details of which have been provided to the retailer under Chapter 7 of the NER, together with the results of the sample testing that support the need for the replacement.”

Providing an explicit ability for small customers to opt out in these circumstances would require additional regulation to give consumers a meaningful and enforceable choice in the period between the meter being recognised as needing replacement and the installation of a new meter.

¹¹⁸ For further details regarding the opt out process and notification requirements see Appendix C2.

¹¹⁹ Specifically, in these scenarios small customers do not currently have an opt out right in the way that is being proposed under the new meter deployment scenario.

An ability to opt out of a maintenance replacement is likely to create confusion and may result in poorer outcomes for consumers. If an opt out were provided, a consumer would only be able to retain their existing meter until it fails, at which point it would be replaced with an advanced meter.

Opting out of a maintenance replacement would also be likely to result in more metering installations failing. This would increase costs for Market Participants and consumers and result in poorer service for consumers, who would be without a working metering installation and would be billed on an estimate of their consumption until the failed meter was replaced.

Consumers will not have the ability to opt out if their metering installation is faulty and needs to be replaced. Providing customers with an ability to opt out of receiving an advanced meter when their meter needs to be replaced due to a fault would not be workable.

Currently, repairs must be made to types 4-6 metering installations as soon as is practicable and no later than 10 business days after notification of a malfunction. Providing small customers with a meaningful and enforceable ability to opt out would require additional regulation and potentially lead to a significant time delay between a fault being discovered and a meter being replaced. A delay in having a working meter installed could increase financial risk to retailers and may cause a customer to be billed on an estimate of their energy consumption over a longer period of time. An obligation to provide an opt out in fault scenarios would likely lead to higher costs to all consumers and more estimated meter reads. Neither of these outcomes are in consumers' long term interests.

The Commission considers that small customers should not be able to opt out of having a metering installation that meets the minimum services specification established at a new connection, eg at a new house or development. Where a metering installation is established at a new connection the Metering Provider must ensure that the metering installation is a type 4 metering installation that meets the minimum services specification, unless the Metering Coordinator has obtained an exemption in respect of that connection point.¹²⁰

Providing an ability to opt out in this scenario is not practical, particularly in large developments such as new apartment buildings. In many cases the developer will arrange connection and metering arrangements for each apartment. It is not the intent of this rule change to provide developers with an ability to install metering installations that do not meet the minimum services specification in residential developments, especially where they might have an incentive to arrange the lowest upfront cost solution, eg accumulation meters, which are unlikely to provide benefits to consumers over the long term.

¹²⁰ Under clause 7.8.4 of the draft rule, AEMO may exempt a Metering Coordinator from complying with the requirement to install a type 4 metering installation that meets the minimum services specification in respect of a connection point if the Metering Coordinator demonstrates to AEMO's satisfaction that there is no existing telecommunications network to enable remote access to the metering installation at that connection point.

4.8 Managing competition concerns

4.8.1 Distribution ring-fencing

The draft rule requires the AER to develop distribution ring-fencing guidelines for the accounting and functional separation of the provision of direct control services from other services provided by DNSPs.¹²¹

As part of developing these guidelines, the AER may determine ring-fencing arrangements that to apply to circumstances where a DNSP takes on the role of Metering Coordinator, Metering Provider and/or Metering Data Provider.

For example, there may be a need to limit the DNSP's ability to:

- cross-subsidise the contestable services carried out by these businesses through their regulated services; and/or
- provide these businesses with access to commercially sensitive information that is not available to others in the contestable Metering Coordinator, Metering Provider and/or Metering Data Provider markets.

Under the draft rule, the AER has the flexibility to determine what ring-fencing measures are most appropriate, having regard to the services being provided.

4.8.2 Access to Metering Coordinator services

A number of stakeholders, particularly DNSPs and energy service companies have raised concerns regarding the potential for Metering Coordinators to exert market power by charging high prices or refusing to negotiate with third parties. This has been of particular concern in the context where a retailer sets up a subsidiary Metering Coordinator business.

Any Metering Coordinator, regardless of its ownership structure, has an incentive to charge as high a price as it can for the provision of metering services to third parties. They will also have some degree of market power, particularly in situations where a third party cannot choose an alternative Metering Coordinator at a particular premises.

However, the ability of Metering Coordinators to exercise market power may be constrained by a number of factors:

¹²¹ Clause 6.17.2 of the NER currently states that the AER 'may' develop the distribution ring-fencing guidelines. Under the draft rule, clause 6.17.2 has been amended to substitute the word 'may' with 'must'. The AER is required to develop the guideline within the timeframe prescribed in the transitional arrangements. In developing or amending the guidelines, the AER must consult with participating jurisdictions, Registered Participants, AEMO and other interested parties, and such consultation must be otherwise in accordance with the distribution consultation procedures.

- The number of potential entrants into the market. Barriers to entry are low and the Commission is aware that a number of retailers and metering businesses are considering establishing a Metering Coordinator business.
- The risk that metering assets will become stranded if Metering Coordinators restrict access to them. This will reduce the incentives on Metering Coordinators to deny access to their services, or to charge excessive prices to other retailers.
- The bargaining power of DNSPs as the only potential party interested in particular services. This will incentivise Metering Coordinators to negotiate with DNSPs and provide services at reasonable cost.
- The ability of consumers to switch retailers. If Metering Coordinators do not offer access to products and services that consumers value, they risk losing customers and market share. This reduces the incentives for Metering Coordinators to deny access to their services, or charge excessive prices to energy service companies.

While indicators suggest that prospects are strong for a workably competitive market to develop in metering services, given the inherent uncertainty regarding a market yet to commence, a range of potential forms of access regulation to address competition concerns have been considered.¹²² These include two relatively light-handed forms of regulation: a negotiate/arbitrate framework and/or some form of price monitoring. Having considered these options in the context of metering services,¹²³ the Commission is concerned that even these light-handed forms of regulation will involve significant costs and could deter investment in advanced meters.

For example, there is a risk that a negotiate/arbitrate model may discourage genuine commercial negotiation.¹²⁴ A third party may consider it can achieve a better outcome by raising a dispute and going to arbitration. This possibility would increase risks for investors in metering businesses, particularly smaller businesses that may not have the resources to participate in an arbitration process, and could be a disincentive for them to enter the market.

More broadly, a negotiate/arbitrate model could undermine the development of a market for metering services by introducing substantial uncertainty. Investors will face the risk that they may be required by a third party arbitrator to provide services at prices lower than those envisaged when the business case was developed. While such regulatory frameworks typically include principles covering cost recovery and reasonable rates of return, an arbitrator is unlikely to have accurate information on what those costs and returns should be, particularly in a new market.

Price monitoring and information disclosure is also likely to be problematic in a new market, where prices are being determined competitively for the first time and new

¹²² See Appendix E.

¹²³ See Appendix E.

¹²⁴ See Appendix E for a fuller discussion on negotiate/arbitrate model in the context of metering services.

service offerings are likely to evolve rapidly.¹²⁵ A requirement to publish prices and/or monitor prices may therefore not be practical in the short term. Further, Metering Coordinators may bundle advanced metering services in different ways depending on the needs of the customer, which could mean that published prices may be different from actual prices being negotiated, and they will be difficult to compare across different providers. Prices will also vary depending on factors such as volume and risk profile.

The Commission has concluded that the introduction of access regulation to manage the potential emergence of competition issues is likely to introduce more costs than benefits. In particular, the Commission is concerned that the risk of arbitrated outcomes under a negotiate/arbitrate mechanism may significantly diminish incentives for investment. Without sufficient incentives, investment in advanced metering infrastructure and the services that this would facilitate may not develop.

For these reasons, the Commission does not propose to regulate access to Metering Coordinator services at market start. Rather, the Commission recommends that an assessment of whether access regulation is required be made in a review three years after the new Chapter 7 of the NER commences, when the market has had time to develop.

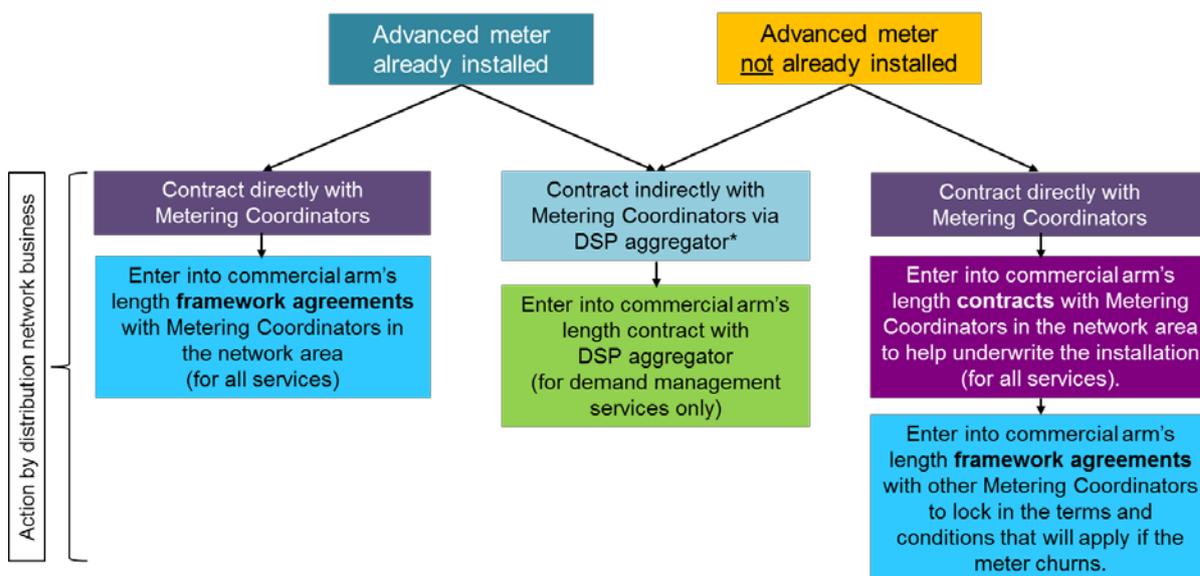
4.8.3 Role DNSPs could play in facilitating the installation of advanced meters

A DNSP may, with the cooperation of the Metering Coordinator and the relevant retailer, as the Financially Responsible Market Participant, choose to help fund the installation of advanced meters in its network area and secure access to the services provided by these meters by entering into long-term contracts with Metering Coordinators. A concern that DNSPs have raised about accessing network-related services and functions through metering installations is that they could be subject to a significant degree of uncertainty and transaction costs if the Metering Coordinator changes at a connection point.

The Commission does not expect the new regulatory arrangements to act as a barrier to the efficient take up of network-related services enabled by advanced meters by DNSPs as there are a number of commercial arrangements that can be used to overcome these risks, as summarised in Figure 4.2.

¹²⁵ See Appendix E for a fuller discussion of price monitoring and information disclosure in the context of metering services.

Figure 4.2 Alternative ways a DNSP could access network-related services and functions



*Note that the Metering Coordinator may be retailer owned, a third party or the distribution network business's unregulated Metering Coordinator business.
* In this case it will be the DSP aggregator that contracts directly with the Metering Coordinators to help underwrite the installation.*

To address concerns regarding uncertainty and transaction costs, DNSPs could enter into framework agreements with several Metering Coordinators so that they have greater certainty about the terms and conditions of access they will have if there is churn in Metering Coordinators. The term ‘framework agreements’ is used in this context to refer to an agreement that sets out the price and non-price terms and conditions of access that will apply when a DNSP deals with a particular Metering Coordinator at any site in its network. These agreements are common in overseas markets.

Another option DNSPs could consider if they are only seeking access to the demand management functions is to enter into a contract with a third party DSP aggregator. Under this option, the DSP aggregator would be responsible for contracting with a sufficient number of Metering Coordinators in the network area to guarantee the provision of the required level of demand management over the required period. It would then be up to the DSP aggregator to enter into agreements with Metering Coordinators in the network area.

Figure 4.2 illustrates some of the alternative contractual arrangements that a DNSP could use when seeking access to the services enabled by advanced meters. The manner in which DNSPs will be able to recover the costs incurred under these contractual arrangements will depend on the nature of the service acquired. However, in general they will be able to recover the prudent and efficient costs they incur in acquiring these services in one of the following ways under the existing AER regulatory determination process:

1. Including the costs in allowed expenditure at the start of the regulatory period (either operating or capital expenditure, depending on the type of project).

2. Funding the expenditure through savings created by deferring or avoiding capital expenditure that was included in the allowed expenditure for the regulatory period.
3. Including the costs in the Demand Management and Embedded Generation Connection Incentive Scheme for demand management related expenditure.

The benefits associated with this expenditure (eg the benefits of deferred network augmentation, improvements in service quality or other operational efficiencies) may be passed on to consumers by DNSPs over time in the form of lower network charges and/or higher quality service.

4.8.4 Bypass options for DNSPs

In submissions and workshops, several DNSPs proposed that they should be able to retain their existing metering installations and use them as network devices if they were replaced as the Metering Coordinator and were unable to negotiate access to network-related services from the new Metering Coordinator on acceptable terms. This was a particular issue for the Victorian DNSPs, who wished to retain access to the network-related functions of their AMI meters if a new Metering Coordinator was appointed.

Several DNSPs proposed that they should be able to install new network devices, to provide a bypass threat in negotiations with Metering Coordinators for access to network-related services.

The draft rule addresses these issues by introducing new provisions relating to network devices. A network device is defined as "an item of apparatus or equipment associated with the provision or the monitoring of *network services* which may include circuit breakers and control equipment and which may be housed within a *facility* that was previously used by the relevant *Local Network Service Provider* as a *metering installation*".

This definition is intended to cover a variety of new and existing network devices that may be used by DNSPs, including:

- existing load control equipment; and
- existing advanced meters that can be used for the purposes of operating or maintaining the DNSP's network, including the AMI meters that were deployed by Victorian DNSPs.

Under the draft rule, a DNSP may install a network device at or adjacent to a metering installation for the purposes of monitoring or operating the local network.

So that the network device provisions are not used to avoid the restrictions in the NER on access to energy data and services provided by a metering installation, the draft rule contains restrictions on the use of the network device and the disclosure of any information contained in a network device.

Metering Coordinators have new obligations in relation to network devices to:

- cooperate with a DNSP that wishes to install a network device and provide all reasonable assistance to facilitate the installation of the network device at or adjacent to the metering installation; and
- not remove, damage or render inoperable a network device that has been installed at or adjacent to a metering installation, except with the consent of the DNSP.

This second requirement means that, following the installation of a meter that meets the minimum services specification, the DNSP must still have ability to use the network device, for example to turn off and on the controlled load.¹²⁶ This requirement applies to all network devices, regardless of whether the DNSP is currently using the functionality of the device.

The Commission recognises that allowing a DNSP to install a network device at a connection point to assist in the monitoring or operation of its network could lead to an inefficient duplication of assets. However, it expects that in most cases the threat of bypassing a metering installation may be sufficient to constrain any exercise of market power by the Metering Coordinator when negotiating with the DNSP to provide equivalent network-related services through the metering installation.

4.9 Arrangements for Victoria

In 2006, the Victorian Government mandated a rollout of advanced meters (the AMI program). Subject to certain limited exceptions, the Victorian DNSPs were required to deploy advanced meters (in accordance with a prescribed Victorian minimum specification) to all Victorians consuming up to 160 MWh of electricity per annum. There are now approximately 2.8 million meters installed across the state.

The Commission has taken this into account in assessing how the proposed transitional arrangements will operate in Victoria.

With the technology already in place to enable small customers to make more informed decisions about their consumption and product choice, and for industry to offer more innovative products and achieve a range of efficiencies, the focus in Victoria is now on delivering the expected benefits of the AMI program. That is not to say that the draft rule has no role to play in Victoria.

¹²⁶ Clause 7.8.6(c) of the NER in the draft rule contains several restrictions on the use of network devices. These restrictions are intended to prevent network devices being used to avoid the NER restrictions on access to energy data and services provided by a metering installation. One of these restrictions is that the network device must not be used to reconnect or disconnect a metering installation via remote access, as these services should be performed by the Metering Coordinator using the metering installation. This restriction is not intended to prevent the DNSP using a network device for load control purposes. Load control involves stopping the flow of electricity to a particular appliance or point of consumption at the premises rather than stopping the flow of electricity entirely to the premises. Accordingly, the Commission does not consider that load control falls within the existing definitions of "disconnect" or "reconnect".

The Commission has considered whether the draft rule will:

- allow the expected benefits of the AMI program to be achieved; and
- enable new investment in metering services where that is efficient.

4.9.1 Exclusivity arrangements

The rule change request proposed that the Victorian DNSPs would be the Metering Coordinator for the advanced meters they 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 established by the Victorian Government through a jurisdictional instrument.

Under the draft rule's transitional arrangements, the Victorian DNSPs will assume the role of initial Metering Coordinator for the meters they have deployed. Given the exit fee that will apply in Victoria (discussed below) and the likelihood that it will take time for competition to emerge in Victoria, the Victorian DNSPs are likely to remain the Metering Coordinator for the advanced meters they have deployed for some time. In addition, the DNSPs will be permitted to retain their AMI meters as network devices. There does not, therefore, appear to be significant value in extending the exclusivity period beyond the date that the draft rule, if made, becomes effective.¹²⁷

An extension to the exclusivity arrangements is likely to act as an impediment to competition in other segments of the market where effective competition could reasonably be expected to evolve (eg at greenfield sites or at existing sites for faults).

The exclusivity period and other aspects of the current Victorian derogation in rule 9.9C of the NER will be extended until 1 July 2017 when the new Chapter 7 of the NER under the final rule (if made) commences, and the derogation will then cease to operate.

4.9.2 Exit fees in Victoria

The current regulatory framework for establishing exit fees for meters installed under the AMI program is set out in the AMI Cost Recovery Order. The COAG Energy Council's rule change request proposed that upon expiry of the exclusivity period, a regulated exit fee would apply, to allow a retailer or consumer to subsequently replace a meter installed under the Victorian AMI program.

¹²⁷ Clause 9.9C of the NER, which provides for the Victorian DNSPs to be exclusively responsible for metering services, is currently due to expire on the earlier of: (1) 31 December 2016; or (2) the commencement in Victoria of a framework for competition in metering and related services for residential and small business customers under the NER; and regulatory arrangements that provide for an orderly transfer of the regulation of relevant metering installations under rule 9.9C of the NER to the regulation of metering installations under the NER.

The Commission is aware that the exit fee principles set out in the AMI Cost Recovery Order differ from the principles the AER is using in other jurisdictions.¹²⁸ However, in the Commission's view a distinction can be drawn between the exit fee to be paid in Victoria and other jurisdictions because advanced meters are already in place and these meters already have a high degree of functionality.

The regulatory framework should not encourage the inefficient replacement of existing Victorian AMI meters. It is therefore appropriate for customers, or retailers, that are considering replacing their meter to pay an exit fee that reflects the unrecovered costs of the meter and associated infrastructure, which is what the AMI Cost Recovery Order requires.

Post 2020, the manner in which the exit fee is determined will be the same as in other NEM jurisdictions and will depend on the AER's classification of metering services.¹²⁹

4.9.3 Access to advanced metering enabled services and functions

Concerns have been raised by the Victorian DNSPs and the ENA about the potential for Metering Coordinators to exercise market power when negotiating the terms and conditions of access to services and functions that are likely to be sought by DNSPs.

The Commission has considered the potential for this to occur, and the factors that might mitigate these concerns, as discussed above and Appendix E. Although the Commission considers that regulating access to metering services is not appropriate at the start of the market, it also recognises that if Metering Coordinators do behave in this manner then it will adversely affect consumers.

As outlined above, the draft rule allows a DNSP to install or utilise an existing "network device" at or adjacent to a metering installation for the purposes of monitoring or operating its network. As a result, if Victorian DNSPs are replaced as the Metering Coordinator and are unable to reach an agreement with the new Metering Coordinator to access equivalent services through the new metering installation, they will be able to use the meters they installed as part of the AMI program as network devices. This option will allow the expected benefits of the AMI program to be realised even if a new Metering Coordinator is appointed and decides to install its own meter before the AMI meter reaches the end of its useful life.

¹²⁸ For example in NSW, where the AER proposes to allow DNSPs to recover residual capital costs (ie the capital costs the customer would have paid through annual charges had they remained a customer of a regulated metering service) through distribution use of system charges, rather than through an exit fee. See AER, Draft decision on Ausgrid distribution determination - Attachment 16 - Alternative control services, November 2014, p29-49.

¹²⁹ If metering services are classified as a direct control service, the AER will have to determine the exit fee (if any) having regard to, amongst other matters, the NEO and the revenue and pricing principles (See Appendix D2.). If the AER classifies metering services as a negotiated, the AER will have no role in determining the exit fee.

4.9.4 Minimum services specification

Some stakeholders have expressed a concern about potential differences between the minimum services specification under the draft rule and the specification of meters installed under the AMI program. The Commission notes that the Victorian specification was developed for a mandated rollout of advanced meters rather than a competitive model and specifies functional requirements rather than services.

Under the draft rule, all new metering installations installed in the NEM at the connection points of small customers must meet the minimum services specification. The Commission is of the view that the minimum services specification is more appropriate in the context of the competitive framework set out in this draft determination. If Victorian DNSPs or energy service companies consider that the benefits of additional services that are not included in the minimum services specification exceed the costs, they can negotiate with the Metering Coordinator for those services to be provided.

The value of maintaining a separate specification in Victoria is therefore likely to be small, particularly when compared with the competitive benefits and economies of scale that could be achieved through the adoption of a national minimum services specification.

4.10 Other changes to the NER and NERR

This chapter is only an overview of the Commission's draft determination and draft rule. Stakeholders should review the more detailed description of the draft determination and draft rule that is set out in the appendices.

The draft rule also contains a number of consequential changes as a result of the new arrangements for the provision of metering services. The majority of these changes are contained in Chapter 7 of the NER, but some changes are made to other chapters of the NER and to the NERR.

Stakeholders should also closely review the draft rule. In particular, retailers, DNSPs, TNSPs, Metering Providers and Metering Data Providers should review the draft rule to understand how their rights and obligations would change under the draft rule.

The draft rule renumbers Chapter 7 of the NER so that provisions are more logically grouped and ordered. Published with this draft determination is a table showing how the current clauses of Chapter 7 have been reordered under the draft rule.

Also published with this draft determination to assist stakeholders is a marked-up version of the NERR showing the changes between the current version of the NERR

and the NERR under the draft rule.¹³⁰ Stakeholders can also obtain a marked-up version of the re-ordered Chapter 7 of the NER on request.¹³¹

¹³⁰ This mark-up only contains the NERR Parts and Schedules that contain amendments.

¹³¹ Due to the nature of the re-ordering process, there is some subjectivity in what is marked as a change in this document and internal cross-references are not correct, and the Commission does not guarantee its general accuracy. If stakeholders request a copy of this document, they should only use it as a general guide and must check it against the amending rule.

5 Implementation

5.1 Introduction

This chapter sets out the proposed timetable for implementing the draft rule and the interim steps that will need to be undertaken by market institutions, industry and jurisdictions before the commencement of the new Chapter 7 of the NER and the NERR under the final rule (if made).

In determining an appropriate commencement date for the new Chapter 7 of the NER, the Commission has considered the timeframes required for:

- the AER to develop and consult on a distribution ring-fencing guideline and for DNSPs to be able to comply with that guideline;
- AEMO and the IEC to develop and consult on new and updated procedures;
- AEMO to implement the necessary IT system changes to implement the draft rule; and
- industry systems development and business process changes, including design, build and testing phases.

The Commission has also considered how implementation of this rule change is likely to interact with implementation of other Power of Choice rule changes.

5.2 Implementation date

Stakeholder views

The AEMC sought stakeholder comments in November 2014 on a high-level draft implementation plan, which had been prepared in consultation with AEMO and the AER. The Commission also met with the IEC for a workshop on implementation issues.

A range of views were given in submissions on how long would be required for industry to make changes to their systems and processes to meet the requirements of the amendments to Chapter 7 of the NER, amendments to procedures, and new AER ring-fencing guidelines. Most stakeholders indicated they could not assess firm implementation timeframes until the draft determination and draft rule had been published.

Ergon Energy, ERM Power, Origin Energy and TasNetworks suggested implementation dates ranging from at least 12-18 months after the final determination

is made.¹³² Several DNSPs, the IEC and the ENA considered that a significant period of time would be required from the time that AEMO's final procedures and/or final build packs become available.¹³³ Views were also mixed on the extent to which work could be undertaken by industry prior to AEMO publishing its final procedures and system build packs.

The IEC's submission included a detailed Gantt chart setting out the steps that need to occur before implementation of this rule change, other Power of Choice rule changes and related reforms. The IEC proposed that the implementation of these changes be coordinated by a dedicated, independent program management team.¹³⁴ AGL, the ERAA, Lumo Energy and Simply Energy supported the conclusions drawn by the IEC in its submission.

We anticipate that stakeholders will now be able to provide more informed feedback on the implementation timetable proposed in this chapter as part of their submissions on this draft determination.

Commission's analysis

The draft rule contains a commencement date of 1 July 2017 for the new Chapter 7 of the NER.

Most of the amendments to the NERR will also commence on 1 July 2017. Some provisions of the draft rule will commence earlier, for example changes to Chapter 2 of the NER and some definitions - see the draft rule for more details.

Consultation with AEMO and the AER indicated that the timeframes in the draft rule should allow sufficient time for new procedures and guidelines to be developed or updated and for changes to be made to AEMO's IT systems. Stakeholder comments on the implementation plan indicated that the key uncertainty related to implementation timing is how long businesses need to make changes to their systems and processes and undertake testing of those changes.

The Commission is cognisant that many industry participants proposed a later commencement date so that industry system and process changes would not commence until AEMO's procedures and or build packs are finalised, so as to reduce the risk of re-work if AEMO's final requirements change. However, those concerns need to be balanced against the costs of delaying implementation of these significant changes and the benefits to consumers and Market Participants that will arise from implementation of the new rules.

132 Ergon Energy, submission on draft implementation plan, p2; ERM Power, submission on draft implementation plan, p2; Origin Energy, submission on draft implementation plan, p1; TasNetworks, submission on draft implementation plan, p2.

133 ENA, submission on draft implementation plan, p1; Energex, submission on draft implementation plan, p2; IEC, submission on draft implementation plan, p3; United Energy, submission on draft implementation plan, p1.

134 IEC, submission on draft implementation plan, p2.

The proposed implementation dates will require industry participants to undertake some of their systems development work in parallel with AEMO finalising its procedures and build packs. However, significant work on industry systems changes are not expected to need to commence until AEMO has published its draft procedures. This approach minimises the risk of significant re-work being required while enabling the benefits of the rule change to be realised as soon as possible.

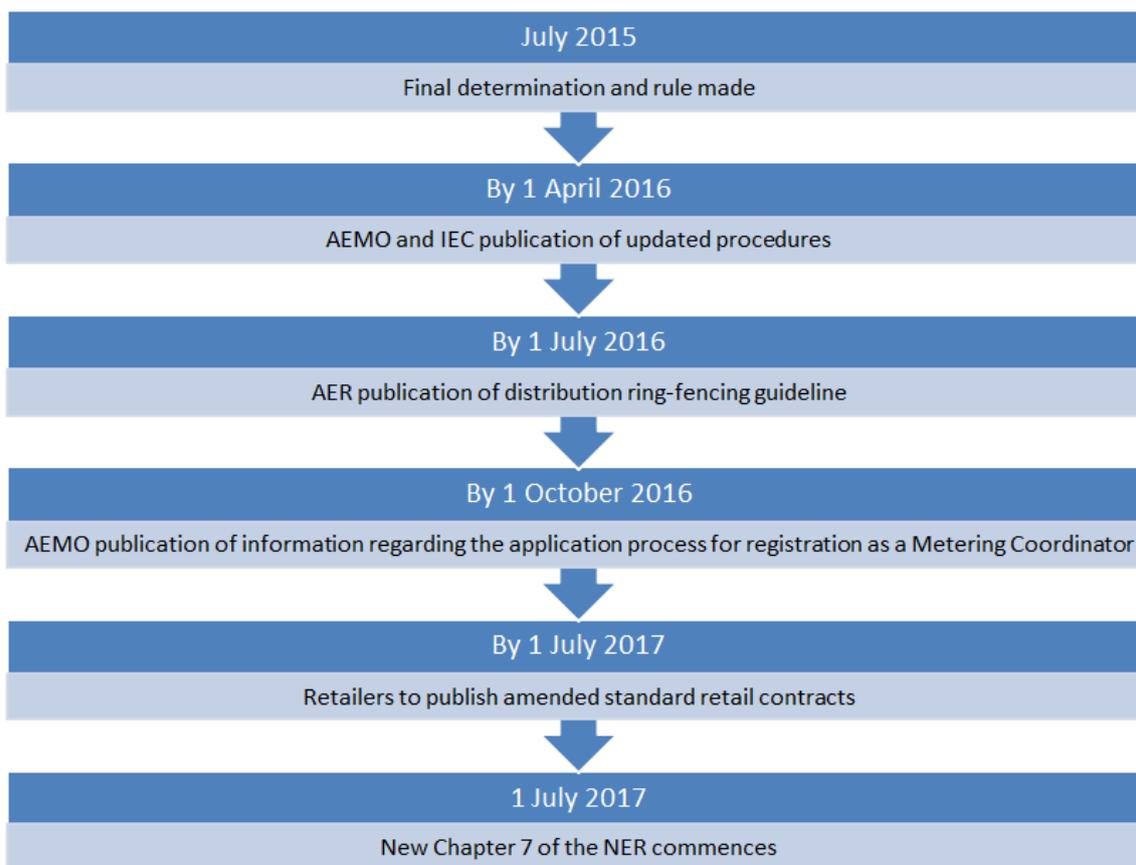
In determining an appropriate commencement date, the Commission has recognised significant inter-linkages between the various Power of Choice projects that are being undertaken and the potential to reduce costs if some of those reforms are implemented at the same time.

The AEMC will provide advice to the COAG Energy Council on the implementation and governance of the shared market protocol, including a draft rule change around the time the final determination is made on this rule change. AEMO is preparing advice to the COAG Energy Council on the content of the shared market protocol. The Commission expects the rule change and the subsequent development of the shared market protocol to be undertaken in parallel with the implementation of this metering rule change.

The AEMC intends to publish a consultation paper on the embedded networks rule change in late April/early May 2015. Depending on progress, implementation of the embedded networks rule change may be able to occur at the same time as this rule change, as was proposed by the IEC and several other stakeholders.

The implementation timeline in Figure 5.1 sets out the key interim steps that will occur leading up to the 1 July 2017 commencement date for the new Chapter 7 of the NER.

Figure 5.1 Implementation timeline



5.3 Implementation requirements

Before the new Chapter 7 of the NER commences, market institutions, the IEC, retailers and DNSPs must undertake a number of interim steps to develop procedures and guidelines and amend model contracts.

The draft rule requires the following steps to occur prior to 1 July 2017:

- It will be necessary for AEMO and the IEC to develop, or update, a number of procedures. These procedures will need to cover the matters set out in Table 5.1 below. The draft rule requires the final procedures to be published by 1 April 2016.
- The draft rule requires the AER to develop a distribution ring-fencing guideline. As outlined in Chapter 4, this guideline is expected to set out, among other things, any applicable ring-fencing requirements for a DNSP that takes on the Metering Coordinator, Metering Provider and/or Metering Data Provider roles. So that DNSPs have sufficient time to put in place the necessary ring-fencing arrangements, the AER will be required to develop and publish the guideline by 1 July 2016.
- The draft rule requires that the Metering Coordinator be a Registered Participant. Metering Coordinators will need to gain registration from AEMO prior to the

new Chapter 7 of the NER commencing. The draft rule requires AEMO to develop and publish by 1 October 2016 information relating to the process for applying for registration as a Metering Coordinator.

- Electricity and gas standard retail contracts will need to be amended by retailers and published on their websites no later than 1 July 2017. These amendments are required to reflect the changes in their obligations under the draft rule, including the retailer's obligation to:¹³⁵
 - appoint a Metering Coordinator to provide metering services at a small customer's premises; and
 - provide small customers with prior written notice of a proposed new meter deployment and provide them with an ability to opt out of having their meter replaced in accordance with the draft rule.

Table 5.1 AEMO and IEC procedures requiring updating and development¹³⁶

Procedure	Existing or new procedure likely to be required?	Description
Service Level Procedures for Metering Providers	Existing AEMO procedure	Details the requirements for Metering Providers. Includes Metering Provider accreditation requirements.
Service Level Procedures for Metering Data Providers	Existing AEMO procedure	Details the obligations, technical requirements, measurement processes and performance requirements for Metering Data Providers. Includes Metering Data Provider accreditation requirements.
Market Settlement and Transfer Solution (MSATS) Procedures (including Consumer Administration Transfer Solution (CATS) Procedures)	Existing AEMO procedure	CATS procedures are used to update MSATS etc when a customer changes retailer. Only minor changes are expected to be required.
Metrology Procedure	Existing AEMO procedure	Details the obligations in relation to metrology on the Responsible Person (the Metering

¹³⁵ Note that the model terms for standard retail contracts in Schedule 1 of the NERR apply to both electricity and gas. Accordingly, gas retailers will also need to amend their standard retail contracts so that they comply with the amended model terms.

¹³⁶ Updates to the NMI procedure may also be required. This procedure is not required to be created under the NER, and is therefore not referred to in the draft rule.

Procedure	Existing or new procedure likely to be required?	Description
		Coordinator in the draft rule), the Financially Responsible Market Participant, AEMO, Metering Provider and Metering Data Provider.
Meter Churn Procedure	Existing AEMO procedure	Process for Financially Responsible Market Participants when a meter at a connection point is changed.
B2B Procedure	Existing IEC procedure	Procedures that relate to the B2B system for retailers, distribution businesses, Metering Providers and Metering Data Providers to communicate in relation to type 5 and 6 metering installations.
Procedures related to the minimum services specification	May be a new procedure or may be included in the existing Service Level Procedures	Procedures relating to the minimum services specification in accordance with cl. 7.8.3(c) of the NER in the draft rule. AEMO may amend the service level procedures to make provision for these procedures.
Emergency priority procedure	May be a new procedure or may be included in the existing Service Level Procedures	Procedures for managing congestion in the metering communications network during emergencies. AEMO may amend the service level procedures to make provision for these procedures.
NEM ROLR Processes	Part of existing MSATS procedures	AEMO to consider whether any amendments should be made to the ROLR procedures to manage the impacts of meter churn following a ROLR transfer (see Appendix A3).

A number of other steps must be taken by AEMO, industry and other parties leading up to the commencement of the new Chapter 7 of the NER on 1 July 2017.

The key additional implementation steps are outlined in Table 5.2. Each of these actions will need to occur by 1 July 2017.

Table 5.2 Key additional implementation actions

Implementation requirements	Person responsible
Updates to AEMO market systems	AEMO
Metering Coordinators apply to AEMO for registration	Any person seeking to be a Metering Coordinator (including DNSPs that will be the initial Metering Coordinator in relation to existing meters)

Implementation requirements	Person responsible
Metering Providers and Metering Data Providers apply to AEMO for accreditation	Any person seeking to be a Metering Provider and/or Metering Data Provider and who is not currently accredited with AEMO to perform that role or who AEMO considers needs to reapply for accreditation due to changes to the accreditation requirements
Appointment of Metering Coordinators	Financially Responsible Market Participants that are responsible for appointing a Metering Coordinator at a connection point
Appointment of Metering Providers and Metering Data Providers	Metering Coordinators ¹³⁷
Amendments to model standing offers for basic connection services (and standard connection services, if relevant) to reflect the new rules, including that connection services do not cover the provision, installation and maintenance of a metering installation at the customer's premises	DNSPs to submit proposed amendments to the AER for approval
Amendments to market retail contacts to comply with the final rule, including the retailer's responsibility for appointing a Metering Coordinator	Retailers with small customers
Industry changes to systems and business processes in order to comply with the final rule and amendments to AEMO/IEC procedures	Market Participants, Metering Providers, Metering Data Providers, and any person proposing to be a Metering Coordinator
Any actions that are required to comply with the AER's distribution ring-fencing guidelines	DNSPs
Any necessary amendments to jurisdictional safety legislation or regulations, including to address any safety issues related to remote disconnection and reconnections (see Appendix A3)	Jurisdictional safety regulators
COAG Energy Council to consider and, if determined appropriate, implement the AEMC's recommendations regarding civil penalty provisions (see Appendix G)	COAG Energy Council

¹³⁷ Where a Responsible Person currently has an agreement with a Metering Provider or Metering Data Provider and the Responsible Person intends to become a Metering Coordinator, that agreement may need to be replaced or amended to comply with the final rule.

Implementation requirements	Person responsible
Amendments to the Victorian AMI Cost Recovery Order in Council to reflect the change from "Responsible Person" to "Metering Coordinator" and other consequential changes in the final rule, and any amendments that may be necessary to the AMI Specifications Order in Council (see Appendix F)	Victorian Government
Victorian Government Essential Services Commission (Victoria) to consider whether to make amendments to the Electricity Retail Code for consistency with the amendments to the NERR contained in the draft rule, eg opt out rights for new meter deployments (see Appendices C2 and F)	Victorian Government and Essential Services Commission
NSW Government to review the operation of the Accredited Service Providers scheme in light of the changes to the NER and NERR, and make any necessary amendments to the relevant legislation, regulations and/or scheme rules.	NSW Government

A Roles and responsibilities

Overview of Appendix A

Appendix A sets out the roles and responsibilities under the draft rule of the following parties:

- A1 Metering Coordinators.
- A2 Metering Providers and Metering Data Providers.
- A3 Retailers.
- A4 DNSPs.

A1 Metering Coordinators' roles and responsibilities

Summary

This appendix sets out the role and responsibilities of the Metering Coordinator under the draft rule.

Under the draft rule, the current roles and responsibilities of the Responsible Person will be performed by the Metering Coordinator. The Metering Coordinator also has additional responsibilities, which primarily relate to new and replacement metering installations installed at small customer connection points.

Under the draft rule, the Financially Responsible Market Participant at a connection point is responsible for appointing a Metering Coordinator for that connection point, other than where a large customer has appointed its own Metering Coordinator. The retailer is the Financially Responsible Market Participant for the connection points of its retail customers and will be responsible for appointing Metering Coordinators at these connection points.

Any party may act as a Metering Coordinator, provided it is registered with AEMO for that role. For example, the Metering Coordinator may be a subsidiary of a retailer that decides to expand into that business,¹³⁸ a DNSP (subject to the requirements of the AER's distribution ring-fencing guidelines),¹³⁹ an existing Metering Provider or Metering Data Provider, or any other party wishing to establish a Metering Coordinator business.

Under the transitional arrangements, the LNSP that is acting as the Responsible Person for a type 5 or 6 metering installation immediately before the commencement of the new Chapter 7 of the NER will become the initial Metering Coordinator at that connection point. The LNSP will continue in this role until another Metering Coordinator is appointed at that connection point, or the services cease to be classified by the AER as a direct control service.

Victorian DNSPs will become the initial Metering Coordinator for the advanced metering installations they deployed under the AMI program.

Certain exclusivity arrangements that currently apply to the Responsible Person role will cease to operate under the draft rule. Ending these exclusivity arrangements is expected to:

- allow increased competition in the provision of metering services, which is

¹³⁸ The draft rule provides that a person may not be registered as both a Metering Coordinator and a Market Customer (eg retailer). The effect of this provision is that a retailer that wishes to establish a Metering Coordinator business will need to do so through a separate legal entity (eg a subsidiary). See Appendix A3.

¹³⁹ See Appendix D3 for details on ring-fencing arrangements for DNSPs.

expected to result in lower costs for consumers;

- support investment and innovation in advanced metering; and
- increase the range of energy products and services available to consumers.

Under the draft rule, LNSPs will remain the exclusive provider of metering services for type 7 metering installations (eg metering for public lighting).

In addition to the existing obligations of the Responsible Person, the Metering Coordinator has additional obligations, including in relation to:

- security controls for managing access to small customer metering installations that meet the minimum services specification, including services provided by, and energy data held in, such installations;
- ensuring that access to all metering installations for which it is responsible and the services provided by, and energy data held in, such installations is managed in accordance with emergency priority procedures to be developed by AEMO; and
- network devices used by DNSPs for the purposes of operating or monitoring their networks.

Under the draft rule, the Metering Coordinator must be a Registered Participant.

A1.1 Introduction

This appendix sets out the role and responsibilities of the Metering Coordinator under the draft rule. In particular, it sets out the rationale for establishing a Metering Coordinator role, the responsibilities of parties acting in the role, and the registration requirements that will apply to any party wanting to undertake the role.

This appendix covers:

- the existing arrangements relating to the provision of metering services in the NEM;
- the COAG Energy Council's rule change request for a Metering Coordinator and for jurisdictions to be able to introduce regulation to prescribe exclusivity for one or more, or a class of, Metering Coordinators providing metering services for some metering installation types;
- stakeholder views, including submissions to the consultation paper and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for the Commission's draft rule in relation to the appointment and role of Metering Coordinators.

A1.2 Current arrangements for provision of metering services in the NEM

A1.2.1 Responsibilities for the provision of metering services under the NER

The current Chapter 7 of the NER sets out the regulatory framework for the provision of metering services in the NEM. It outlines arrangements relating to matters including:

- provision, installation, accuracy and maintenance of a metering installation;
- collection and provision of metering data;
- security of, and rights of access to, metering data and energy data; and
- standards of performance and the accreditation requirements of Metering Providers and Metering Data Providers.

Under the current arrangements, a Market Participant must ensure there is a metering installation at each of the connection points in respect of which it is participating in the NEM and that the metering installation is registered with AEMO.¹⁴⁰ The retailer is the Market Participant required to satisfy these requirements with respect to the connection points of its retail customers.

There must also be a Responsible Person for each connection point that arranges for the installation, provision and maintenance of the metering installation, and the collection, processing and delivery of metering data.¹⁴¹

The Market Participant is required to act as the Responsible Person for a type 1-4 metering installation unless it has requested, and subsequently accepted, an offer from the LNSP to take on this role.¹⁴² A LNSP is required to make an offer to act as the Responsible Person for a connection point with a type 1-4 metering installation when requested to do so by the Market Participant.¹⁴³

The role of the Responsible Person is exclusively performed by the LNSP for types 5-6 metering installations at the premises of small customers. In Victoria, where the Victorian government mandated that Victorian DNSPs roll out advanced meters (the AMI program) to almost all Victorian customers consuming up to 160 MWh of electricity per annum (ie residential and small business customers), the LNSP is the Responsible Person for those advanced metering installations.

140 Current clause 7.1.2 of the NER.

141 Current clause 7.2.1 of the NER.

142 Current clause 7.2.2 of the NER, where the LNSP is the local DNSP.

143 Current clause 7.2.3(c) of the NER.

The Responsible Person is responsible for the installation and maintenance of a metering installation, and the collection, processing and delivery of metering data for the relevant metering installation.

In addition, the Responsible Person must, amongst other things, for each metering installation:

- 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;¹⁴⁴
- engage a Metering Data Provider (unless the Responsible Person is the Metering Data Provider) to provide metering data services between the metering installation and the metering database and to parties entitled to such services under Rule 7.7(a) (except where the Responsible Person is a TNSP);¹⁴⁵
- ensure that the installation is provided, installed and maintained in accordance with the NER, the metrology procedure and other procedures under the NER;¹⁴⁶
- ensure that the components, accuracy and testing of the installation comply with the requirements of the NER, the metrology procedure and other procedures authorised under the NER;¹⁴⁷
- 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;¹⁴⁸
- 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;¹⁴⁹ 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.¹⁵⁰

144 Current clause 7.2.5(a) of the NER.

145 Current clause 7.2.5(c1) of the NER.

146 Current clause 7.2.5(d)(1) of the NER.

147 Current clause 7.2.5(d)(2) of the NER.

148 Current clauses 7.2.5(d)(3) and 7.8.1 of the NER.

149 Current clause 7.2.5(d)(4) of the NER.

150 Current clause 7.2.5(d)(7) of the NER.

A1.2.2 Economic regulation of type 5 and 6 metering services by the AER

As discussed above, the role of the Responsible Person is performed exclusively by the LNSP for types 5-6 metering installations at the premises of small customers. The price for these services is currently regulated by the AER.

The AER may classify distribution services provided by a DNSP, including metering services, as a direct control service or a negotiated service.¹⁵¹ Direct control services are price regulated and divided into two subclasses – standard control services that are paid by all customers, and alternative control services that are generally only paid by users of that service. If a service is not classified by the AER it will not be subject to economic regulation under the NER.

Type 5 and type 6 metering services have generally been classified by the AER as a standard control service. This means that DNSPs charges for these metering services are bundled into distribution use of system charges that all users of the network pay. The AER is currently in the process of unbundling charges for metering services from the distribution use of system charges. This issue is discussed in Appendix D1.

A1.3 Rule proponent's view

A key element of the COAG Energy Council's proposed new framework is the establishment a separate Metering Coordinator role. This proposal was based on the principle that no party should have the exclusive right to provide these services in the NEM.

The COAG Energy Council proposed that the Metering Coordinator will take on the existing responsibilities of the Responsible Person for the provision of metering services in the NEM, as well as additional responsibilities related to the provision of advanced metering services.

More specifically, the COAG Energy Council's rule change request proposes that:

- The term “Responsible Person” be changed to “Metering Coordinator”.¹⁵²
- The Metering Coordinator would retain the responsibilities of the Responsible Person, which could be performed by any suitably qualified party to provide metering services in the NEM. The COAG Energy Council’s rule change request noted that a retailer or LNSP (subject to any ring-fencing requirements) could perform the role if registered and accredited with AEMO.¹⁵³
- Jurisdictions should be able to introduce regulation to prescribe exclusivity for one or more, or a class of, Metering Coordinators to coordinate metering services for some metering installation types to support the efficient provision of basic

151 Clause 6.2.1(a) of the NER.

152 COAG Energy Council, rule change request, October 2013, p7.

153 Ibid.

metering services.¹⁵⁴ As an example, the COAG Energy Council considers that jurisdictions might seek to prescribe that LNSPs continue to provide type 6 and/or type 7 metering services because:

- there may be little benefit in opening the provision of these services to competition, for example if a new and replacement policy prevents the installation of type 6 metering installations;
 - LNSPs are currently able to take advantage of significant economies of scale in providing these services at low cost to consumers;
 - it is unlikely that competition for the provision of type 6 metering services would provide small customers with a lower cost service, particularly if there are fewer type 6 metering installations being installed.¹⁵⁵
- The Metering Coordinator must comply with the current provisions in Chapter 7 of the NER that relate to the Responsible Person role. In particular, the Metering Coordinator must:
 - retain overall responsibility for provision of metering services, including installation, maintenance and testing of the metering installation and the collection, processing and delivery of metering data;
 - ensure the accuracy of the metering installation and integrity and delivery of metering data; and
 - engage and coordinate the availability, dispatch, performance and payment of the Metering Provider and Metering Data Provider.¹⁵⁶
 - The functionality of a DNSP's existing load management devices will be retained if a meter is replaced in order to preserve the benefits of the load management scheme. A number of load management schemes currently operate in the NEM, such as switching off hot water heaters during peak periods.¹⁵⁷

A1.4 Stakeholder views

The views expressed by stakeholders in their submissions to the consultation paper on the proposed Metering Coordinator role were varied.

¹⁵⁴ COAG Energy Council, rule change request, October 2013, p17.

¹⁵⁵ Ibid.

¹⁵⁶ The rule change request proposes that a Metering Coordinator can also be a Metering Provider and/or a Metering Data Provider where accredited to fulfil these functions.

¹⁵⁷ COAG Energy Council, rule change request, October 2013, p12.

Some stakeholders considered that there would be competition benefits from allowing any party to take on the role of Metering Coordinator, while combining the Metering Coordinator and the Metering Provider may limit competition.¹⁵⁸

Other stakeholders considered that the costs of introducing the contractual arrangements and information interactions between retailers and the Metering Coordinator are likely to outweigh the benefits of having the Metering Coordinator role separate from the Market Participant (eg retailer).¹⁵⁹ Other stakeholders considered that the roles and responsibilities of the Metering Coordinator could be accommodated within the existing Responsible Person, Metering Provider and Metering Data Provider roles.¹⁶⁰

Following the first stakeholder workshop on 26 June 2014, most stakeholders generally supported the proposal that the Metering Coordinator should take over the existing Responsible Person role and that any party should be able to perform the role provided they satisfy the relevant registration requirements. Most stakeholders were also of the view that the roles and responsibilities of the Metering Coordinator should be separate from the roles and responsibilities of the retailer, Metering Provider and Metering Data Provider. It was generally considered by stakeholders that this would better align responsibilities with the operational aspects of each role.

Stakeholders presented mixed views in submissions on the proposal that jurisdictions should be able to prescribe exclusivity for one or more, or a class of, Metering Coordinators to coordinate metering services for some metering installation types to support the efficient provision of basic metering services.

Some stakeholders were of the view that exclusivity arrangements may be suitable for type 6 and 7 metering services because there is no apparent benefit of opening these services up to competition.¹⁶¹ Several DNSPs saw themselves as having an ongoing role to provide a basic, regulated metering service.¹⁶² However, SA Power Networks considered that if the NER allowed jurisdictions to prescribe exclusivity to Metering Coordinators, this should not be limited to certain metering types.¹⁶³

The AER suggested that exclusivity arrangements be removed where competition is possible, but maintained where competition is unlikely to emerge or be effective. It proposed that DNSPs retain exclusivity for regulated metering services for type 5 and type 6 metering installations at the time the rule change commences so that metering costs do not change in the transition.¹⁶⁴

158 Origin Energy, submission on consultation paper, p3.

159 Simply Energy, submission on consultation paper, p1; ESAA, submission on consultation paper, p2.

160 SA Power Networks, submission on consultation paper, p5.

161 Vector, submission on consultation paper, p9; EDML, submission on consultation paper, p8; Simply Energy, submission on consultation paper, p7; Energex; submission on consultation paper, p3.

162 NSW DNSPs, submission on consultation paper, p10; Ergon Energy, submission on consultation paper, p8.

163 SA Power Networks, submission on consultation paper, p6.

164 AER, submission on consultation paper, p4,6.

Lumo Energy considered that jurisdictions should only be able to prescribe exclusivity arrangements where a consumer is not directly involved, ie for type 7 metering only. It considered that allowing exclusivity arrangements for other meter types would increase investment risks to the market and threaten national consistency.¹⁶⁵

Origin Energy was of the view that exclusivity arrangements for type 6 metering would not be required because DNSPs, as the default Metering Coordinator for type 6 meters under the framework proposed in the rule change request, are unlikely to be challenged by other parties.¹⁶⁶ Metropolis considered that there might be a Metering Coordinator who can provide an efficient, cost effective manually read metering service, and that exclusivity arrangements would close down opportunities for competition that may be beneficial to the market.¹⁶⁷

Several stakeholders were of the view that exclusivity arrangements should not be permitted at all because they would increase investment risk, limit competition and compromise national consistency.¹⁶⁸

A1.5 Commission's analysis

In assessing the implications of the COAG Energy Council's rule change request to create a new role of 'Metering Coordinator', the Commission has considered whether the draft rule will:

- encourage consumer participation and increase choice of energy services and products that reflect consumer needs and preferences;
- provide energy services at an efficient cost to consumers;
- facilitate competition between commercial parties to supply consumers with the products and services they want in a cost effective way;
- reduce barriers to entry into the market for the provision of metering services;
- support innovation and efficient investment in metering services over time;
- maximise overall electricity system and market efficiency;
- allocate new obligations associated with any new responsibilities to the party best placed to carry out those obligations;

¹⁶⁵ Lumo Energy, submission on consultation paper, p5.

¹⁶⁶ Origin Energy, submission on consultation paper, p4.

¹⁶⁷ Metropolis, submission on consultation paper, p5.

¹⁶⁸ Secure Australasia, submission on consultation paper, p1; ERAA, submission on consultation paper, p2; AGL, submission on consultation paper, p5; Metropolis, submission on consultation paper, p5; PIAC, submission on consultation paper, p1; Simply Energy, submission on consultation paper, p7; EDML, submission on consultation paper p8.

- promote transparency and predictability in the regulatory framework to assist business confidence, and information for consumers; and
- keep administrative burden and transaction costs as low as practicable, to reduce the costs passed on to consumers.

This section sets out:

- the Commission's reasons for establishing a separate Metering Coordinator role;
- the Commission's reasons for not including provisions in the draft rule that would prescribe a process by which a Metering Coordinator or class of Metering Coordinators could be given the exclusive right by jurisdictions to provide certain types of metering services;
- a description of how Metering Coordinators will be appointed;
- a description of the role of the Metering Coordinator, including its main obligations under the draft rule; and
- the Commission's reasons for requiring that a Metering Coordinator be a Registered Participant.

A1.5.1 A separate Metering Coordinator role

The Commission considered the COAG Energy Council's proposal for a separate Metering Coordinator role and potential alternatives. These alternatives included allocating responsibility for the provision of metering services exclusively to the Market Participant at the connection point, or alternatively, the Responsible Person role being combined with the existing Metering Provider role.

The Commission considers that allocating the role of providing all metering services exclusively to the Market Participant would limit the number of parties able to provide metering services and consequently hinder competition.

Metering is not a core role for retailers. Some retailers, in particular smaller retailers, may not wish to have any responsibility for metering services (other than the obligation to appoint a Metering Coordinator) and the associated liability for any breach of the metering provisions of the NER. The establishment of a Metering Coordinator role allows those retailers to appoint a party that specialises in metering services to be responsible for metering issues. Requiring the retailer to be responsible for metering may increase costs for smaller retailers or discourage entry by new retailers.

Combining the Metering Coordinator and the Metering Provider roles is also not appropriate. At a very general level, the Metering Coordinator role involves managing the relevant commercial arrangements required to provide metering services in accordance with the regulatory framework, while the Metering Provider and Metering

Data Provider roles relate to the day-to-day management and provision of such services.¹⁶⁹

As the requisite capabilities and responsibilities for each role are significantly different, under the draft rule the Metering Coordinator, Metering Provider and Metering Data Provider are separate roles. This will allow different parties to enter into the market for each role, reducing the barriers to entry and potentially increasing the number of parties competing to undertake each role. Separation of the roles allows the most appropriately resourced and qualified parties to compete to provide the most efficient, safe and reliable metering services. However, the draft rule does not prevent a party from undertaking all three roles if it is registered and accredited by AEMO to do so. This allows greater flexibility for participants in the NEM when considering different business models.

While the Metering Coordinator, Metering Provider and Metering Data Provider are separate roles under the draft rule, the Commission considers that it is important that a single party is responsible for the provision of metering services.

In general terms, while the Metering Coordinator must appoint a Metering Provider for the provision, installation and maintenance of a metering installation and a Metering Data Provider to provide metering data services, the Metering Coordinator continues to have overall accountability for metering services under the NER.

The Commission considers that establishing the Metering Coordinator role and allowing any party that satisfies the applicable registration requirements to take on that role is likely to increase competition and reduce barriers to invest in advanced metering services. This is likely to lead to lower costs for consumers.

A1.5.2 Metering Coordinator exclusivity arrangements

The Commission understands that the purpose of the COAG Energy Council's proposed exclusivity arrangements is to mitigate the risk that:

- competition may not emerge in a particular market segment or region, in which case a jurisdiction might wish to impose an exclusivity arrangement such that small customers receive regulated metering services in relation to type 5 or type 6 metering installations;
- small customers could be adversely affected by competition because the costs of type 5 or 6 metering services are expected to increase, for example due to a loss of economies of scale in meter reading as other small customers have their meters read remotely; and/or
- a market could be created for the provision of type 5 and 6 metering services, which was previously only the responsibility of the DNSP, if consumers are able

¹⁶⁹ The roles of the Metering Provider and Metering Data Provider are discussed in Appendix A2.

to opt out of receiving a metering installation that meets the minimum services specification thereby slowing the deployment of advanced meters.

The Commission considers the above concerns are addressed in the draft rule through alternative means to those proposed by the COAG Energy Council, as discussed below.

Further, the purpose of this rule change is to facilitate competition in the provision of metering services. This objective is in part achieved by removing the exclusivity that retailers (as Market Participants) and LNSPs currently have to provide metering services with respect to certain types of metering installations, and allowing other parties to offer services in this market.¹⁷⁰ The Commission considers that this approach is likely to lead to lower costs and increased choice for consumers.

As discussed below, an LNSP that is the Responsible Person for type 5 and 6 metering installations immediately before the commencement of the new Chapter 7 of the NER will become the initial Metering Coordinator at that connection point. The LNSP will continue in this role until another Metering Coordinator is appointed to the connection point, or the services cease to be classified by the AER as a direct control service. Small customers will therefore continue to receive metering services, which are subject to price regulation, in relation to existing type 5 and 6 metering installations for as long as the service remains classified a direct control service.

As discussed in Appendix C1, the draft rule requires that all new and replacement metering installations for small customer connection points must meet the minimum services specification. Small customers will not be able to opt out of receiving a metering installation that meets the minimum services specification in maintenance replacement, fault or new connection scenarios.¹⁷¹ Consequently, there is no need for jurisdictions to prescribe exclusivity arrangements for a particular Metering Coordinator to provide services in respect of type 5 and 6 metering installations because the draft rule will prevent these metering installation types from being installed for small customers.

The draft rule does not prevent a retailer (as the Financially Responsible Market Participant) appointing a party other than the DNSP to be the Metering Coordinator for existing type 5 and 6 metering installations. However, this is unlikely to generate a large market for the provision of services for type 5 and 6 metering installations because:

- all new and replacement metering installations for small customers must meet the minimum services specification.¹⁷² This means that existing type 5 and 6 metering installations will gradually be replaced as they become faulty, the small customer takes up a product or service that requires a new meter to be installed, or the retailer carries out a "new meter deployment" or "maintenance replacement" (see Appendix C2); and

170 Other than for type 7 metering installations, as discussed below.

171 This is discussed further in Appendix C2.

172 Subject to a limited AEMO exemption power - see Appendix C1.

- while the retailer may replace the LNSP as Metering Coordinator where the LNSP is the initial Metering Coordinator, neither the retailer nor the incoming Metering Coordinator will acquire the existing meter at the premises as result of the retailer's appointment of another Metering Coordinator. Accordingly, a new Metering Coordinator would only be able to take over the provision of type 5 or 6 metering services from a LNSP if it also reached a commercial agreement to acquire or lease the existing meter or appoint the LNSP as the Metering Provider.

In addition, the Commission is concerned that the proposed exclusivity arrangements would:

- increase investment uncertainty;
- impede innovation; and
- limit consumer choice in energy products and services.

The Commission is therefore of the view that, other than in relation to type 7 metering installations, giving a particular party or class of parties (such as retailers or DNSPs) the exclusive right to perform the Metering Coordinator role for certain metering installation types (as proposed in the rule change request) is inconsistent with the purpose of this draft determination. Exclusivity arrangements would mean the provision of metering services would not be subject to the competitive pressures that constrain prices and encourage service improvements.

For reasons discussed in Appendix D1, the Commission agrees that it is appropriate to retain the existing arrangement that requires the LNSP to be the Responsible Person for type 7 metering installations.

The Commission does not see value in establishing arrangements to allow other parties to provide type 7 metering installations given the limited evidence that competition is likely to emerge for these services.

A1.5.3 Appointment of Metering Coordinators

Under the draft rule, the Financially Responsible Market Participant at a connection point is responsible for appointing a Metering Coordinator for that connection point, other than where a large customer has appointed its own Metering Coordinator (see Appendix B1 for appointment by large customers).¹⁷³

The retailer is the Financially Responsible Market Participant for the connection points of its retail customers and, as such, will be responsible for appointing Metering Coordinators at these connection points.

¹⁷³ Clause 7.6.2 of the NER in the draft rule.

Any party may act as a Metering Coordinator, provided it is registered with AEMO to perform that role:

- If a retailer wishes to perform the Metering Coordinator role itself, it will need to establish a separate legal entity (eg a subsidiary) to perform the role. For the reasons explained in Appendix A3, the draft rule provides that a person that is a Market Customer (eg retailer) may not be registered as a Metering Coordinator.¹⁷⁴
- A DNSP may be a Metering Coordinator, provided that it complies with any distribution ring-fencing requirements established by the AER.
- An existing Metering Provider or Metering Data Provider, or any other party, could also become a Metering Coordinator.

The relevant Financially Responsible Market Participant will enter into a commercial arrangement to appoint the Metering Coordinator, other than where a large customer has entered into such arrangement with the Metering Coordinator for the relevant connection point. This arrangement will set out the terms and conditions on which the Metering Coordinator provides services, including the price for those services.

Metering Coordinators may also enter into agreements to provide services that utilise the metering installation to other parties who are entitled to access those services under the NER or have the customer's consent, subject to provisions in the draft rule relating to access to, and security of, the metering installation. The Metering Coordinator will charge those other parties for the provision of those services.

Payment for Metering Coordinator services

Generally, the Financially Responsible Market Participant is currently responsible for payment of all metering services costs at the connection point.¹⁷⁵

Under the new arrangements, Financially Responsible Market Participants will appoint Metering Coordinators (other than where a large customer has done so) and will enter

¹⁷⁴ This restriction has been introduced under the draft rule to address concerns that if a retailer is also a Metering Coordinator at a connection point and the customer at that connection point changes retailers (but the Metering Coordinator does not change), the former retailer may have continued access to the customer's energy and metering data. In such circumstances, the former retailer would no longer be entitled to access that data under the NER in its capacity as a retailer or Financially Responsible Market Participant (as it would cease to hold these positions in respect of the connection point), but the Metering Coordinator would be entitled to access the data. If the Metering Coordinator and former retailer were part of the same legal entity, the Confidential Information provisions in the NER (see clause 8.6) would not be sufficient to ensure that such data collected by the Metering Coordinator business was not provided and used by the retail business being operated by the one entity. Access to this data could limit retail competition by creating an uneven playing field where retailers that were also Metering Coordinators would have access to valuable information that other retailers are not permitted to access under the NER.

¹⁷⁵ The current clause 7.3A(a) of the NER sets out the services to which such costs relate. This includes, amongst other things, costs associated with installing the meter, metering data services and preparing settlements ready data.

into a contract with them setting out the terms of that appointment, including payment arrangements. Metering Coordinators may also enter into agreements to provide services to other parties, as discussed above, and charge those other parties for those services.

As discussed in Appendix E, the price for access to services provided by Metering Coordinators will not be regulated under the draft rule.¹⁷⁶

It is therefore not necessary or appropriate for the NER to provide that the Financially Responsible Market Participant is responsible for payment for all metering services. Instead, payment arrangements should be left for commercial agreements. Accordingly, the current clause 7.3A of the NER has been removed from the draft rule.¹⁷⁷

Instead, clause 7.6.1 of the NER in the draft rule provides that:

- a Metering Coordinator assumes responsibility in respect of a connection point on terms and conditions (including as to price) to be commercially agreed between the Metering Coordinator and the Financially Responsible Market Participant or large customer who appoints the Metering Coordinator; and
- a Metering Coordinator may supply services on terms and conditions (including as to price) to be commercially agreed between the Metering Coordinator and the requesting party.

A similar approach has been taken to certain other current provisions in the NER that address payments for services provided by the Metering Provider or Metering Data Provider. The current clauses 7.11.2(b) and S7.2.1(b) of the NER have accordingly been removed in the draft rule, as the issues that they address are more appropriately dealt with by commercial arrangements under the new framework.

Transitional arrangements for existing type 5 and 6 metering installations

As noted above, the LNSP that is acting as the Responsible Person for type 5 and 6 metering installations immediately before the commencement of the new Chapter 7 of the NER will become the initial Metering Coordinator at that connection point.

The LNSP will continue in this role until another Metering Coordinator is appointed at that connection point for example when the meter is replaced because it becomes faulty or the retailer carries out a new meter deployment), or the services cease to be classified by the AER as a direct control service.

¹⁷⁶ See Appendix E for further details. Where an LNSP is acting as the initial Metering Coordinator for existing type 5 or type 6 metering installations, the price for those services will continue to be regulated by the AER as a direct control service.

¹⁷⁷ The current clause 7.3A(c) of the NER, which relates to payment for functions undertaken by AEMO, is retained as clause 7.5.2 of the NER in the draft rule. The current clause 7.3A(e) of the NER is retained (subject to certain consequential amendments) under the draft rule in clause 7.9.3(f) of the NER.

The Victorian DNSPs will become the initial Metering Coordinator for the advanced meters they deployed under the AMI program. They will continue as the Metering Coordinator until a new Metering Coordinator is appointed or the relevant services cease to be classified by the AER as a direct control service

To implement this initial appointment of the LNSP as Metering Coordinator, the transitional provisions in the draft rule provide that:

- at least three months prior to the commencement of the new Chapter 7 of the NER, the LNSP must provide each Financially Responsible Market Participant with a standard set of terms and conditions on which it will agree to act as the Metering Coordinator;
- unless the Financially Responsible Market Participant and LNSP agree other terms and conditions prior to the commencement of the new Chapter 7 of the NER, the LNSP will be deemed to be appointed as the Metering Coordinator on the LNSP's standard terms and conditions.

The draft rule also provides that the terms and conditions on which the LNSP is appointed as Metering Coordinator in such circumstances must:¹⁷⁸

- include terms as to price which are consistent with Chapter 6 (and, where relevant, Chapter 11) of the NER (ie the price will be the price as regulated by the AER);
- include a scope of services which is consistent with the responsibilities of the Metering Coordinator under Chapter 7 of the NER;
- provide that the Financially Responsible Market Participant may terminate an appointment on reasonable notice to the Metering Coordinator;
- not prevent, hinder or otherwise impede a Financially Responsible Market Participant from replacing the LNSP with another Metering Coordinator after the commencement of the new Chapter 7 of the NER; and
- include other terms and conditions as may be agreed between the LNSP and the Financially Responsible Market Participant.

Type 7 metering installations

LNSPs currently act as the Responsible Person for all type 7 metering installations.¹⁷⁹ The draft rule requires the LNSP to take on the Metering Coordinator role for all type 7 metering installations.

¹⁷⁸ See clause 11.78.7 of the NER in the draft rule.

¹⁷⁹ Type 7 metering installations do not involve a physical metering service but rather a reconciliation between DNSPs and the users of that service using an algorithm to determine the throughput of energy, eg for public lighting and traffic lights.

To give effect to the initial appointment of the LNSP as the Metering Coordinator for type 7 metering installations, the draft rule provides that:¹⁸⁰

- the LNSP must provide the Financially Responsible Market Participant with a standard set of terms and conditions on which it will agree to act as the Metering Coordinator for a type 7 metering installation;
- the terms and conditions of the LNSP's offer must be fair and reasonable and must not have the effect of unreasonably discriminating between Financially Responsible Market Participants or between customers of a Financially Responsible Market Participant; and
- a Financially Responsible Market Participant must accept an offer on the standard terms and conditions of appointment provided by the LNSP, unless the Financially Responsible Market Participant and LNSP agree other terms and conditions.

Transmission connection points and interconnectors

The requirement to appoint a Metering Coordinator will also apply to transmission network connection points.

However, in relation to transmission connection points, the draft rule provides that the Financially Responsible Market Participant may request that the LNSP offer to act as the Metering Coordinator.¹⁸¹ This provision reflects the current NER arrangements that require LNSPs to offer to act as the Responsible Person for type 1 to 4 metering installations in certain circumstances.

This requirement has been included due to concerns that its removal could mean that there may not be any party with the appropriate capabilities and expertise available to act as the Metering Coordinator at transmission network connection points. This is because the technology for these metering installations is specialised and there are only a relatively small number of such connection points. The Commission also understands that currently the Responsible Person for the majority of these connection points is the TNSP.

The arrangements for interconnectors are not changed under the draft rule. Under clause 7.2.1(c) of the NER in the draft rule, the TNSP (and not the Responsible Person) is responsible for the provision, installation and maintenance of the metering installations for interconnectors.

The current NER provisions on joint metering installations are also not amended by the draft rule.¹⁸²

180 Clause 7.6.4 of the NER in the draft rule.

181 Clause 7.6.3 of the NER in the draft rule.

182 Clause 7.8.12 of the NER in the draft rule.

The Commission understands that the joint metering installation provisions are intended to address circumstances where an interconnector has two metering installations ie there is one connection point with a metering installation at either end of the interconnector.

A1.5.4 Role and responsibilities of the Metering Coordinator

The Metering Coordinator will take on all of the current responsibilities of the Responsible Person as summarised above.

Under the draft rule, the Metering Coordinator is responsible for appointing a Metering Provider and Metering Data Provider in accordance with the NER. However, in general terms, the Metering Coordinator continues to have overall accountability for metering services under the NER.

For example, the Metering Coordinator must appoint a Metering Provider for the provision, installation and maintenance of each metering installation.¹⁸³ However, the Metering Coordinator remains responsible for ensuring that the metering installation is installed and maintained in accordance with the NER and relevant procedures.¹⁸⁴

A Metering Coordinator may choose to become accredited as a Metering Provider and/or Metering Data Provider and also carry out those roles.

Table A1.1 provides a general overview of the core obligations of a Metering Coordinator. This table distinguishes between those obligations which are currently obligations imposed on the Responsible Person as well other additional obligations being imposed on the Metering Coordinator under the draft rule.

Table A1.1 General overview of core obligations of a Metering Coordinator

Obligations	Existing or new obligation
Existing obligations of the Responsible Person in relation to metering installations and data	
<p>Existing obligations of the Responsible Person in Chapter 7 of the NER with respect to the provision, installation and maintenance of metering installations. For example:</p> <ul style="list-style-type: none"> • Ensure the security of metering installations and the accuracy of metering data.¹⁸⁵ • Appoint and coordinate the performance of the Metering Provider and the Metering Data Provider.¹⁸⁶ 	Existing

¹⁸³ Clause 7.3.2(a)(1) of the NER in the draft rule.

¹⁸⁴ See clause 7.3.2(e)(1) of the NER in the draft rule.

¹⁸⁵ Clause 7.3.2(e) of the NER in the draft rule.

¹⁸⁶ Clause 7.3.2(a) of the NER in the draft rule.

Obligations	Existing or new obligation
<ul style="list-style-type: none"> • Ensure that metering installations are provided, installed and maintained in accordance with the NER and procedures.¹⁸⁷ • Ensure that metering data services are provided in accordance with the NER and procedures.¹⁸⁸ • Ensure that energy data held in the metering installation is protected from direct local or remote electronic access by suitable password and security controls.¹⁸⁹ • Manage metering installation malfunctions, inspections, testing and auditing etc.¹⁹⁰ • Data obligations as required by AEMO procedures.¹⁹¹ 	
Minimum services specification	
Ensure that any new or replacement metering installation for small customers is a type 4 metering installation that meets the minimum services specification (see Appendix C1). ¹⁹²	New
Security controls for managing access to small customers' metering installations	
<p>For small customers' metering installations that meet or are required to meet the minimum services specification, ensure that:</p> <ul style="list-style-type: none"> • access to energy data held in the metering installation is only given to a person and for a purpose that is permitted under the NER; and • access to services provided by the metering installation and metering data from the metering installation is only given to: <ul style="list-style-type: none"> — in respect of a service listed in the minimum services specification, and metering data in connection with that service, an access party listed in Table S7.5.1.1 of the NER; or — a person and for a purpose to which the small customer has given its prior consent; or — a person and for a purpose that is permitted under the NER.¹⁹³ 	New

¹⁸⁷ Clause 7.3.2(e)(1) of the NER in the draft rule.

¹⁸⁸ Clause 7.3.2(g)(2) of the NER in the draft rule.

¹⁸⁹ Clause 7.15.3(a) of the NER in the draft rule.

¹⁹⁰ Clause 7.8.10(a) of the NER (malfunctions) and clause 7.9.1 of the NER (inspection, testing and audit) in the draft rule.

¹⁹¹ Clause 7.3.2(g) of the NER in the draft rule.

¹⁹² Clause 7.8.3 of the NER in the draft rule.

Obligations	Existing or new obligation
For small customers' metering installations that meet or are required to meet the minimum services specification, ensure that the services provided by the metering installation are protected from local access and remote access by suitable password and security controls. ¹⁹⁴	New - extension of the current obligation that applies for all customers' metering installations in relation to energy data
Emergency management	
For all connection points for which the Metering Coordinator is responsible, ensure that access to the metering installation, services provided by the metering installation and energy data held in the metering installation are managed in accordance with emergency priority procedures to be developed by AEMO. ¹⁹⁵	New
Other obligations	
Cooperate with an LNSP who wishes to install a network device for the purposes of operating or monitoring its network, and provide all reasonable assistance to facilitate the installation of the network device at or adjacent to the metering installation. ¹⁹⁶	New
Not remove, damage or render inoperable a network device that has been installed by an LNSP at or adjacent to a metering installation, except with the LNSP's consent. ¹⁹⁷	New
Not prevent, hinder or otherwise impede an LNSP from locally accessing a metering installation or connection point for the purposes of reconnecting or disconnecting the connection point. ¹⁹⁸	New
Registration	
Be registered as a Registered Participant. ¹⁹⁹	New

Security controls for managing access to small customers' metering installations

People seeking to access services provided by a metering installation will need to negotiate the access with the Metering Coordinator through commercial negotiation. Such parties may include energy service companies seeking to provide services to consumers or a DNSP or retailer seeking access to services, such as remote disconnection/reconnection services.

¹⁹³ Clause 7.15.4(a) and (b) of the NER in the draft rule.

¹⁹⁴ Clause 7.15.4(c) of the NER in the draft rule.

¹⁹⁵ Clause 7.8.5 of the NER in the draft rule.

¹⁹⁶ Clause 7.8.6(b)(1) of the NER in the draft rule.

¹⁹⁷ Clause 7.8.6(b)(2) of the NER in the draft rule.

¹⁹⁸ Clause 7.15.2(g) of the NER in the draft rule.

¹⁹⁹ Clause 2A.4.1 of the NER in the draft rule.

In its advice to the COAG Energy Council on how access to advanced metering services should be managed ("Open Access review"), the Commission outlined a framework for open access and common communication standards to support competition in energy services enabled by advanced meters. The Commission made a number of recommendations, including the need for a "gate keeper" role to manage access and security for small customer's advanced meters.²⁰⁰

The draft rule contains additional security controls for "small customer metering installations" to implement this gate keeper function.²⁰¹

These new provisions only apply to "small customer metering installations", ie any metering installation that meets or is required to meet the minimum services specification.²⁰²

Under these provisions, new requirements have been introduced with respect to local and remote access to the metering installation, services provided by the metering installation (eg remote disconnection or reconnection services or load control services), and the energy data held in the metering installation.

Under the draft rule, the Metering Coordinator must ensure that:

- access to energy data held in the metering installation is only given to a person and for a purpose that is permitted under the NER; and
- access to services provided by the metering installation and metering data from the metering installation is only given to:
 - in respect of a service listed in the minimum services specification, and metering data in connection with that service, an access party listed in Table S7.5.1.1 of the NER; or
 - a person and for a purpose to which the small customer has given its prior consent; or
 - a person and for a purpose that is permitted under the NER.²⁰³

The draft rule provides that only certain parties are permitted to request access to the services listed in the minimum services specification. These parties are:²⁰⁴

- For the remote scheduled meter read service and the remote on-demand meter read service: Parties listed in clause 7.15.5(a) of the NER in the draft rule (ie

²⁰⁰ AEMC, Framework for open access and common communication standards, Final advice, AEMC, 10 April 2014.

²⁰¹ See clause 7.15.4 of the NER in the draft rule.

²⁰² See the new definition of "small customer metering installation" in Chapter 10 of the NER. This definition does not cover manually read meters that are classified as type 4A metering installations - see Appendix C1.

²⁰³ See clauses 7.15.4(a) and (b) of the NER in the draft rule.

²⁰⁴ See Table 7.5.1.1 of the NER in the draft rule.

parties that are entitled to access energy and metering data). These parties include:

- the Financially Responsible Market Participant and LNSP at the connection point;
 - certain parties such as the AER and Ombudsmen;
 - any other person who has a small customer's prior consent; or
 - a large customer or a "customer authorised representative" of that large customer.
- For the remote disconnection and reconnection services, and the advanced meter reconfiguration service: The Financially Responsible Market Participant (eg retailer) and DNSP.
 - For the meter installation inquiry service: The Financially Responsible Market Participant, the LNSP, and any person who has a small customer's prior consent.

Access to any additional services that are provided by a small customer's metering installation but are not listed in the minimum services specification can only be provided to a person and for a purpose:

- in relation to which the small customer has given its prior consent; or
- that is permitted under the NER.²⁰⁵

Under the draft rule, the Metering Coordinator must also ensure that services provided by a small customer metering installation are protected from local access and remote access by suitable password and security controls in accordance with the NER.²⁰⁶

The draft rule amends which parties can obtain passwords allowing local access or remote access to the metering installation, services provided by the metering installation or energy data held in the metering installation in relation to small customer metering installations. Only the Metering Coordinator, Metering Provider, Metering Data Provider and AEMO will have local or remote access.

As an extension of its current obligations, the Metering Provider must ensure that no other person receives or has access to a copy of a password allowing local access or remote access to the metering installation or energy data held in the metering installation.²⁰⁷

²⁰⁵ Clause 7.15.4(b) of the NER in the draft rule.

²⁰⁶ Clause 7.15.4(e) of the NER in the draft rule. A similar obligation currently applies to the Responsible Person for connection points for which it is responsible in relation to energy data that is held in a metering installation - see current clause 7.8.2(a) of the NER. This existing obligation is now part of the obligations under clause 7.15.4 of the NER in the draft rule.

²⁰⁷ Clause 7.15.4(e)(2) of the NER in the draft rule.

Appendix B3 outlines amendments that have been made to the NER provisions that set out which parties may be granted access to energy data or may receive metering data.²⁰⁸

Emergency management

The NER currently provides that the Responsible Person must ensure that access to energy data by people authorised to access that data is scheduled appropriately to ensure that congestion does not occur.²⁰⁹ This requirement is retained in the draft rule, with the obligation being imposed on the Metering Coordinator.²¹⁰

In addition, the draft rule requires Metering Coordinators to ensure that access to the metering installation, services provided by the metering installation and energy data held in the metering installation are managed in accordance with the emergency priority procedures that are established by AEMO.²¹¹

This obligation applies to all current and new metering installations, not just small customer metering installations.

AEMO is responsible for establishing, maintaining and publishing the emergency priority procedures, which must set out:

- the criteria for determining when an emergency condition is present and which metering installations will be affected by the emergency condition; and
- where a Metering Coordinator supplies services to an LNSP from a metering installation that is affected by an emergency condition, which services the Metering Coordinator may be required to prioritise at the request of the LNSP.

This requirement has been introduced to address situations where it may not be possible for the Metering Coordinator, Metering Provider or Metering Data Provider to process all service commands in line with the applicable service standards under the NER or the relevant contracts during periods of an unusually high volume of requests for services. This scenario is more likely to occur as the penetration of advanced meters increases.

The emergency priority procedures will only apply during emergency conditions.²¹² It will provide DNSPs with greater certainty that they can rely on the services that they have negotiated to be provided by the Metering Coordinator when managing a network security issue during an emergency condition.

If there is such congestion during emergency conditions, it may be appropriate for commands from DNSPs regarding certain services to be prioritised over other

208 Clause 7.15.5 of the NER in the draft rule.

209 Current clause 7.7(c1) of the NER.

210 Clause 7.15.5(d) of the NER in the draft rule.

211 Clause 7.8.5 of the NER in the draft rule.

212 The criteria for emergency conditions will be set out in the procedures.

commands. For example, if DNSPs are required to temporarily disconnect customers due to an extreme weather event or bushfire, there is likely to be merit in those commands being prioritised over less time sensitive commands such as scheduled meter reads or software updates.

DNSPs could negotiate such priority in their contracts with the Metering Coordinator. However, there are likely to be benefits in AEMO developing a single NEM-wide definition of an emergency condition and order of prioritisation that all Metering Coordinators must comply with.

AEMO is the most appropriate body to develop and maintain the emergency priority procedures as it:

- will be familiar with the roles of the Metering Coordinator, Metering Provider and Metering Data Provider, as it will be responsible for registration and accreditation of those roles under the draft rule;
- will be knowledgeable of the technical issues associated with congestion within the communications network; and
- has an understanding of the management of network security during emergency conditions.

DNSPs must comply with the emergency priority procedures when issuing a service prioritisation request to a Metering Coordinator under those procedures.²¹³

Network devices

The COAG Energy Council proposed that the functionality of a DNSP's existing load management devices must be retained if a meter is replaced.

There are many existing load management schemes that have been implemented by DNSPs in the NEM, such as off peak hot water heating. These schemes provide benefits by reducing:

- the peak demand at a location in the network, and hence the cost of maintaining a reliable supply; and
- the costs of energy at times of peak demand.

These existing load management schemes generally involve a load control device²¹⁴ at the consumer's premises. The load control device is often accompanied by multiple meters to provide the consumer with different tariffs for the controlled load and the remainder of their consumption.

²¹³ See clause 7.8.5(c) of the NER.

²¹⁴ A typical example of a load control device would be a ripple control relay. These relays turn on or off a load such as the hot water heater in response to signals injected in the electricity network by the DNSP. This allows the DNSP to remotely turn on or off blocks of consumers' hot water heaters. This is done to reduce the peak demand in their network at a time of potential overload.

In submissions and workshops, several DNSPs proposed that DNSPs should have the right to retain their existing meters and use them as network devices if they were replaced as the Metering Coordinator and were unable to negotiate access to network-related services from the Metering Coordinator on acceptable terms.²¹⁵ This was a particular issue for Victorian DNSPs, who wished to retain access to the network related functions of their AMI meters if a new Metering Coordinator was appointed.

Several DNSPs also proposed that DNSPs should be able to install new network devices, to provide a bypass threat in negotiations with Metering Coordinators for access to network-related services.

The draft rule addresses these issues by introducing new provisions relating to network devices.²¹⁶

A "network device" is defined in the draft rule as "an item of apparatus or equipment associated with the provision or the monitoring of *network services* which may include circuit breakers and control equipment and which may be housed within a *facility* that was previously used by the relevant *Local Network Service Provider* as a *metering installation*".

This definition covers a variety of existing and new network devices that may be used by LNSPs, including:

- existing load control devices used for the purposes of operating the LNSP's network; and
- existing advanced meters that can be used for the purposes of operating or monitoring the LNSP's network, including the AMI meters that were deployed by Victorian DNSPs.

Under the draft rule, an LNSP may install a network device at or adjacent to a metering installation for the purposes of monitoring or operating its network.

So that the network device provisions cannot be used to avoid the restrictions in the draft rule on access to energy data and services provided by a metering installation, an LNSP must not:

- use a network device except in connection with the operation or monitoring of its network;
- use a network device to reconnect or disconnect a metering installation via remote access (as these services should be performed by the Metering Coordinator using the meter);
- disclose any information obtained from a network device to any person except as permitted in the NER.²¹⁷

²¹⁵ This issue is discussed in more detail in Appendix E.

²¹⁶ Clause 7.8.6 of the NER in the draft rule.

The prohibition on using a network device to reconnect or disconnect a metering installation via remote access is not intended to prevent the DNSP using a network device for load control purposes. Load control involves stopping the flow of electricity to a particular appliance or point of consumption at the premises rather than stopping the flow of electricity entirely to the premises. Accordingly, the Commission does not consider that load control falls within the existing definitions of "disconnect" or "reconnect".

An LNSP also must not remove, damage or render inoperable a metering installation.

Metering Coordinators also have new obligations in relation to network devices to:

- cooperate with a LNSP who wishes to install a network device and provide all reasonable assistance to facilitate the installation of the network device at or adjacent to the metering installation; and
- not remove, damage or render inoperable a network device that has been installed at or adjacent to a metering installation, except with the consent of the LNSP.

The requirement not to remove, damage or render inoperable a network device will mean that, following the installation of a metering installation that meets the new minimum services specification, the DNSP must still have the ability to use the device, for example to turn off and on the controlled load. This requirement applies to all network devices, regardless of whether the DNSP is using the functionality of the device at the time the new metering installation is installed by the Metering Coordinator.

B2B arrangements

The draft rule also adds Metering Coordinators to the list of parties that must use the B2B e-Hub for B2B Communications.²¹⁸

References to Metering Coordinators are also added to several provisions relating to the method for making and changing B2B procedures, for example by adding Metering Coordinators to the list of parties that may propose a change to the B2B procedures.²¹⁹

Broader changes to the B2B procedure provisions have not been included in the draft rule and are outside of the scope of this rule change. For example, Metering

217 This requirement is needed because the information contained in a network device will not be energy data or metering data and will not be covered by the existing restrictions on disclosure and use of that data. The draft rule also provides that information obtained from a network device is confidential and must be treated as confidential information in accordance with the NER.

218 Clause 7.17.1 of the NER.

219 Clause 7.17.3 of the NER.

Coordinators have not been added to the list of people that may be members of the Information Exchange Committee (IEC).²²⁰

A1.5.5 Registration requirements for a Metering Coordinator

The Commission has considered the roles and responsibilities of the Metering Coordinator to determine whether the Metering Coordinator should be required to be a Registered Participant or otherwise accredited by AEMO to perform the role.

Current arrangements

Currently, the only parties that can act as a Responsible Person are Market Participants or LNSPs. Each of those parties are already a Registered Participant, eg retailers are registered as a Market Customer. Accordingly, there is no need for a separate requirement that the Responsible Person must be a Registered Participant.

Certain rights and obligations apply to all Registered Participants under the NER, including:

- participation in the NER dispute resolution process;²²¹
- confidentiality obligations with respect to confidential information;²²²
- reporting requirements as determined by the AER;²²³ and
- an obligation to pay participant fees to AEMO.²²⁴

In addition to these general rights and obligations, each class of Registered Participant has certain rights and obligations that are specific to their respective roles.

Metering Providers and Metering Data Providers must satisfy certain technical, capability and licensing requirements in order to be accredited and registered with AEMO.²²⁵ However, Metering Providers and Metering Data Providers are not required to be Registered Participants.

Metering Coordinator to be a new class of Registered Participant

Under the draft rule, the Responsible Person's responsibilities in relation to the provision, maintenance and installation of metering installations and metering data

²²⁰ Some of these issues will be considered as part of the AEMC's advice on the shared market protocol. For example, that advice will consider the governance arrangements for the shared market protocol, which may partly or wholly replace the B2B e-Hub and B2B procedures.

²²¹ Rule 8.2 of the NER.

²²² Clause 8.6.1(b) of the NER

²²³ Clause 8.7.2(e) of the NER.

²²⁴ Clause 2.1.2 (f) of the NER.

²²⁵ See current schedule 7.4 of the NER (Metering Provider) and current schedule 7.6 of the NER (Metering Data Provider).

services will be allocated to the Metering Coordinator. Metering Coordinators will have additional responsibilities as discussed earlier in this appendix.

Due to the nature of the Metering Coordinator's role and responsibilities in providing services that are essential for the operation of the NEM, it is necessary for the Metering Coordinator to be a Registered Participant. .

Registration requirements for the Metering Coordinator

The Commission has considered the nature and scope of the role and responsibilities of the Metering Coordinator in order to determine what criteria an applicant must meet in order to become registered as a Metering Coordinator.

Under the draft rule, to be eligible for registration as a Metering Coordinator, an applicant must:²²⁶

- not be a Market Customer;
- satisfy AEMO that it is complying with and will comply with the NER and the procedures authorised under the NER;
- have appropriate processes in place to determine that a person seeking access to a service listed in minimum service specification is an "access party" in respect of that service;
- have an appropriate security control management strategy and associated infrastructure and communications systems for the purposes of preventing unauthorised access to metering installations, services provided by metering installations and energy data held in metering installations;
- have insurance as considered appropriate by AEMO; and
- pay the prescribed fee.

A Market Customer (eg retailer) must not be registered as a Metering Coordinator. A retailer that wishes to establish a Metering Coordinator business must do so via a separate legal entity, eg a subsidiary.

DNSPs that act as the initial Metering Coordinators under the transitional arrangements will still be required to register as a Metering Coordinator. The standard registration requirements will apply.²²⁷

TNSPs that act as Metering Coordinators in relation to transmission connection points would also need to be registered as a Metering Coordinator.

However, the draft rule allows AEMO to exempt TNSPs from satisfying one or more of the registration requirements when the TNSP is registering as a Metering Coordinator

²²⁶ Clause 2.4A.1 of the NER in the draft rule.

²²⁷ Clause 11.78.7(f) of the NER in the draft rule.

for transmission connection points within its transmission network, subject to conditions as AEMO deems appropriate where (in AEMO's reasonable opinion) the exemptions are not inconsistent with the NEO.²²⁸

This exemption power is appropriate because:

- under the current NER provisions and the draft rule, a TNSP that becomes the Metering Coordinator for a connection point in its network is only responsible for the provision, installation and maintenance of the metering installation, with AEMO being responsible for collection of metering data from that metering installation, the processing of that data and the delivery of the processed data;²²⁹ and
- the TNSP would already need to be a Registered Participant by virtue of being registered as a TNSP.

As noted above, the arrangements for interconnections do not changed under the draft rule. Accordingly, TNSPs are not required to be registered as a Metering Coordinator for the purposes of satisfying their obligation with respect to metering installations at interconnectors.

²²⁸ Clause 2.4A.1 of the NER in the draft rule.

²²⁹ Clause 7.5.1(a) and 7.2.1(c) of the NER in the draft rule.

A2 Metering Providers and Metering Data Providers' roles and responsibilities

Summary

This appendix outlines the roles and responsibilities of the Metering Provider and Metering Data Provider under the draft rule.

The Metering Provider and Metering Data Provider retain their current roles and obligations.

The general approach under the draft rule has been to impose new obligations on the Metering Coordinator rather than the Metering Provider or Metering Data Provider. This is consistent with the approach that the Metering Coordinator has overall accountability for metering services under the NER.

However, the Metering Provider and Metering Data Provider will have new obligations under the draft rule in relation to the following matters:

- In relation to "small customer metering installations" (a new defined term in the NER), the draft rule amends which parties can obtain passwords allowing local access or remote access to the metering installation, services provided by the metering installation or energy data held in the metering installation. Only the Metering Coordinator, Metering Provider, Metering Data Provider and AEMO will have local or remote access. The Metering Provider must ensure that no other person receives or has access to a copy of a password allowing local access or remote access to the metering installation or energy data held in the metering installation.
- The Metering Provider has a new obligation to ensure that any metering installation established at a connection point for a new connection (ie new house or development) must be a type 4 metering installation that meets the minimum services specification, except where a Metering Coordinator has obtained an exemption from AEMO.
- As part of the drafting of the new Chapter 7 of the NER in the draft rule, the Commission has identified that several existing obligations do not state which person is required to comply with that obligation. This is addressed in the draft rule, which specifies who is responsible for those obligations. One such obligation has been allocated to the Metering Provider (in relation to metering installation components) and one to the Metering Data Provider (in relation to periodic energy metering).
- Metering Providers and Metering Data Provider will have new obligations as a result of being deemed to be Registered Participants for the purposes of the confidentiality obligations in the NER.
- As part of the accreditation process, Metering Providers and Metering Data

Providers for "small customer metering installations" must meet an additional requirement. This requirement relates to the establishment of an appropriate security control management plan and associated infrastructure and communications systems for the purposes of preventing unauthorised local access or remote access to metering installations, services provided by metering installations and energy data held in metering installations.

A2.1 Introduction

This appendix outlines the Commission's draft rule in relation to the roles and responsibilities of a Metering Provider and Metering Data Provider under the proposed arrangements to promote competition in metering and related services.

This appendix covers:

- the COAG Energy Council's proposal regarding the role of the Metering Provider and Metering Data Provider;
- stakeholder views including submissions to the consultation paper and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis with respect to the roles and responsibilities of Metering Providers and Metering Data Providers and consequential changes to existing accreditation requirements.

A2.2 Rule proponent's view

The rule change request considered that the existing roles for the Metering Provider and Metering Data Provider should not change.²³⁰

However, the COAG Energy Council highlighted that the rule change should consider issues raised in the AEMC's review into open access and common communication standards.²³¹ The Open Access review (discussed further in Appendix A1) recommended that the party responsible for managing access, security and congestion to advanced meter functionality be considered as a part of this rule change.²³²

A2.3 Stakeholder views

Some stakeholders initially expressed support for the proposal to combine all of the additional responsibilities required for managing access, security and congestion to advanced meter functionality with the Metering Provider role, as an alternative to the

²³⁰ COAG Energy Council, rule change request, October 2013, p7.

²³¹ AEMC, Framework for open access and common communication standards, Final advice, AEMC, 10 April 2014.

²³² Ibid., p62.

COAG Energy Council's proposal for a separate Metering Coordinator role.²³³ Other stakeholders considered that not all of the additional responsibilities, particularly those related to contract and risk management, were appropriate for the Metering Provider to carry out.²³⁴

At the first stakeholder workshop on 26 June 2014 stakeholders were generally in agreement that the Metering Coordinator role and Metering Provider role should be separate. Stakeholders considered that the additional roles and responsibilities related to the provision of advanced metering services should be divided between the Metering Coordinator and Metering Provider consistent with the existing roles and responsibilities of the Responsible Person and Metering Provider.

A2.4 Commission's analysis

In assessing whether any changes are required to the Metering Provider and Metering Data Provider roles, the Commission has considered:

- the nature of any new roles and responsibilities and the party that is best placed to carry out those roles and responsibilities;
- the administrative burden and transaction costs of the new roles and responsibilities;
- reducing barriers to entry into the market for the provision of metering services; and
- supporting innovation and efficient investment in metering services over time.

This section sets out:

- the roles and responsibilities of the Metering Provider;
- the roles and responsibilities of the Metering Data Provider; and
- accreditation requirements for the Metering Provider and Metering Data Provider.

A2.4.1 Metering Provider

Current role and responsibilities

As noted in Appendix A1, under the existing arrangements the Responsible Person engages a Metering Provider. This engagement is given effect through a commercial

²³³ ERM Power, submission on consultation paper, p6; ERAA, submission on consultation paper, p2; AGL, submission on consultation paper, p3.

²³⁴ Vector's submission to the Consultation paper.

arrangement between the Responsible Person and the Metering Provider, with supporting requirements in the NER.

The Metering Provider's responsibilities are generally related to technology management, such as the provision, installation and maintenance of the metering installation, including fault finding and repairs. Specifically, the responsibilities of Metering Providers include:

- installing and maintaining metering installations;²³⁵ and
- programming and certifying metering installations to required standards,²³⁶ and providing and maintaining the security controls of a metering installation.²³⁷

These responsibilities require a particular skill set, including technical knowledge and understanding of meters, instrument transformers, connection configurations, software access and testing regimes.²³⁸

Requirements under the draft rule

The draft rule requires a Metering Coordinator to appoint a Metering Provider for the provision, installation and maintenance of each metering installation it is responsible for.²³⁹ This appointment is given effect through a commercial arrangement between the parties, with supporting requirements in the NER.

Under the draft rule, a Metering Provider retains the responsibilities it currently has under the NER, including those related to the installation, operation and maintenance of metering installations.

New roles and obligations

A number of parties including retailers, DNSPs and energy service companies may seek access to services from advanced meters.

As explained in Appendix A1, the draft rule imposes additional obligations on the Metering Coordinator in relation to managing access to "small customer metering installations",²⁴⁰ including services provided by, and energy data held in, such installations.

235 Current clause 7.4.1(a) of the NER.

236 Current clause S7.4.3(b) of the NER.

237 Current clause 7.4.1(b) of the NER.

238 Current clause S7.4.3 of the NER.

239 Clause 7.3.2(a) of the NER in the draft rule.

240 In general terms, this is any metering installation that meets or is required to meet the minimum services specification - see the new definition of "small customer metering installation" in Chapter 10 of the NER in the draft rule.

For example, a Metering Coordinator must ensure that access to a small customer's metering installation, the services provided by that metering installation and the energy data held in that metering installation are only accessed by certain parties.²⁴¹

In practice, the Metering Provider will have a role in ensuring that these obligations are met. However, the general approach under the draft rule has been to impose these new obligations on the Metering Coordinator, rather than the Metering Provider. This is consistent with the approach that the Metering Coordinator has overall accountability for metering services under the NER.

The draft rule amends which parties can obtain passwords allowing local access or remote access to the metering installation, services provided by the metering installation or energy data held in the metering installation in relation to small customer metering installations. Only the Metering Coordinator, Metering Provider, Metering Data Provider and AEMO will have local or remote access.

As an extension of its current obligations, the Metering Provider must ensure that no other person receives or has access to a copy of a password allowing local access or remote access to the metering installation or energy data held in the metering installation.²⁴²

The Metering Provider has a new obligation, under clause 7.8.3(b) of the draft rule, to ensure that any metering installation established at a connection point for a new connection (ie new house or development) is a type 4 metering installation that meets the minimum services specification, except where a Metering Coordinator has obtained an exemption from AEMO. Under clause 7.8.4 of the draft rule, AEMO may exempt a Metering Coordinator from complying with the requirement to install a type 4 metering installation that meets the minimum services specification in respect of a connection point if the Metering Coordinator demonstrates to AEMO's satisfaction that there is no existing telecommunications network to enable remote access to the metering installation at that connection point.

As part of the drafting of the new Chapter 7 of the NER in the draft rule, the Commission has identified that several existing obligations do not state which person is required to comply with that obligation. This is addressed in the draft rule, which specifies who is responsible for those obligations. In one case, such an obligation has been allocated to the Metering Provider: the obligations in relation to metering installation components that are now contained in clause 7.8.2 of the NER in the draft rule.

As noted below, Metering Providers will also have new obligations as a result of being deemed to be Registered Participants for the purposes of the confidentiality obligations in the NER.

²⁴¹ Clause 7.15.4 of the NER in the draft rule.

²⁴² Clause 7.15.4(e)(2) of the NER in the draft rule.

A2.4.2 Metering Data Provider

Current role and responsibilities

Metering Data Providers have responsibilities related to the collection, processing, storage and delivery of metering data.²⁴³ Metering Data Providers must also provide and maintain the security controls associated with metering data services in accordance with the NER.²⁴⁴

Requirements under the draft rule

The draft rule requires a Metering Coordinator to appoint a Metering Data Provider for the collection, processing, storage and delivery of metering data from each metering installation it is responsible for.²⁴⁵ This appointment is given effect through a commercial arrangement between the parties, with supporting requirements in the NER.

Under the draft rule, a Metering Data Provider retains its current under the NER in relation to metering data services.

New roles and obligations

The Metering Data Provider may also have an expanded role in relation to the provision of advanced metering services. For example, the Metering Data Provider currently has a role in providing metering data to people that are authorised to access it.

However, as with the Metering Provider, the general approach under the draft rule has been to impose new obligations on the Metering Coordinator, rather than the Metering Data Provider. This is consistent with the approach that the Metering Coordinator has overall accountability for metering services.

As part of the drafting of the new Chapter 7 of the NER in the draft rule, the Commission has identified that several existing obligations do not state which person is required to comply with that obligation. This is addressed in the draft rule, which specifies who is responsible for those obligations. In one case, such an obligation has been allocated to the Metering Data Provider: the obligations in relation to periodic energy metering that are now contained in clause 7.10.4(a) of the NER in the draft rule.

The draft rule also amends the access to data clause in the NER (clause 7.7 of the current NER and clause 7.15.5 of the NER in the draft rule) to clarify how this clause operates within the new competitive metering framework. These amendments are

²⁴³ Current clause 7.4.1A(a) of the NER.

²⁴⁴ Current clause 7.4.1A(b) of the NER.

²⁴⁵ Clause 7.3.2(d) of the NER in the draft rule.

discussed in Appendix B3 and may affect the Metering Data Provider's role and obligations.

As noted below, Metering Data Providers will also have new obligations as a result of being deemed to be Registered Participants for the purposes of the confidentiality obligations in the NER.

A2.4.3 Accreditation requirements for the Metering Provider and Metering Data Provider

Metering Providers and Metering Data Providers must currently be accredited and registered by AEMO. The requirements for accreditation are currently set out in clauses 7.4.2 and 7.4.2A of the NER, respectively, and outlined in AEMO's service level procedures.

Metering Providers and Metering Data Providers can obtain different categories of accreditation, depending on the type of metering installation and type of work they intend to carry out.²⁴⁶

Accredited Metering Providers and Metering Data Providers are placed on a register by AEMO. To check the ongoing capability of accredited parties, AEMO carries out regular audits. A material breach of the NER or the associated procedures by a Metering Provider or a Metering Data Provider can result in loss of accreditation.²⁴⁷

The draft rule adds a new requirement to the capabilities that Metering Providers and Metering Data Providers for small customer metering installations must demonstrate to the reasonable satisfaction of AEMO in order to be accredited. This additional requirement relates to the establishment of an appropriate security control management plan and associated infrastructure and communications systems for the purposes of preventing unauthorised local access or remote access to metering installations, services provided by metering installations and energy data held in metering installations.²⁴⁸

While the Commission considers that the roles of a Metering Provider and Metering Data Provider under the draft rule are similar to their existing responsibilities, AEMO will need to determine whether any other changes are required to its accreditation procedures for Metering Providers and Metering Data Providers as a consequence of the new framework.

²⁴⁶ Current schedule 7.4 of the NER for Metering Providers and current schedule 7.6 of the NER for Metering Data Providers.

²⁴⁷ A material breach of the provisions of the NER or of the procedures under the NER is defined in current clause 7.4.3(aa) of the NER.

²⁴⁸ Clauses S7.2.5 and S7.3.4 of the NER in the draft rule.

Under the draft rule, Metering Providers and Metering Data Providers will also be deemed to be Registered Participants for the purposes of the confidentiality obligations in Part C of Chapter 8 of the NER.²⁴⁹

The key confidentiality obligations to which Metering Providers and Metering Data Providers would be subject as a result of this amendment are contained in rule 8.6.1 of the NER, and include obligations to:

- use all reasonable endeavours to keep confidential any confidential information that comes into their possession or control or of which they become aware;
- not disclose confidential information to any person except as permitted by the NER;
- only use or reproduce confidential information for the purpose for which it was disclosed or another purpose contemplated by the NER; and
- not permit unauthorised persons to have access to confidential information.

This change is included to ensure uniformity in the confidentiality obligations of Metering Coordinators, Metering Providers and Metering Data Providers under the draft rule.

²⁴⁹ Clause 8.6.1A of the NER.

A3 Retailers' roles and responsibilities

Summary

This appendix provides an overview of the role and responsibilities of retailers under the draft rule.

Retailers, as the relevant Financially Responsible Market Participant for the connection points of their retail customers, will be responsible for appointing a Metering Coordinator for the provision of metering services, other than where a large customer chooses to appoint its own Metering Coordinator. This will allow the retailer to arrange for the provision of metering services in a cost effective manner, as well as continuing to be simple and practical from a small customer's perspective.

The retailer, as the Financially Responsible Market Participant, will no longer be required to act, or otherwise be able to request that the LNSP provide an offer to act, as the Responsible Person for the provision of metering services for type 1-4 metering installations at the connection points of its retail customers.²⁵⁰ The existing obligations of the Responsible Person will be performed by the Metering Coordinator, and the Metering Coordinator role will be contestable.

Under the draft rule, retailers will be able to arrange remote disconnection and reconnection services directly with a Metering Coordinator in certain circumstances (subject to having reached a commercial agreement with the Metering Coordinator for the provision of those services).

The draft rule includes a number of changes to the NERR so retailers and DNSPs inform each other when they perform disconnections and reconnections, and issues related to consumers with life support services are managed.

In addition, retailers would be subject to any applicable requirements of the relevant jurisdictional safety regulator.

A3.1 Introduction

This appendix provides an overview of the role and responsibilities of retailers in relation to metering services under the draft rule. The relationship between the retailer and the consumer are discussed in Appendix B.

This appendix covers:

- the current responsibilities of a retailer under the NER with respect to the provision of metering services;

²⁵⁰ See A1.2.2 for an explanation of who acts as the Responsible Person for type 1-4 metering installations.

- the COAG Energy Council's rule change request covering the proposed responsibilities of a retailer;
- stakeholder views including submissions to the consultation paper and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for its draft rule.

A3.2 Current responsibilities of a retailer in relation to metering services

Under Chapter 7 of the NER, a Market Participant must ensure that a connection point has a metering installation and that the metering installation is registered with AEMO before participating in the market in respect of that connection point.²⁵¹

Where the retailer is the relevant Market Participant at the connection point, the retailer is required in its role as Market Participant to:

- Ensure that the Responsible Person for that connection point has obtained a National Metering Identifier (NMI). A NMI is a unique code that identifies a metering installation for billing and settlement purposes.²⁵²
- Act as the Responsible Person for type 1-4 metering installations or, alternatively, request and accept an offer from the LNSP to act as the Responsible Person for the relevant connection point. The role and responsibilities of the Responsible Person in relation to the provision of metering services in the NEM are discussed in Appendix A1.

The retailer has a range of other responsibilities relating to metering services.²⁵³ For example, where a retailer is the Financially Responsible Market Participant for a connection point, it is currently responsible for the payment of all metering services costs at that connection point.²⁵⁴

Retailers also have responsibilities with respect to metering under the ROLR provisions in the NERL. The ROLR scheme seeks to ensure that a consumer's

²⁵¹ Current clause 7.1.2 of the NER. The retailer is generally the Market Participant and the Financially Responsible Market Participant in relation to the connection points of each of its retail customers.

²⁵² Current clauses 7.1.2(a)(3) and 7.3.1(d)-(f) of the NER.

²⁵³ For example, when the retailer is the relevant Market Participant at a connection point, it has certain responsibilities with respect to joint metering installations and special sites or technology related conditions. Refer to current clauses 7.2.4 and 7.2.4A of the NER.

²⁵⁴ Current clause 7.3A(a) of the NER sets out the services to which such costs relate. This includes, amongst other things, costs associated with installing the meter, metering data services and preparing settlements ready data. If the Responsible Person has allowed another party to engage a Metering Provider to install the meter, the Responsible Person is not responsible for the payment of the relevant installation costs for the metering installation.

continuity of supply is maintained if a ROLR event²⁵⁵ occurs, by establishing arrangements that transfer a customer of a “failed retailer” to another retailer.

Under the current ROLR arrangements in the NERL, 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 current clause 7.2.5 of the NER, the designated ROLR will, by force of law, become party to that agreement in place of the failed retailer.²⁵⁶

Retailers also have a number of responsibilities under the NERR relating to the disconnection and reconnection of consumers. These are discussed in Appendix A3.

A3.3 Rule proponent's view

The rule change request did not seek to change the existing responsibilities of retailers as Market Participants, including ensuring that a connection point has a metering installation and that the metering installation is registered with AEMO.

The COAG Energy Council proposed that retailers would be responsible for ensuring that there is a Metering Coordinator at each of their customers’ connection points. In particular, retailers would be responsible for engaging a Metering Coordinator for the provision of metering services at a connection point, unless a customer decided to engage its own Metering Coordinator.²⁵⁷ The ability for a customer to engage its own Metering Coordinator is discussed in Appendix B1.

The COAG Energy Council proposed that the engagement of a Metering Coordinator by a retailer would be based on a commercial arrangement. Further, to simplify arrangements for residential and small business customers, the standard retail contract would include a provision specifying that the retailer is to arrange metering services on behalf of its customer. In addition, a retailer could choose to act as a Metering Coordinator, if registered with AEMO to perform the role.²⁵⁸

The rule change request also highlighted that the Commission should consider any consequential changes required to the existing ROLR arrangements as they relate to provision of metering services. This is to ensure that there is the continued provision of metering services when a ROLR event occurs. It was highlighted that the Commission should advise the COAG Energy Council of any ROLR scheme changes required to the NERL.²⁵⁹

255 ROLR event is defined in section 122 of the NERL.

256 Section 140(2) of the NERL.

257 COAG Energy Council rule change request, p8.

258 Ibid.

259 Ibid., p14.

A3.4 Stakeholder views

In submissions to the consultation paper, stakeholders supported the continuation of the current arrangements in which retailers are responsible for ensuring a connection point has a metering installation and that the metering installation is registered with AEMO.

Several stakeholders were of the view that retailers seeking to take on the Metering Coordinator role should be subject to ring-fencing obligations to support the development of competition and minimise the risk of insider trading.²⁶⁰

Generally, retailers and metering service providers considered that the terms and conditions of appointment of a Metering Coordinator by a retailer should be based on commercial arrangements, rather than governed under standardised terms and conditions set out in the NER or NERR.²⁶¹

Several stakeholders were of the view that the existing ROLR arrangements would need to be expanded to accommodate the Metering Coordinator role.²⁶² The ENA noted that, where metering competition exists, the number of customers and data being transferred in a ROLR event may be significant.²⁶³

Stakeholders agreed that the current practice where the DNSPs perform manual disconnection and reconnection services should continue; that is, where a fuse or connection is physically removed at the premises. However, there was no consensus on whether DNSPs should exclusively manage the remote disconnection and reconnection services that could be provided using advanced meters. DNSPs considered that they should manage both manual and remote services to ensure that the current safety requirements would be met.

Retailers and metering service providers considered the ability to negotiate directly with a Metering Coordinator for disconnection and reconnection services would lead to significant business efficiencies and support their business case to deploy advanced meters.

²⁶⁰ EDMI, submission on consultation paper, p12; Ergon Energy, submission on consultation paper, p14; SA Power Networks, submission on consultation paper, p7.

²⁶¹ AGL, submission on consultation paper, p7; EnergyAustralia, submission on consultation paper, p3; Origin Energy, submission on consultation paper, p6; Simply Energy, submission on consultation paper, p8; Lumo Energy, submission on consultation paper, p6; EDMI, submission on consultation paper, p3; Metropolis, submission on consultation paper, p6; Vector, submission on consultation paper, p11.

²⁶² Energex, submission on consultation paper, p3; Origin Energy, submission on consultation paper, p4.

²⁶³ ENA, submission on consultation paper, p20.

A3.5 Commission's analysis

In assessing the relevant aspects of the COAG Energy Council's request related to the role of retailers, the Commission has considered:

- the nature of any new roles and responsibilities under the proposed regulatory framework and the party that is best placed to carry out those roles and responsibilities;
- how best to support a competitive framework for the provision of advanced meters by keeping administrative burden and transaction costs as low as practicable, to reduce the costs passed on to consumers; and
- consumer protections and safety issues, including for life support customers, particularly as they relate to remote disconnection and reconnection.

This section sets out the Commission's views regarding the roles and responsibilities of retailers with respect to:

- ensuring there is a metering installation at a connection point;
- appointing a Metering Coordinator at a connection point;
- the provision of disconnection and reconnection services; and
- other issues related to metering services.

A3.5.1 Requirement for a Financially Responsible Market Participant to establish a metering installation at a connection point

The draft rule does not change the requirement that a retailer, as a Financially Responsible Market Participant, must ensure that a connection point has a metering installation for the purposes of electricity supply before participating in the market in respect of that connection point.

Retailers could satisfy this requirement by either:

- appointing a Metering Coordinator that is registered with AEMO to perform this role; or
- establishing a Metering Coordinator business that registers with AEMO as a Metering Coordinator, and arranging metering services through this Metering Coordinator.

The current rules provide that a Market Customer that is involved in the trading of energy must not be registered as a Metering Provider or Metering Data Provider for connection points in respect of which the metering data relates to its own use of

energy.²⁶⁴ This restriction is retained in the draft rule. The effect of this restriction is that a person cannot be a Metering Provider or Metering Data Provider in relation to connection points where it is also the retailer. As a result, in practice retailers that also wish to establish a Metering Provider or Metering Data Provider business have done so by establishing a separate legal entity to carry out metering functions.

The draft rule also provides that a Market Customer (eg retailer) may not be registered as a Metering Coordinator.²⁶⁵ The effect of this provision is that a retailer that wishes to establish a Metering Coordinator business will need to do so through a separate legal entity (eg a subsidiary). That subsidiary could be registered and accredited as a Metering Coordinator, Metering Provider and Metering Data Provider.

This restriction has been introduced under the draft rule to address concerns that if a retailer is also a Metering Coordinator at a connection point and the customer at that connection point changes retailers (but the Metering Coordinator does not change), the former retailer may have continued access to the customer's energy and metering data. In such circumstances, the former retailer would no longer be entitled to access that data under the NER in its capacity as a retailer or Financially Responsible Market Participant (as it would cease to hold these positions in respect of the connection point), but the Metering Coordinator would be entitled to access the data.

If the Metering Coordinator and former retailer were part of the same legal entity, the Confidential Information provisions in the NER (see clause 8.6 of the NER) would not be sufficient to ensure that such data collected by the Metering Coordinator business was not provided and used by the retail business being operated by the one entity. Access to this data could limit retail competition by creating an uneven playing field where retailers that were also Metering Coordinators would have access to valuable information that other retailers are not permitted to access under the NER.

Other than the new requirement set out above, the NER does not impose "ring fencing" obligations on retailers and Metering Coordinators in this scenario, as were proposed by some stakeholders in submissions.

However, the existing Confidential Information provisions will apply and will prevent a Metering Coordinator providing energy or metering data to, amongst others, a related body corporate (eg the retailer business in respect of which the Metering Coordinator is a subsidiary) unless such related body corporate requires that information for the purposes of the NER.²⁶⁶

²⁶⁴ Clauses 7.4.1(e) and 7.4.2(e) of the NER in the draft rule.

²⁶⁵ Clause 2.4A.1 of the NER in the draft rule.

²⁶⁶ Clause 8.6.2 of the NER provides that the confidentiality restrictions in clause 8.6 do not prevent the disclosure of information by a Registered Participant or the Registered Participant's Disclosees to an employee or officer of the Registered Participant or a related body corporate of the Registered Participant, or consultants of the Registered Participant, which require the information for the purposes of the NER, or for the purpose of advising the Registered Participant or the Registered Participant's Disclosee.

A3.5.2 Requirement for the retailer to appoint a Metering Coordinator

A key principle underpinning the Commission's draft rule is that the arrangements should be simple and practical from a consumer's perspective.

As outlined in Appendix A1, under the draft rule the Financially Responsible Market Participant will be responsible for appointing a Metering Coordinator to provide metering services for a connection point, other than in circumstances where a large customer chooses to engage their own Metering Coordinator. The Commission considers that retailer appointment of a Metering Coordinator would be simple and practical from a small consumer's perspective and support existing consumer protections.²⁶⁷

As a transitional arrangement, the LNSP that is acting as the Responsible Person for a type 5 or 6 metering installation immediately before the commencement of the new Chapter 7 of the NER will become the initial Metering Coordinator for that connection point. The LNSP will continue in this role until another Metering Coordinator is appointed by the Market Participant or, if applicable, a large customer (see Appendix B1), or the services cease to be classified by the AER as a direct control service.

The retailer will need to appoint a Metering Coordinator when the meter is replaced, including when:

- the metering installation becomes faulty;
- the consumer takes up a product or service that requires a new meter to be installed; or
- the retailer carries out a "new meter deployment" (for example where the retailer or DNSP identifies a business case for deploying advanced meters, such as potential operational efficiencies resulting from more advanced metering technology) or a "maintenance replacement" (see Appendix C2).

A3.5.3 Requirements regarding disconnection and reconnection services

One of the benefits of advanced meters is the ability to remotely disconnect and reconnect energy supply. The Commission's draft rule recognises this benefit and enables retailers to carry out remote disconnection or reconnection of small customers' premises directly through a Metering Coordinator, if the retailer has reached a commercial agreement with the Metering Coordinator for the provision of that service.

The Commission has considered the potential impact on consumers and safety to be confident that existing consumer protections in the NERR are effectively maintained and safety risks are managed.

²⁶⁷ Issues related to the ability of consumers to appoint their own Metering Coordinator are discussed further in Appendix B1.

The draft rule does not change the existing arrangements as they relate to manual disconnections and reconnections. Due to the nature of the services, these will continue to be performed exclusively by DNSPs.

This section discusses the implications of a Metering Coordinator offering remote disconnection and reconnection services, including the parties that:

- can arrange a request for disconnection and reconnection services;
- approve a request to perform the services, and are accountable for that decision; and
- can action a request and provide the service.

Current arrangements for disconnection and reconnection services

Currently disconnection and reconnection services for small consumers are regulated both through the NERR and through jurisdictional safety arrangements.²⁶⁸ While both retailers and DNSPs can initiate these requests, only a DNSP is currently able to undertake a disconnection and reconnection service.

Initiating disconnection and reconnection services

Under the NERR, the DNSP can initiate disconnection of a consumer's premises for a number of reasons, including for: failure to pay distribution network charges; interfering with energy supply to others; or for health and safety reasons.

The NERR prevents a DNSP from initiating a request for disconnection in certain circumstances, including if:²⁶⁹

- the premises is registered as having life support equipment;
- it is a protected period;²⁷⁰
- there is an extreme weather event;²⁷¹ or
- there is an unresolved complaint directly in relation to the proposed disconnection.

²⁶⁸ For example, in Victoria remote disconnection and reconnection services can only be provided in accordance with processes approved by Energy Safe Victoria.

²⁶⁹ Rule 120 of the NERR.

²⁷⁰ Rule 108 of the NERR defines what constitutes a protected period. It includes: business days before 8am or after 3pm; a Friday or the day before a public holiday; a weekend or a public holiday; and the days between 20 December and 31 December, inclusive.

²⁷¹ An extreme weather event is defined in rule 108 of the NERR. It means an event declared by a local instrument as an extreme weather event in the jurisdiction in which the customer's premises are located.

A retailer can also arrange to disconnect a customer's premises for a number of reasons, including non-payment of energy charges.²⁷² Under the NERR, a retailer must not arrange for a customer's premises to be disconnected in certain prescribed circumstances, including but not limited to those that apply to disconnection initiated by the DNSP.²⁷³

The retailer or DNSP that arranged for disconnection is required under the NERR to arrange for reconnection of the premises once the matter that led to disconnection has been rectified and once the customer that has requested reconnection has paid any reconnection charges.

Performing disconnection and reconnection services

Under the NERR only a DNSP can perform a reconnection service.²⁷⁴ In practice, the DNSP is also the only party that performs disconnection services.²⁷⁵

When a DNSP decides that it can proceed with a disconnection or reconnection service it must determine how to provide the service. Outside of Victoria generally a DNSP, or its agent, attends the premises to manually remove or replace the service fuse in order to disconnect or reconnect supply.²⁷⁶ In Victoria, disconnection and reconnection services can be performed using the advanced meters already installed.

DNSPs charge a fee to retailers for the provision of disconnection and reconnection services. These fees are determined as part of the process of economic regulation by the AER. If a consumer is mistakenly disconnected from electricity supply, DNSPs are obliged to reconnect the consumer at no cost.²⁷⁷

Safety issues with disconnection and reconnection services

Obligations relating to disconnection of a consumer's premises primarily relate to confirming that the consumer does not have life support equipment, as disconnection of such premises could be fatal. The NERR requires both DNSPs and retailers to maintain registers of premises with life support equipment and they are not permitted to disconnect these premises. Where a consumer has life support at its premises, it is required to inform either the retailer²⁷⁸ or the DNSP.²⁷⁹

²⁷² Part 6 Division 2 of the NERR.

²⁷³ Rule 116 of the NERR.

²⁷⁴ Rule 121 of the NERR.

²⁷⁵ Currently the NER states that a retailer "may arrange" for a customer's premises to be disconnected, however it does not expressly state with whom it can arrange the disconnection (rule 111 of the NERR).

²⁷⁶ DNSPs can use different methods to manually disconnect and reconnect a customer's premises such as removing the service fuse in the consumer's meter box or a pole top fuse. In each case it is a physical disconnection or reconnection of the supply that is performed manually at the premises.

²⁷⁷ Section 13.3 of the Model terms and conditions for deemed standard connection contracts, Schedule 2 of the NERR.

²⁷⁸ Clause 6.3(b) of the model terms and conditions for standard retail contracts in schedule 1 of the NERR.

When a consumer informs its retailer it has life support equipment, the retailer must:

- include the premises in its life support register;
- advise the DNSP of the premises; and
- not arrange for disconnection of these premises.

When a consumer informs the DNSP it has life support equipment, the DNSP must:

- include the premises in its life support register; and
- not arrange for disconnection of these premises.

DNSPs are not required currently under the NERR to inform retailers when they become aware that a premises has life support equipment. Under the current arrangements DNSPs undertake all disconnections, and as such, retailers arguably do not have a need for this information. However, the Commission understands that:

- while it is not a requirement under the NERR, some DNSPs inform the customer's retailer when the customer advises the DNSP that the customer's premises has life support equipment; and
- the IEC²⁸⁰ and AEMO are investigating how to improve the processes used by DNSPs and retailers to manage the registration of premises with life support equipment. This review includes improving the process to reconcile any differences between the registers held by DNSPs and retailers.

At the sixth stakeholder workshop on 22 January 2015, the Commission noted the potential risks that could arise from having separate life support registers held by DNSPs and retailers. As a potential alternative, the Commission proposed requiring DNSPs to hold a single register and removing the obligations on retailers to maintain a register. Retailers would be required to notify DNSPs when customers notified them that they have life support equipment.

All but one stakeholder opposed this alternative approach at the workshop. Stakeholders considered that this approach would significantly increase the risks of incorrect disconnection of life support customers compared with the current arrangements. Most retailers indicated that they would be likely to maintain their own register even if there was no longer a requirement to do so under the NER.

279 Clause 6.4(b) of the model terms and conditions for standard connection contracts in schedule 2 of the NERR.

280 The IEC is a body established under the NER to govern the procedures for B2B.

The Commission understands that reconnection of a consumer's premises also has safety implications and DNSPs typically:

- check that the consumer has not left any appliances on while the premises was disconnected before allowing reconnection, which could impose a fire hazard when the supply is restored and the appliance turns on;²⁸¹
- inspect the wiring at the premises following a prolonged period of disconnection; and
- do not allow the reconnection during an emergency (such as flood or bush-fire), at the direction of the jurisdiction emergency coordinators.

In addition to the requirements in the NERR, DNSPs are required to manage safety risks associated with disconnection and reconnection in accordance with the requirements of the relevant jurisdictional safety regulators.

This may involve the DNSP performing the disconnection and reconnection services in accordance with operating procedures that are consistent with the relevant safety legislation and which may need to be approved by the relevant jurisdictional safety regulator. The DNSP may also be required to liaise with the relevant jurisdictional emergency coordinators during emergencies such as bush-fires and floods to ensure the safety of the emergency service workers attending to the emergency, in accordance with the emergency services or equivalent legislation in each jurisdiction.

Options for responsibility to disconnect and reconnect

The Commission considered two options for allocating responsibility for remote disconnection and reconnection services through a Metering Coordinator:

- retaining the current requirements, whereby only DNSPs are able to disconnect and reconnect premises, including remote disconnection and reconnection services (through a Metering Coordinator); and
- permitting both retailers and DNSPs to disconnect and reconnect premises remotely through a Metering Coordinator.

Option 1: DNSPs continue to perform disconnections and reconnections

The Commission considered that one option for managing remote disconnection and reconnection was to allow DNSPs to retain exclusive responsibility for the provision of disconnection and reconnection services.

²⁸¹ The Commission understands that when reconnections are performed manually DNSPs, they will confirm that appliances are off with the customer. In Victoria, where remote reconnections are possible, the DNSPs can rely on retailers to checking the status of customers' appliances provided that their processes for establishing this are approved by Energy Safe Victoria, as required by legislation administered by Energy Safe Victoria.

Under this option, a retailer that seeks disconnection and reconnection services would continue to make this request to the DNSP, under the current provisions of the NERR. The DNSP would then determine whether the disconnection or reconnection service could be performed remotely, under contract with a Metering Coordinator, or manually.

The AEMC discussed this approach at its fourth stakeholder workshop in Sydney on 24 September 2014. Stakeholders in attendance generally agreed that the responsibilities associated with manual disconnections should remain with DNSPs. However, there were divergent views on the treatment of remote disconnection and reconnection services.

DNSPs generally considered that they should retain responsibility for disconnection and reconnection services. These stakeholders argued that this option is preferable because the existing arrangements provide appropriate mechanisms to maintain consumer protections and manage safety issues, as the obligations and risks are clearly assigned between the DNSP and the retailer. Changing this framework by allowing retailers to initiate disconnections and reconnections directly with a Metering Coordinator could undermine existing consumer protections and the safe operation of the power system.

DNSPs considered that the fees charged by DNSPs for disconnection and reconnection services should remain regulated through the AER's regulatory determination process. DNSPs argued that this would ensure that fees remain appropriate and reflect that many disconnection and reconnection services may be able to be performed remotely.

However, retailers and metering service providers considered that maintaining DNSP responsibility for disconnection and reconnection services would not create sufficient incentives for DNSPs to offer remote disconnection and reconnection services. Further, these stakeholders considered the DNSP fees for such services would be higher than the retailer could negotiate with a Metering Coordinator.

Retailers and metering service providers also contended that a significant component of the business case for a retailer led deployment of advanced meters relies on having the ability to deliver disconnection and reconnection services in an efficient and timely manner. These stakeholders considered that this would be more likely if the retailer were able to negotiate directly with a Metering Coordinator for these services.

Option 2: retailers able to arrange remote disconnection and reconnection services with Metering Coordinator

The Commission also considered the option of allowing retailers to directly access remote disconnection and reconnection services. Maintaining the existing consumer and safety protections was central to the Commission's assessment of this option.

Benefits of allowing retailers to negotiate for services directly with a Metering Coordinator

The Commission agrees that there would be advantages in allowing retailers to negotiate directly with a Metering Coordinator for remote disconnection and reconnection services. These benefits include:

- Retailers being able to negotiate lower cost remote services, as provision of these services could be negotiated when a Metering Coordinator is appointed. Lower costs for retailers would be expected to be reflected in lower prices for consumers.
- Retailers being able to better manage commercial risks associated with non-payment or consumers moving premises. Again, this would be expected to result in lower prices for consumers and quicker resolution of final bills when moving out of a premises.
- Improved service quality for consumers as supply could potentially be restored quickly following disconnection or when moving into a new premises.

Further, allowing retailers to negotiate directly with a Metering Coordinator would not prevent retailers from arranging a manual disconnection with DNSPs. Manual disconnections may still be necessary to manage instances of theft or illegal use of energy, safety issues at a premises, or consumer requests for disconnection for alterations at the premises.

Risks of allowing retailers to arrange disconnection directly with a Metering Coordinator

Currently under the NERR, a retailer is not permitted to arrange disconnection at a premises under certain circumstances, including if the premises is registered as having life support equipment.²⁸² In addition, a DNSP cannot undertake a disconnection service requested by the retailer before meeting its own requirements to check that there are no reasons under the NERR why the disconnection cannot be performed.²⁸³ This results in a "double check" by the DNSP when the retailer is arranging the disconnection. If retailers are able to arrange disconnection directly with a Metering Coordinator these double checks would not be performed.

The Commission considers that these double checks are not necessary to mitigate the safety risks associated with the disconnection of premises with life support equipment, provided that the retailer has access to an up-to-date life support register. This would be achieved by requiring DNSPs to notify retailers when they have been advised that a premises has life support equipment.

Retailers would also need to comply with any additional requirements of the relevant jurisdictional safety arrangements before arranging for remote disconnection of a consumer's premises. This would be expected to include any additional safety

²⁸² Clause 116(1)(a) of the NERR.

²⁸³ Rule 120 of the NERR.

requirements that the jurisdiction considers necessary to address safety risks for remote disconnections.

Risks of allowing retailers to arrange reconnection directly with a Metering Coordinator

The safety risks associated with reconnecting a consumer's premises are generally greater than for disconnection, except in the case of premises with life support equipment and possibly during an extreme weather event.

One risk is that retailers could seek to reconnect a premises that a DNSP has disconnected for safety or emergency reasons. In these instances, remote reconnection by a retailer could be unsafe. Disconnection for safety reasons is likely to be done manually, which would make it impossible for supply to be remotely reconnected. Consequently a safety issue would not arise in this instance. However, disconnection during an emergency, such as a bushfire, could be performed remotely and remote reconnection by the retailer could occur, potentially resulting in safety issues.²⁸⁴ These risks would need to be managed under arrangements where retailers can organise remote disconnection and reconnection services.

The Commission considers the risks associated with retailers directly arranging remote reconnection of a consumer's premises with a Metering Coordinator would be appropriately addressed if:

- the retailer is not able to reconnect a premises that has been disconnected by a distribution business; and
- the retailer meets any obligations imposed by the relevant jurisdictional safety regulator.

The Commission's draft determination and draft rule

The draft rule allows retailers to arrange remote disconnection and reconnection services directly with a Metering Coordinator or with a DNSP, subject to any applicable requirements of the relevant jurisdictional safety regulator.

Under the draft rule, retailers will not be able to arrange for remote reconnection of premises directly with a Metering Coordinator if the premises had been disconnected by the DNSP.²⁸⁵

The Commission considers that allowing retailers to arrange disconnection and reconnection services directly with a Metering Coordinator would further the overall objectives of the rule change request and the long term interests of consumers.

²⁸⁴ The DNSP's decision whether to disconnect manually or remotely would need to be made in accordance with any relevant jurisdictional requirements.

²⁸⁵ Rule 106A of the NERR in the draft rule.

In particular it is expected to:

- provide a competitive framework for disconnection and reconnection services;
- provide disconnection and reconnection services at an efficient cost;
- reduce transaction costs for retailers when arranging remote disconnection and reconnection services; and
- reduce administrative and regulatory costs, as the services would be provided under the commercial arrangements between a retailer and a Metering Coordinator, reducing the circumstances in which the AER regulates the fees for such services.

As a result, it is likely to provide for lower costs and improved services for consumers.

The Commission considers that the benefits of allowing retailers to arrange disconnections and reconnections directly with a Metering Coordinator outweigh the risks, and that the risks involved can be appropriately managed.

To address the potential risks, the draft rule includes the following obligations:

- the DNSP must inform the retailer when it registers a retailer's customer's premises as having life support equipment (to allow the retailer to have a comprehensive life support register);²⁸⁶
- a retailer or DNSP that undertakes a disconnection service at a customer's premises must notify the other party of the disconnection, including providing reasons for the disconnection and for the DNSP whether it was performed manually or remotely;²⁸⁷
- a retailer or DNSP that undertakes a reconnection service at a customer's premises must notify the other party of the reconnection;²⁸⁸
- a retailer must not arrange reconnection of a customer's premises by a person other than the DNSP if the premises were disconnected by the DNSP;²⁸⁹ and

²⁸⁶ Rule 125(2)(b) of the NERR in the draft rule. In addition, the retailer continues to be required to inform the DNSP when it registers premises as having life support equipment - see rule 124 of the NERR in the draft rule..

²⁸⁷ Rule 104(1) and (2) of the NERR in the draft rule. It is important for the retailer to inform the DNSP when it disconnects a customer's premises in order to prevent a DNSP from interpreting a lack of supply at a customer's premises as an interruption to the supply and dispatching staff to investigate. Similarly, it is important for the DNSP to inform the retailer so that it can manage any inquiries from the affected customers. This risk would be removed if the business has negotiated access to the relevant services from the advanced metering infrastructure to test the status of the supply.

²⁸⁸ Rule 106A of the NERR in the draft rule.

²⁸⁹ Rule 106A of the NERR in the draft rule.

- a DNSP must not reconnect a customer's premises if it was disconnected by the retailer, unless the customer's retailer requests the DNSP to arrange the reconnection.²⁹⁰

The draft rule maintains the current requirements on DNSPs and retailers to maintain separate registers of which premises have life support equipment. The Commission considers that this to be the most appropriate way to manage the risk of disconnection of premises with life support equipment.

Jurisdictional safety regulators may also need to consider the safety implications of allowing retailers to arrange disconnection and/or reconnection services directly with a Metering Coordinator. This may require changes to the associated jurisdictional safety regulations to impose suitable obligations on the retailer prior to such arrangements commencing.

A3.5.4 Other issues

Other amendments to the NERR

The draft rule contains a number of amendments to the NERR to recognise the Metering Coordinator role and retailers' obligations to appoint a Metering Coordinator, and to implement changes to disconnection and reconnection arrangements, opt out arrangements for new meter deployments and other matters. Stakeholders, in particular retailers, should closely review these draft amendments to the NERR.

Standard retail contracts

The COAG Energy Council proposed that the standard retail contract under the NERR include a provision specifying that a retailer is to arrange metering services on behalf of a customer (unless the customer chooses to engage its own Metering Coordinator).²⁹¹

Currently, the model terms and conditions for standard retail contracts do not cover the physical connection of the small customer's premises to the distribution system, including metering equipment.²⁹² The deemed standard connection contract provides that the DNSP will provide, install and maintain equipment for the provision of customer connection services at the customer's premises.²⁹³

²⁹⁰ Rule 106A of the NERR in the draft rule.

²⁹¹ COAG Energy Council rule change request, p8.

²⁹² This is the customer retail contract for the provision of customer retail services that takes effect under section 26 of the NERL between a small customer and a designated retailer. See schedule 1 of the NERR for further details.

²⁹³ This is the customer's connection contract that is taken to be entered into under section 70 of the NERL. See clause 5.3 of schedule 2 of the NERR for further details.

In practice, small customers generally organise a connection service through their retailer, who liaises with the LNSP for the connection service or for a change to the existing connection. Large customers often deal directly with the LNSP to organise their connection to the network.

The model terms and conditions for standard retail contract are amended under the draft rule to recognise the new role and responsibilities of retailers (in their capacity as the Financially Responsible Market Participant for the connections points of their retail customers) in relation to the provision of metering services.

More specifically, the model terms and conditions for standard retail contracts in the NERR are amended to reflect the retailer's:

- role in appointing a Metering Coordinator to provide metering services at the customer's premises;
- obligations with respect to notifying the customer of a proposed new meter deployment (see Appendix C2); and
- ability to arrange remote disconnections and reconnections directly with the Metering Coordinator in certain circumstances rather than have to request that the DNSP undertake the disconnection or reconnection.

Retailer of last resort provisions

As noted above, under the current ROLR arrangements in the NERL, the designated ROLR currently takes on the role of the Responsible Person for any metering installation for which the failed retailer was the Responsible Person. The current ROLR provisions in the NERL also provide that the designated ROLR will, by force of law, become party to the agreement between the failed retailer and the Metering Provider.

The ROLR arrangements in the NERL do not provide for the appointment of a Metering Coordinator for a connection point to continue following the transfer of customers of a failed retailer to the designated ROLR. This means that the designated ROLR will be required to appoint a new Metering Coordinator for each connection point transferred to it as a result of a ROLR event.

Under section 144 of the NERL, AEMO is empowered to make ROLR procedures that deal with a broad range of matters relating to how customers are transferred following a ROLR event and how ROLR transfers are to be dealt with under the metrology procedure and other procedures authorised under the NER.²⁹⁴

The Commission considers that prior to the commencement of the new Chapter 7 of the NER, AEMO should consider whether any amendments should be made to the ROLR procedures to manage the impacts of meter churn following a ROLR transfer.

²⁹⁴ These procedures are contained in the "NEM ROLR Processes", which form part of AEMO's MSATS Procedures.

This approach would avoid the need for the ROLR provisions in the NERL to be amended. The COAG Energy Council may wish to amend the relevant NERL provisions to assist with clarity, but would not need to do so before the commencement of the new Chapter 7 of the NER.

The Commission is interested in stakeholder views on this proposal.

A4 DNSPs' roles and responsibilities

Summary

This appendix sets out the roles and responsibilities of DNSPs under draft rule.

Under the draft rule the role of Responsible Person will cease to be exclusively performed by LNSPs for type 5 and type 6 metering installations. Type 7 metering installations will continue to be provided exclusively by LNSPs. The draft rule does not require LNSPs to make an offer to act as the Metering Coordinator for type 1-4 metering installations if requested to do so by a Market Participant, except in the case of transmission connection points. Consequently, the LNSP will no longer be responsible for the provision and installation of metering installations at new connections.

Under the proposed transitional arrangements, the LNSP currently acting as the Responsible Person for metering services that are classified as a direct control service will become the initial Metering Coordinator and will continue in this role until another Metering Coordinator is appointed by the Market Participant or the services cease to be classified as a direct control service.

In Victoria, DNSPs will become the initial Metering Coordinator for the advanced meters they deployed under the AMI program and will continue in this role until the relevant retailer appoints another Metering Coordinator at the site or the services cease to be classified as a direct control service.

DNSPs will be able to take on the Metering Coordinator, Metering Provider and/or Metering Data Provider roles to provide metering services in a competitive segment of the market. However, to do so a DNSP will need to comply with the national ring-fencing guidelines developed by the AER.

If DNSPs do not wish to become a Metering Coordinator, they may still be able to access these services for network management purposes by negotiating access on a commercial basis with Metering Coordinators providing those services.

The draft rule also allows DNSPs to maintain existing network devices or install new network devices for the purposes of monitoring or operating the network. Where a DNSP is replaced as the Metering Coordinator, the DNSP will have the option of retaining its existing metering installation and using it as a network device.

The draft rule allows either a DNSP or a retailer to arrange remote disconnection and reconnection services directly with a Metering Coordinator.

The Commission has also considered the potential impacts on network security that could arise from large quantities of direct load control available from advanced meters. As the risks to network security are not limited to meters and it is not possible to predict the proportion of direct load control that will be

performed by advanced meters, the Commission considers that the benefits of implementing a solution that only applies to load controlled by advanced meters are likely to be outweighed by the costs.

A4.1 Introduction

This appendix sets out the roles and responsibilities of a DNSP under the draft rule.

This appendix covers:

- the impacts of the COAG Energy Council's proposal to remove the LNSP's exclusive right to be the Responsible Person for type 5 and type 6 metering installations;
- stakeholder views including submissions to the consultation paper and outcomes of stakeholder workshops held by the AEMC;
- an overview of the role and responsibilities of DNSPs with respect to the provision of metering services, including at new connections;
- an overview of the obligations of DNSPs in relation to remote disconnection and reconnection services (further detail is set out in Appendix A3); and
- options that were considered to address the potential impact of direct load control on the security of the network.

A4.2 Rule proponent's view

The COAG Energy Council did not provide a view on the implications of the rule change proposal on the roles and responsibilities of DNSPs.

A4.3 Stakeholder views

DNSPs raised concerns during stakeholder workshops that separating the Metering Coordinator role from their regulated network role may require changes to their responsibilities under the NERR and jurisdictional licenses. DNSPs were particularly concerned about the safety, reliability and network security implications of the rule change request, including the continued supply of electricity to life support customers.

At the first stakeholder workshop on 26 June 2014, DNSPs expressed concerns that establishing a separate Metering Coordinator role may introduce risks in terms of:

- maintaining consumer protections and managing safety risks associated with remotely disconnecting or reconnecting consumer premises; and
- the risks to network security associated with one or more Metering Coordinators switching large quantities of load without reference to the DNSP.

In each case DNSPs were concerned that they may be liable for the actions of third parties who cause a breach of the current obligations on the DNSPs under the NER and NERR, particularly in relation to network security and reliability of supply.

A4.4 Commission's analysis

In assessing the implications for DNSPs of the COAG Energy Council's proposal for the Commission has considered:

- consumer protections and safety issues, including for life support customers;
- risks to network security from direct load control enabled by advanced meters; and
- the administrative burden and costs of introducing additional regulation in respect of direct load control enabled by advanced meters.

A4.4.1 The role of DNSPs

Provision of and access to metering services

Under the draft rule, the obligations of the Responsible Person will be performed by the Metering Coordinator, and that role will not be exclusively performed by LNSPs for type 5 and type 6 metering installations. Type 7 metering installations will continue to be provided exclusively by DNSPs, as discussed in Appendix A1.

In addition, the draft rule does not require LNSPs to make an offer to act as the Metering Coordinator for type 1-4 metering installations if requested to do so by a Market Participant, except where the Market Participant has requested the LNSP to make an offer to act as the Metering Coordinator for a transmission connection point. Currently, LNSPs must make an offer to act as the Responsible Person in such circumstances.

Under the transitional arrangements, the LNSP that is acting as the Responsible Person for a type 5 or 6 metering installation immediately before the commencement of the new Chapter 7 of the NER will become the initial Metering Coordinator at that connection point. The LNSP will continue in this role until another Metering Coordinator is appointed to the site by the Market Participant or, if applicable, a large customer.

This is anticipated to primarily occur when a new meter is installed, including where the metering installation becomes faulty, the consumer takes up a product or service that requires a more advanced meter to be installed, or the retailer carries out a "new meter deployment" or "maintenance replacement" (see Appendix C2).

In Victoria, DNSPs will become the initial Metering Coordinator for the advanced meters they deployed under the AMI program and will continue in this role until the

Market Participant appoints another Metering Coordinator at the site (see Appendix F for the detailed arrangements for Victoria).

The transitional appointment of DNSPs will also end if the relevant metering services cease to be classified as a direct control service.

The draft rule does not prevent a DNSP from taking on the Metering Coordinator, Metering Provider and/or Metering Data Provider roles to provide metering services in a competitive segment of the market provided they are appropriately accredited by AEMO. However, the draft rule requires the AER to determine appropriate ring-fencing requirements for DNSPs and to set these out in a distribution ring-fencing guideline. These issues are discussed further in Appendix D3.

If a DNSP does not wish to compete as a Metering Coordinator to provide advanced metering services, it will still be able to access these services for network management purposes by negotiating access on a commercial basis with the Metering Coordinators.²⁹⁵ Also, a DNSP may fund, in whole or in part, a retailer's deployment of advanced meters in exchange for access to the services enabled by those meters.²⁹⁶

Under the draft rule, a DNSP will also be able to continue to use existing network devices or install new network devices for the purposes of operating or monitoring its network. Where a DNSP is replaced as the Metering Coordinator, it will therefore have the option of using its existing metering installation as a network device. For example Victorian DNSPs will be able to continue to use their existing AMI meters as network devices. The draft rule contains a number of provisions to give effect to this right, which are discussed in Appendix D4.

New connections

As a consequence of establishing a separate Metering Coordinator role, a DNSP will not be responsible for installing and maintaining metering installations at new connection points unless it either sets up a Metering Coordinator business and is appointed by a Market Participant to provide those services, or is requested to be the Metering Coordinator for a transmission connection point.

However, the LNSP will still be responsible for 'connection services' with regard to a connection point and will need to coordinate with the relevant Metering Coordinator where necessary to provide these services.

A4.4.2 Disconnection and reconnection services

As discussed in Appendix A3, while DNSPs will retain responsibility for manual disconnection and reconnection of premises, the Commission's draft rule would allow both retailers and DNSPs to arrange for remote disconnection and reconnection

²⁹⁵ Some DNSPs raised concerns about gaining access to advanced metering services. This issue is discussed in Appendix E.

²⁹⁶ This is discussed in Appendix D4.

services through a Metering Coordinator. This is to capture efficiencies from allowing a retailer being able to directly negotiate and initiate connection services with a Metering Coordinator.

In order to maintain consumer and network safety under the new arrangements, the draft rule includes the following requirements:

- a requirement in the NERR for the DNSP to inform the retailer when it registers a retailer's customer's premises as having life support equipment (to allow the retailer to have a comprehensive life support register);²⁹⁷
- a requirement in the NERR for a DNSP that undertakes a disconnection service at a consumer's premises to notify the retailer of the disconnection, including providing reasons for the disconnection and whether it was performed manually or remotely;
- a requirement in the NERR for a DNSP that undertakes a reconnection service at a consumer's premises to notify the retailer of the reconnection;
- a requirement in the NERR that prevents a retailer from reconnecting a customer's premises if it was disconnected by the DNSP; and
- a requirement in the NERR that prevents a DNSP from reconnecting of customer's premises if it was disconnected by the retailer, unless the customer's retailer requests the DNSP to arrange the reconnection.

A detailed analysis of the implications of a Metering Coordinator offering remote connection services and the Commission's reasons for this approach is provided in Appendix A3.

A4.4.3 Direct load control and network security management

This section discusses the implications for network security of Metering Coordinators offering direct load control services to a large number of consumers' premises.

Impact of direct load control management and network security

In the future, consumers may increasingly manage their electricity consumption by changing their usage in response to price signals. That is, a consumer, or its agent, may actively modify consumption at the consumer's premises to manage the consumer's electricity costs in response to the retail tariffs, or as part of another service being offered to the consumer. Direct load control services could be offered using advanced metering services, but may also be offered using alternative technology such as

²⁹⁷ A retailer's obligations in respect of life support equipment are contained in Part 7 (rule 124) of the NERR. A distributor's current obligations in respect of life support equipment are contained in Part 7 (rule 125) of the NERR.

internet based services. The issue of the impact on the security of the distribution network is therefore not limited to load control enabled by advanced meters.

Direct load control by individual consumers is not likely to have a material impact on the network as this already occurs when an individual consumer switches on or off some of its load. An individual consumer's load is generally small compared to the total load on the network. However, direct load control of a large amount of load in a network may cause significant fluctuations in the network voltage that could compromise network security. In extreme cases it could cause damage to consumers' equipment, or result in a blackout in part of the network.

At present there are no specific restrictions on the use of direct load control at the sites of residential and small business customers via a meter with advanced functionality, or via any other means.

The Commission has considered two options to assist DNSPs to manage the impact of direct load control on their networks:

- the provision of direct load control information to the DNSP from a Metering Coordinator; and
- the development of a network load management protocol.

Option 1: Provision of direct load control information to the DNSP

Under this option, a Metering Coordinator would provide DNSPs with information in order to monitor the performance of their networks and the extent to which their network is impacted by the direct load control services being offered to consumers within their networks. This would require a Metering Coordinator to inform DNSPs of the quantity of load that it has under direct control and to provide event logs of when and where such direct load control services have been used.

As the use of direct load control in a network increases, such information would allow the DNSP to monitor the voltage profile within its network.²⁹⁸ This information could be used to determine the extent to which direct load control services performed via advanced meters are contributing to potential security risks within the distribution network.

However, in practice, a Metering Coordinator might not be able to determine the size of the load. Rather, this information would be held by the party that has arrangements with the consumer to provide load control services.

As an alternative, the Commission considered requiring Metering Coordinators to provide DNSPs with the number of premises under direct load control. However, this information is unlikely to be of value to DNSPs as it is the size of the load being

²⁹⁸ One of the ways that the DNSP could monitor the voltage profile within its network would be via the advanced services offered by metering installations, where this service to provide this voltage information has been negotiated with the Metering Coordinator.

controlled, rather than the number of premises with direct load control, that may impact on network security.

In addition, any information provided by Metering Coordinators on direct load control using advanced meters will only provide DNSPs with a partial understanding of the amount of load under control, as there are other sources of direct load control that will not be captured. Other factors such as electric vehicles and solar PV will also impact network voltage. Therefore, the Commission does not consider that this option would materially improve the ability of DNSPs to manage network issues over time.

Including information provision requirements would be burdensome on Metering Coordinators and would result in additional costs that may be passed on to consumers. The Commission considers that these costs are likely to outweigh the potential benefits to the DNSPs. For this reason, the Commission has not included information provision requirements in the draft rule.

Option 2: The development of a network load management protocol

Risks to the security of the distribution network could be reduced if direct load control activities within a distribution network were required to follow a network load management protocol. That is, the amount of load being switched at any time would be limited to a level that did not cause a significant risk. The AEMC considered this in its previous advice to the COAG Energy Council, *Energy Market Arrangements for Electric and Natural Gas Vehicles*, which recommended the development of:

“technical standards to encourage arrangements that balance the need to maintain network security while enabling different providers to offer controlled electric vehicle charging services.²⁹⁹”

Under this proposal, where there are requests to switch a large quantity of load under direct load control, the Metering Provider would be required to switch the load in small blocks at a time. One method for achieving this would be to spread the switching of the individual consumer loads by introducing a random delay between the request for a direct load control service and it being implemented.³⁰⁰

²⁹⁹ AEMC 2012, *Energy Market Arrangements for Electric and Natural Gas Vehicles*, Final Advice, 11 December 2012

³⁰⁰ The ability to implement random delays when performing direct load control via the meter was included in the Minimum Functionality Specification that was developed as part of the National Smart Meter Program. This is available on the AEMO website at <https://link.aemo.com.au/sites/wcl/smartmetering/Document%20library/Work%20Stream%20documentation/BRWG/BRWG%20deliverable%2001%20-%20SMI%20Minimum%20Functionality%20Specification%20v1.3.pdf> . In addition, the Minimum AMI Functionality Specification for Victoria includes the capability of including random delays of between zero and sixty minutes. Details of the Victorian specification are available at http://www.energyandresources.vic.gov.au/__data/assets/pdf_file/0004/201883/Minimum-AMI-Functional-Specification-v1.2.pdf .

The draft Load Management and Network Security Protocol, developed by the ENA, provides an example of a direct load control protocol.³⁰¹ This draft protocol proposed that loads over a certain threshold being switched must be registered with DNSPs, with a DNSP able to block switching to ensure security of electricity supply.

An alternative to allowing DNSPs an ability to block direct load control requests would be to give an independent body this role. When determining the load management protocol for meters, this independent body would need to consider:

- the extent to which the load control operation needs to be restricted to mitigate the risk to network security; and
- the resulting potential reductions to the value of the load control services.

The Commission does not consider that a load management protocol specifically for direct load control services from advanced meters would be sufficient to address the potential network security issues. This is because the risks to the security of the network imposed by direct load control is not limited to meters, and it is not possible to predict the proportion of direct load control that will be performed by meters or other devices in the future. Similar network security issues could also arise from the uptake of new technologies such as battery storage and electric vehicles.

Accordingly, the draft rule does not introduce any specific requirements in relation to load control. The Commission notes that the broader issue of load control and its implications for network security is being considered by the COAG Energy Council as part of its current consultation on the regulation of new products and services in the NEM.³⁰²

³⁰¹ The ENA developed a draft Load Management and Network Security Protocol, dated 15 March 2012, and provided this to the AEMC as an attachment to its submission to the Directions Paper for the AEMC's Power of Choice review, dated 16 May 2014.

³⁰² <https://scer.govspace.gov.au/workstreams/energy-market-reform/demand-side-participation/new-products-and-services-in-the-electricity-market>

B Consumer arrangements

Overview of Appendix B

Appendix B sets out the arrangements under the draft rule in relation to:

- B1 The ability of consumers to engage their own Metering Coordinator.
- B2 Whether basic metering charges should be itemised on a consumer's retail bill.
- B3 Access by consumers and their authorised representatives to their energy and metering data.

B1 Consumer appointment of a Metering Coordinator

Summary

This appendix addresses the ability of consumers to appoint their own Metering Coordinator under the draft rule.

There would be benefits in allowing consumers to appoint their own Metering Coordinator. First, it would enable consumers to choose products and services supported by advanced meters that are consistent with their preferences. Second, it would impose additional competitive discipline on retailers regarding the prices, terms and conditions of products and services enabled by advanced meters.

However, providing consumers with the ability to choose their own Metering Coordinator needs to be coupled with arrangements to protect the continued provision of billing and settlements data to the market, as well as appropriate arrangements for consumer protection.

The regulatory changes required to enable large customers to appoint their own Metering Coordinator and ensure the continued provision of settlements data to the market are not substantial. In contrast, as explained in this appendix, the regulatory arrangements that would need to be implemented to enable small customers to appoint their own Metering Coordinator are substantial.

Under the draft rule:

- Large customers will be able to appoint their own Metering Coordinator.
- Small customers will not initially have the option of engaging their own Metering Coordinator. This approach has the advantage that small customers will deal solely with their retailer with respect to the supply of energy and metering services, and will continue to be covered by existing consumer protection provisions and jurisdictional ombudsman schemes that apply to retailers.

The Commission recommends that the ability for small customers to appoint their own Metering Coordinator should be reviewed three years after the commencement of the new Chapter 7 of the NER, once the market has had a chance to develop.

B1.1 Introduction

This appendix addresses the ability of consumers to appoint their own Metering Coordinator.

This appendix covers:

- the COAG Energy Council's proposal regarding the ability of consumers to engage a Metering Coordinator;
- stakeholder views expressed in submissions to the consultation paper and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for the Commission's draft rule.

B1.2 Rule proponent's view

The rule change request proposed that all consumers should be able to contract directly with any registered Metering Coordinator.³⁰³

The COAG Energy Council stated that this arrangement would be particularly relevant to large and medium sized businesses because it would allow them to arrange metering services to minimise costs or maximise opportunities to monitor and manage energy use.³⁰⁴

The COAG Energy Council also considered that allowing large and small customers to directly engage their own Metering Coordinator would be likely to increase competitive discipline on retailers, for example to provide products and services that consumers value at a price that reflects the costs of doing so.

To give effect to an ability for consumers to appoint their own Metering Coordinator, the COAG Energy Council proposed that:

- a 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 the engagement of that Metering Coordinator;³⁰⁵
- 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;³⁰⁶
- a Metering Coordinator must inform its consumer of the functions required in a metering installation in the jurisdiction in which the consumer is based, and the circumstances in which the installation must be upgraded to meet those requirements;³⁰⁷

303 COAG Energy Council, rule change request, October 2013, p8.

304 Ibid., p22.

305 Ibid., p30.

306 Ibid., p8.

307 Ibid., p31.

- where a Metering Coordinator changes a metering installation or its functions, and the change has not been requested by the consumer, a 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 the consumer; 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 the consumer.³⁰⁸
- a Metering Coordinator must not unreasonably block a request from a consumer to change the features of its metering installation, provided it does not affect the functions being used by other parties.³⁰⁹

B1.3 Stakeholder views

Stakeholders at the fourth stakeholder workshop on 24 September 2014 generally supported large customers being able to directly engage their own Metering Coordinator.

Submissions to the consultation paper displayed divergent views on the ability of small customers to directly engage a Metering Coordinator. Those in support of a direct relationship between a small customer and a Metering Coordinator reasoned that this would provide competitive pressure on parties.³¹⁰ However, some stakeholders considered that additional consumer protections may be required if such a relationship was allowed.³¹¹

Other stakeholders did not support a direct relationship between small customers and Metering Coordinators at this time, given the magnitude of the regulatory burden relative to the benefits for consumers.³¹² Some stakeholders suggested that the market should be allowed to develop first and that the option for direct engagement of a Metering Coordinator by a small customer be reviewed after a few years.³¹³

A number of stakeholders commented on the need for a 'Metering Coordinator of last resort' in the event that a Metering Coordinator appointed by the consumer cannot or does not want to continue to provide its services. Lumo Energy considered that specific

³⁰⁸ COAG Energy Council, rule change request, October 2013, p32.

³⁰⁹ Ibid.

³¹⁰ EnerNOC, submission on consultation paper, p4.

³¹¹ ATA and other consumer groups, submission on consultation paper, p4. For a contrary view, see Metropolis, submission on consultation paper, p6.

³¹² EnergyAustralia, submission on consultation paper, p2; Simply Energy, submission on consultation paper, p.8.

³¹³ See for example: AGL, submission on consultation paper, p7; Origin, submission on consultation paper, p6.

arrangements to cater for this scenario are not needed because standard contract law should apply, and suggested that consumers should be able to select the new Metering Coordinator.³¹⁴

Several stakeholders were of the view that the retailer should be responsible for appointing a new Metering Coordinator in the event that the existing one fails.³¹⁵ Metropolis considered that, where a Metering Coordinator fails, the role should transfer to a Metering Coordinator pre-nominated by AEMO, similar to the ROLR scheme.³¹⁶

Ergon Energy considered that it would be imprudent to require a 'Metering Coordinator of last resort' to take on the functions of meters used by the failed Metering Coordinator if they do not have the equivalent functionality of the meters used by the 'Metering Coordinator of last resort'.³¹⁷ Vector was of the view that the AEMC, or a working group, should review whether existing market arrangements and/or general insolvency legislation are sufficient to address a Metering Coordinator's failure.³¹⁸

The general consensus of views at the fourth stakeholder workshop was that small customers should not be able to directly appoint their own Metering Coordinator initially, but that this be reviewed in the future.

B1.4 Commission's analysis

The ability for consumers to appoint a Metering Coordinator can provide a range of benefits to consumers. It can allow a consumer to choose a Metering Coordinator that offers certain services (or facilitates the offer of services by other parties) at a price and on terms and conditions favoured by the consumer. This may be particularly relevant to a large customer who may demand a range of tailored services and therefore require bespoke Metering Coordinator arrangements.

In addition, as highlighted by the COAG Energy Council, the option for direct appointment of a Metering Coordinator may place a competitive discipline on retailers and other Metering Coordinators regarding the price, terms and conditions of their product and service offerings. It may therefore address concerns around the potential exercise of market power by Metering Coordinators.

The Commission's view is that consumer choice should be facilitated where possible, as this is likely to lead to more efficient outcomes. However, it is also important to recognise that the provision of metering data for billing and settlements is a service essential to the operation of the NEM. Consumer choice therefore needs to be coupled

³¹⁴ Lumo Energy, submission on consultation paper, p4.

³¹⁵ NSW DNSPs, submission on consultation paper, p9; Origin Energy, submission on consultation paper, p4; Vector, submission on consultation paper, p8.

³¹⁶ Metropolis, submission on consultation paper, p4.

³¹⁷ Ergon Energy, submission on consultation paper, p8.

³¹⁸ Vector, submission on consultation paper, p8.

with arrangements that protect the continuing provision of billing and settlements data to the market.

Such arrangements are also important for consumers themselves. If access to the provision of reliable metering data was compromised, bills would need to be based on estimated consumption. This introduces a risk for consumers that their energy consumption, and so bills, could be overestimated. It also introduces similar risks for retailers, who may under-recover their costs if energy consumption was underestimated. Appropriate protections may need to be implemented to manage these risks.

To evaluate whether the regulatory framework should enable consumers to directly appoint a Metering Coordinator, the Commission considered:

- the extent to which additional regulation is required and how that regulation should be implemented; and
- the respective costs and benefits of introducing such regulation at the start of the new rules.

The Commission's analysis found that while additional regulatory arrangements would be needed to enable large customers to appoint their own Metering Coordinator, the additional regulatory arrangements that would be needed to enable small customers to do so are significantly more substantial and complex.

Key areas in which regulatory arrangements may need to be developed, for both small and large consumers, are:

- to provide for appropriate consumer protections, particularly for small customers;
- to allow for a retailer to appoint another Metering Coordinator in the event that a Metering Coordinator appointed by the consumer is unable to perform its functions; and
- to facilitate a market for Metering Coordinator services.

These issues are discussed below.

B1.4.1 Consumer protections

Consumer protection provisions in the NERR currently only apply to retailers and DNSPs. Similarly, only authorised retailers and DNSPs are generally covered by jurisdictional ombudsman schemes. A large customer is likely to have sufficient bargaining power to negotiate terms and conditions and resolve any disputes with a Metering Coordinator. However, small customers are unlikely to be in such a strong position.

A new framework would need to be developed and set out in the NERR to ensure that appropriate consumer protections govern the relationship between a small customer and their Metering Coordinator. These could include:

- requirements on the Metering Coordinator to provide specific information if contacted by a small customer to obtain services, and the form that information must take;
- the basis for, frequency and content of bills;
- the framework that must be followed in the event of a billing dispute; and
- provisions outlining a consumer's rights should they have difficulty paying a bill.

The COAG Energy Council is currently consulting on how third party energy service providers and new products and services in the NEM should be regulated.³¹⁹ It is likely to be more efficient to consider consumer protections associated with metering services as part of this broader review of the regulation of services provided to small customers, such as direct load control, embedded generation and storage, rather than creating a bespoke set of consumer protections for services provided by Metering Coordinators.

B1.4.2 Requirement for a retailer to appoint a Metering Coordinator in the event that the current Metering Coordinator is unable to perform its functions

Allowing consumers to directly appoint a Metering Coordinator creates issues in scenarios where the Metering Coordinator cannot or does not want to continue to provide its services to a consumer. Examples of such scenarios include where the:

- contract between a Metering Coordinator and a consumer expires without replacement;
- Metering Coordinator becomes insolvent; or
- Metering Coordinator has not been paid for its services.

In these circumstances, a retailer would need to appoint another Metering Coordinator or take on that role itself if no other option is available in order to provide basic metrology services. The requirement for a 'Metering Coordinator of last resort' is necessary because basic metrology services are essential for the operation of the electricity market: that is, for market settlements and billing.

Implementing arrangements to require a retailer to appoint a Metering Coordinator in the event that an existing Metering Coordinator that was directly appointed by the

³¹⁹ See <https://scer.govspace.gov.au/workstreams/energy-market-reform/demand-side-participation/new-products-and-services-in-the-electricity-market/>.

consumer is unable to perform its functions would involve additional regulation for all consumers, but particularly for small customers.

For large customers, there is a need for some additional regulation analogous to the requirements for the current ROLR scheme for large customers, under which prices must be fair and reasonable.³²⁰

For small customers, the extent of the regulation required would be greater. The NERR currently contains provisions that set out the standard terms and conditions that retailers are required to offer small customers, and customers will default to this contract if they do not choose a retailer. To provide small customers with a choice of Metering Coordinator, analogous provisions would likely be required for the supply of metering services.

The NERR would need to contain, and retailers would be required to offer, a standing offer contract that includes the provision of basic metering services. Specifically, the standing offer contract would likely need to include model terms and conditions, including the basis on which tariffs and charges for metering services would be set, and would be in addition to the existing standing offer without metering services. A small customer may need to transition to the standing offer contract in the event that the existing Metering Coordinator cannot, or does not wish to, continue to provide services at the connection point and the retailer is required to arrange an alternative Metering Coordinator.

B1.4.3 Arrangements necessary to facilitate a market for Metering Coordinator services

Allowing consumers to directly appoint a Metering Coordinator also raises issues relating to how a market for Metering Coordinator services should be facilitated. If a consumer appoints a Metering Coordinator, it may be necessary for retailers to offer market contracts that are both inclusive and exclusive of Metering Coordinator services. This would require the unbundling of the component price of Metering Coordinator services in retail electricity charges.

It is unlikely that additional regulation would be needed for large customers because they should have sufficient bargaining power to require a retailer to provide an unbundled price. However, regulation may be required for small customers to curb incentives on retailers to offer onerous terms and conditions that discourage a small customer from engaging its own Metering Coordinator. Consequently, facilitating a market for Metering Coordinator services for small customers may require greater regulatory complexity relative to that required for large customers.

B1.4.4 Draft decision

Based on the analysis set out above, the draft rule enables large customers to appoint their own Metering Coordinator.

The Commission considers that large customers are likely to be in a position to commercially negotiate for the provision of products and services supported by advanced meters. The ability for them to do so is likely to place a competitive discipline on retailers. Therefore, the Commission is of the view that the benefits to large customers of having the option to appoint their own Metering Coordinator are likely to outweigh the regulatory costs involved.

Under the draft rule, if a large customer decides to appoint its own Metering Coordinator, the relationship between the large customer and the Metering Coordinator will be a commercial arrangement with some supporting regulatory requirements.

To address the risk that a Metering Coordinator appointed by a large customer ceases to provide metering services and a replacement Metering Coordinator needs to be appointed, the draft rule introduces the following Metering Coordinator default arrangements:³²¹

- The Financially Responsible Market Participant (ie the large customer's retailer) must appoint a new Metering Coordinator if:
 - a "Metering Coordinator default event" occurs in relation to the existing Metering Coordinator at the connection point;³²² or
 - the contract under which the large customer appoints the existing Metering Coordinator terminates or expires and the large customer does not appoint a new Metering Coordinator within the period specified by AEMO in procedures.
- If the Financially Responsible Market Participant must appoint a new Metering Coordinator and the existing contract between the Financially Responsible Market Participant and the large customer does not deal with the appointment of a Metering Coordinator in these circumstances, the terms of the contract between the Financially Responsible Market Participant and the large customer relating to the appointment of the Metering Coordinator must be fair and reasonable.

The draft rule also requires the Metering Coordinator to notify the relevant retailer, the large customer and AEMO if a Metering Coordinator default event occurs or the contract under which the Metering Coordinator was appointed by the large customer terminates or expires.³²³

The draft rule does not enable small customers to appoint their own Metering Coordinator. The Commission considers that the development of the regulatory arrangements that would be needed to support this option for small customers, in

³²⁰ Section 146(3) of the NERL.

³²¹ Clause 7.7.1 of the NER.

³²² See the new Chapter 10 definition of "Metering Coordinator default event" in the draft rule. This definition includes events such as the Metering Coordinator ceasing to be registered by AEMO.

³²³ Clause 7.7.2 of the NER.

order to provide for continuing market integrity and appropriate consumer protections, would risk delaying the start of the market for competitive metering services and the benefits that this is expected to bring to consumers.

The Commission notes that the market is undergoing significant change. If the draft rule allowed small customers the ability to appoint a Metering Coordinator, there is a risk that the significant complexity of the new arrangements could erode consumer confidence in the market. In the early stages of market development there are significant advantages to consumers in the simpler model contained in the draft rule under which they will only need to deal with a single retailer who is covered by consumer protections in the NERR and jurisdictional ombudsman schemes.

The Commission recommends that the option for small customers to appoint their own Metering Coordinator be reviewed three years after the commencement of the new Chapter 7 of the NER. This review should include an assessment of whether the benefits of allowing a small customer to appoint their own Metering Coordinator would outweigh the costs and complexity of the regulatory arrangements that may be needed to support that option.

B2 Itemising metering charges for small customers on retail bills

Summary

This appendix addresses whether metering charges should be identified separately from other energy charges on a consumer's electricity retail bill.

The draft rule does not require retailers to provide information about metering charges to small customers. Metering charges will not need to be unbundled from other charges on a consumer's retail bill.

In light of the Commission's draft decision that a small customer cannot appoint its own Metering Coordinator at this time, information about metering charges is unlikely to be of any value to a small customer. Rather, the more useful information relates to the charges for products and services about which a customer is making a choice; in this case, the overall bundle of products and services provided by the retailer to the consumer.

The Commission will review this position when the option of a small customer appointing its own Metering Coordinator is reviewed.

B2.1 Introduction

This appendix sets out the Commission's draft determination in relation to whether metering charges should be identified separately from other energy charges on a consumer's retail bill.

This appendix covers:

- the COAG Energy Council's proposal regarding separately identifying metering charges;
- stakeholder views expressed in submissions to the consultation paper and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for the draft rule.

B2.2 Rule proponent's view

In its rule change request, the COAG Energy Council proposed that a retailer must inform the consumer of the metering service charges for that consumer. The retailer must also notify the consumer of the retail tariff that would be offered if charges for metering services were removed as a result of the consumer appointing its own Metering Coordinator.³²⁴

³²⁴ COAG Energy Council, rule change request, October 2013, p10.

The COAG Energy Council asked the AEMC to consider the best approach for a retailer to provide information about basic metering charges, including:³²⁵

- requiring metering services information to be provided on a customer's retail bill;
- separately identifying this information from other tariffs and charges payable by a customer;
- requiring retailers to provide this information to a small customer; or
- providing such information to a small customer on request.

These issues were raised in the context of the proposal that a small customer would have the ability to engage its own Metering Coordinator.

B2.3 Stakeholder views

In submissions to the consultation paper, there were divergent views as to whether information about metering charges should be separately identified.

- Some stakeholders supported this information being identified on a consumer's bill, on the basis that it would support competition.³²⁶ This was particularly the case if a consumer could engage their own Metering Coordinator.³²⁷
- Other stakeholders were concerned about requiring this information on a consumer's bill.³²⁸ These stakeholders thought that requiring this information at the same time as a competitive advanced meter deployment could affect consumer confidence by creating confusion and a negative perception in consumers' minds. This could consequently result in a barrier to investment and innovation in advanced metering.³²⁹

Retailers and the ENA considered that the provision of information about metering charges, such as whether it should be on a bill or as part of discrete marketing material, should be up to the retailer or market to decide.³³⁰

³²⁵ COAG Energy Council, rule change request, October 2013, p10.

³²⁶ ATA and other consumer groups, submission on consultation paper, p4; EnerNOC, submission on consultation paper, p3; Ergon Energy, submission on consultation paper, p8; NSW DNSPs, submission on consultation paper, p12.

³²⁷ Metropolis, submission on consultation paper, p6.

³²⁸ AER, submission on consultation paper, p10; AGL, submission on consultation paper, p6; Alinta Energy, submission on consultation paper, p3.

³²⁹ This view was reflected in discussions at the third stakeholder workshop.

³³⁰ AGL, submission on consultation paper, p6; ENA, submission on consultation paper, p24; ERM Power, submission on consultation paper, p12; Origin, submission on consultation paper, p6; Simply Energy, submission on consultation paper, p8.

At the third stakeholder workshop all stakeholders agreed that there should be no requirement to provide information about metering charges to small customers if small customers cannot appoint their Metering Coordinator.

B2.4 Commission's analysis

In determining whether metering charges should be itemised separately from other energy charges on a consumer's retail bill, the Commission considered if consumer access to this information would facilitate arrangements that:

- are simple and practical from a consumer perspective and reduce transaction costs;
- promote consumer participation and confidence in the market; and
- facilitate innovation in the provision of, and efficient investment in, metering and related services over time.

With these principles in mind, the Commission considered the value of this information to small customers. This involved consideration of the type of information that consumers would need to make informed decisions, which is dependent on the ability of small customers to appoint their own Metering Coordinator.

As small customers cannot appoint their own Metering Coordinator under the draft rule, the Commission considers that specific information about basic metering charges would be of little value to consumers in making informed decisions about energy products and services. It is the total bundle of energy services provided by a retailer to a consumer, which would include metering charges, that will be relevant to a consumer's choice. This is consistent with current arrangements where the components of energy charges, such as network costs, are not separately identified on consumers' bills.

In addition, providing specific information about metering service charges, particularly on a consumer's bill, could result in consumer confusion. This confusion could arise as the metering services charge may be interpreted as a new charge, when in fact it is an existing charge separated out from a bundled set of charges.

For these reasons, the Commission has determined that retailers should not be required to provide specific information about metering charges to consumers.

The draft rule makes changes to the NERR to clarify that provisions that refer to the sale and supply of energy by retailers to small customers include the provision, installation and maintenance of the customer's meter. Among other things, those changes clarify that the requirements on the content of retail bills in rule 25 of the NERR do not require charges for the provision, installation and maintenance of the small customer's meter to be itemised separately from other energy charges.

The Commission's position in relation to the provision of information about metering charges to small customers should also be reviewed as part of the broader review

referred to in Appendix B1 regarding whether a small customer should be able to appoint its own Metering Coordinator.³³¹

³³¹ As noted in Appendix B1, the Commission recommends that this review occurs three years after the new Chapter 7 of the NER commences.

B3 Access to energy and metering data

Summary

This appendix sets out the arrangements under the draft rule in relation to access by Metering Coordinators, consumers and consumers' representatives to energy data and metering data.

The NER currently contains restrictions on who can access energy data and metering data.

Under the draft rule, the list of people who may be granted access to energy data or receive metering data has been updated to recognise the new Metering Coordinator role. Metering Coordinators may be granted access to energy data and receive metering data in relation to metering installations for which they are responsible.

To help consumers access the products and services enabled by advanced meters, the draft rule provides that metering data in respect of a small customer metering installation (as defined in the draft rule) may be received by a person with the relevant small customer's prior consent.

These changes will assist in facilitating the provision of services by energy service companies that allow consumers to better understand their energy use, such as applications that allow consumers to view their energy usage on an in-home display, mobile phone or tablet that is remotely connected to the metering installation. These services would be provided by energy service companies on a commercial basis.

The draft rule also provides that a large customer or its "customer authorised representative" may receive data from a large customer's metering installation.

B3.1 Introduction

This appendix addresses the arrangements under the draft rule in relation to access by consumers and their representatives to energy and metering data.

This appendix covers:

- the COAG Energy Council's proposal in relation to access to energy and metering data;
- stakeholder views expressed in submissions to the consultation paper and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for the Commission's draft rule.

B3.2 Rule proponent's view

In its rule change request, the COAG Energy Council considered that the current rules on the provision of electronic data transfer facilities to metering installations, including rights to access energy and metering data, should be revised as appropriate.³³²

B3.3 Stakeholder views

Few stakeholders commented specifically on this issue in submissions to the consultation paper. The Consumer Action Law Centre stated the importance of consumers having access to clear, simple and real-time information about their energy consumption in order to benefit from more cost-reflective pricing and other demand side initiatives.³³³

B3.4 Commission's analysis

The current clause 7.7(a) of the NER sets out the range of parties that are entitled to access energy data and receive metering data.³³⁴

In general terms, "energy data" is data that is obtained directly from a metering installation.³³⁵ "Metering data", in contrast, refers to energy data after it has been collected from a metering installation.³³⁶

The Commission has considered whether the existing NER provisions related to access to energy and metering data need to be amended as a result of the new framework for metering services under the draft rule.

The AEMC recently completed the *Customer access to information about their energy consumption* rule change.³³⁷ This rule change clarified the rights of retail customers or their authorised representatives to request retailers or DNSPs to provide metering data up to four times per year. Minimum requirements, such as formats and timeframes for delivery of metering data, will be set out in procedures to be developed by AEMO. The

³³² COAG Energy Council, rule change request, October 2013, p18.

³³³ CALC, submission on consultation paper, p1.

³³⁴ This clause also addresses NMI standing data, settlements ready data and data from the metering register.

³³⁵ For example, interval energy data is defined in the NER as "[t]he data that results from the measurement of the flow of electricity in a power conductor where the data is prepared and recorded by the metering installation in intervals which correspond to a trading interval or are submultiples of a trading interval. Interval energy data is held in the metering installation."

³³⁶ For example, interval metering data is defined in the NER as "[t]he interval energy data, once collected from a metering installation, is interval metering data. Interval metering data is held in a metering data services database and the metering database." The metering data services database is established and maintained by the relevant Metering Data Provider, while the metering database is maintained and administered by AEMO.

³³⁷ Available at <http://www.aemc.gov.au/Rule-Changes/Customer-access-to-information-about-their-energy>.

primary objective of this rule change was to improve the ability of retail customers or their authorised representatives to access historical consumption information, for example to help consumers make more informed decisions about switching retailers or energy plans.

The draft rule establishes the role of Metering Coordinator. The current NER provision setting out the parties entitled to access data only recognises the Metering Provider and Metering Data Provider roles. The draft rule amends this clause to add Metering Coordinators as a party that may be granted access to energy data and receive metering data in relation to metering installations for which they are responsible.³³⁸

The draft rule also amends the access to data clause in the NER (ie clause 7.7 of the current NER and clause 7.15.5 of the NER in the draft rule) to clarify how this clause operates within the new competitive metering framework.

The key amendments are as follows:

- Clause 7.15.5(a) of the NER now refers to "persons who may be granted access to energy data or may receive metering data". This compares with the current wording of clause 7.7(a) of the NER, which refers to "persons entitled to access energy data or receive metering data". This change is designed to clarify that the listed people do not have an absolute entitlement to access or receive this data. For example, as discussed below, in some cases these parties will need to negotiate access with the Metering Coordinator and agree on a price for access.
- Clause 7.15.5(b) provides that remote access to energy data by the parties listed in clause 7.15.5(a) must only be provided where passwords in accordance have been allocated in accordance with the NER, otherwise access shall be to metering data from the metering data services database or the metering database. Appendices A1 and A2 discuss changes to the parties to whom a password may be allocated in relation to a "small customer metering installation".³³⁹
- Clause 7.15.5(d) provides that the Metering Data Provider (or AEMO, where AEMO is responsible for the provision of metering data services), must ensure that access is provided to metering data from the metering data services database only to the parties referred to in clauses 7.15.5(a)(1) to (6) and (a)(11). In general terms, these parties are Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation, the relevant Metering Coordinator, the relevant Metering Provider, the Financially Responsible Market Participant, the Network Service Provider associated with the connection point, AEMO and its authorised agents, and the AER or jurisdictional regulators on request to AEMO.

One effect of amendments noted in the last bullet point above is that these parties will only have an automatic entitlement to access metering data from the metering data

³³⁸ Clause 7.15.5(a)(2) of the NER in the draft rule.

³³⁹ See the new definition of this term in Chapter 10 of the NER - discussed in Appendix A1.

services database. If they wish to receive other metering data directly from the Metering Data Provider, they will need to negotiate access to that service on commercial terms. Other parties that are entitled under clause 7.15.5(a) to receive metering data will also need to access that data from the Metering Data Provider and negotiate access on commercial terms (subject to other rights that they may have to access that data, eg the rights of small customers and their authorised representatives to access metering data up to four times a year free of charge under the NERR).

The Commission has also considered whether the NER presents any barriers to an energy service company that is providing services to the consumer accessing metering data directly from the relevant Metering Coordinator or Metering Data Provider without having to go through the consumer's retailer or DNSP. Requesting data through the consumer's retailer or DNSP is unlikely to be a practical solution for services that require the ongoing provision of data to the consumer, including for services that display a consumer's energy use through in-home displays, web portals, or smart phone applications.

The draft rule amends the NER to add to the list of parties that may be granted access to energy data or receive metering data:

- In relation to small customer metering installations: a person who has the small customer's prior consent may access metering data.³⁴⁰
- In relation to large customers: the large customer or a "customer authorised representative" of the large customer may access data from the metering installation.³⁴¹

This data would be provided to consumers or their authorised representatives on a commercial basis and would not be subject to minimum format requirements. This will allow for flexibility and innovation in the services that parties may wish to provide to consumers.

³⁴⁰ See clause 7.15.5(9) and 7.15.4(b)(2) of the NER in the draft rule.

³⁴¹ See clause 7.15.5(10) of the NER in the draft rule. Under the current NER, "customer authorised representative" is defined as "[a] person authorised by a retail customer to request and receive information under Chapter 7 on the retail customer's behalf". The ability for a large customer to access data is consistent with the current ability of a customer to receive a "read-only" password, which has been retained in relation to large customers in clause 7.15.3 of the NER in the draft rule. Consistent with the new security controls for small customer metering installations in clause 7.15.4 of the NER in the draft rule, the Commission does not consider that small customers should be able to access energy or metering data themselves through passwords.

C Application of the minimum services specification

Overview of Appendix C

This appendix sets out the arrangements under the draft rule in relation to:

- C1 The minimum services specification that applies to all new and replacement meters that are installed a small customer's premises, including the services to be included in the minimum services specification and governance arrangements for the minimum services specification.
- C2 The circumstances in which a small customer will have the ability to opt out of having a new meter installed, and the requirements for those opt out arrangements.
- C3 Arrangements in relation to meter reversion from an interval meter to an accumulation meter.

C1 Minimum services specification

Summary

This appendix addresses the governance, content and application of a minimum services specification for small customers' metering installations.

Under the draft rule, all new and replacement meters installed at small customer connection points must meet a new minimum services specification. This specification relates to the services that those metering installations must be capable of providing, rather than the technical functionality of the metering installation itself. This is expected to provide greater opportunity for innovation to help deliver consumers and third parties the services that they want at a lower cost and in a technology neutral manner.

The draft rule includes a description of the services that comprise the minimum services specification. AEMO must establish, maintain and publish procedures that set out the minimum service levels, standards and relevant technical requirements for each service set out in the minimum services specification.

The minimum services specification includes the following services:

- remote disconnection service;
- remote reconnection service;
- remote on-demand meter read service;
- remote scheduled meter read service;
- meter installation inquiry service;³⁴² and
- advanced meter reconfiguration service.

The Commission considers that a relatively low minimum services specification, such as the minimum services specification under the draft rule, allows the market to determine the services that consumers want at a price they are willing to pay. Over-specifying the minimum services specification could result in consumers having to pay for meters that are capable of providing services that ultimately are not taken up, are of no benefit to them or could be provided in a more cost effective way through alternative technologies. Therefore the minimum services specification only includes services that are expected to deliver benefits to the majority of small customers receiving those services at a relatively low cost.

³⁴² The metering installation must be capable of providing the following types of information at a minimum: supply status; voltage; current; power; frequency; average voltage and current; and the contents of the meter log including information on alarms.

In practice, the Commission expects that most metering installations will exceed the minimum services specification because retailers, DNSPs and energy service companies will negotiate for additional services to be provided by the metering installation. Metering Coordinators may also install metering installations that are capable of providing additional services to anticipate demand for services and avoid the risk of meter churn.

While all new and replacement metering installations for small customers will need to be capable of providing the services set out in the minimum services specification, there will be no obligation on Metering Coordinators to provide those services. Rather, the terms and conditions on which those services are provided, if at all, will be subject to commercial negotiation between the Metering Coordinator and third parties.

There are a number of services that are expected to be commonly used that have not been included in the minimum services specification, such as load control. These services may be captured by a shared market protocol. The Commission and AEMO are developing advice on this protocol.

C1.1 Introduction

This appendix explains the draft rule's provisions in relation to the governance, content and application of a minimum services specification for new and replacement metering installations for small customers.

The draft rule does not mandate a minimum services specification for metering installations installed at the connection points of large customers.

The purpose of a minimum services specification is to allow the broader market benefits of advanced meters to be captured, particularly where the party installing the meters may not have an incentive to provide a metering installation capable of providing services that would be of value to others. Coupled with mandated service levels and standards, the minimum services specification provides a starting point for third parties, such as retailers, DNSPs and energy service companies, to negotiate access to services that may ultimately benefit their customers, either directly through new retail or energy management service offerings, or indirectly through lower retail and network costs.

The remainder of this appendix sets out:

- current arrangements relating to the functionality of metering installations;
- the relevant elements of the COAG Energy Council's rule change request;
- stakeholder views including submissions to the consultation paper, outcomes of stakeholder workshops held by the AEMC, and a summary of AEMO's advice to the COAG Energy Council on a minimum functionality specification; and

- the Commission's analysis of the key issues and reasoning for the draft rule.

C1.2 Current arrangements

The NER currently contains minimum functionality requirements for metering installations.³⁴³ These requirements were primarily established to facilitate settlement of the NEM and billing of customers.

Currently, most metering installations for small customers in the NEM are accumulation meters that must be manually read at the premises and can only measure consumption on an accumulation basis. The main exceptions are the advanced meters deployed under the Victorian AMI program and some advanced meter trials in other jurisdictions.

AEMO is responsible for establishing and maintaining the procedures specified in Chapter 7 of the NER, including the metrology and service level procedure, in accordance with the rules consultation procedures.³⁴⁴

There are a number of provisions in the NER relating to the collection and provision of metering data, the provision of metering data services and accuracy and design requirements for metering installations that support market settlement and billing. These existing arrangements are different in nature to the minimum services specification and will largely remain unchanged.

C1.3 Rule proponent's view

The COAG Energy Council considered 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 an advanced meter should provide.³⁴⁵ To support competition and investment in the provision of metering services, the COAG Energy Council proposed that the new framework cater for a minimum functionality specification.

The COAG Energy Council rule change request proposed that the minimum functionality specification should not override the existing specifications contained in the NER. These include the accuracy, design, inspection and testing of metering installations and other requirements to meet Australian and international standards.

The COAG Energy Council proposed that the minimum functionality specification should not be binding unless prescribed by a jurisdiction.

³⁴³ Current clause 7.3.1 of the NER.

³⁴⁴ Current clauses 7.1.3 and 7.1.4 of the NER. The exception is the B2B procedures that provide for the operation of the B2B e-hub, which are established and maintained by the IEC (current clauses 7.1.3 and 7.2A of the NER).

³⁴⁵ COAG Energy Council, rule change request, October 2013, p15.

C1.3.1 Governance of the minimum services specification

The COAG Energy Council proposed that AEMO would develop, maintain and publish the 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 comply with the rules consultation procedures under the NER when establishing and changing the minimum functionality specification.³⁴⁶

The COAG Energy Council noted that the final rule could provide guidance to AEMO on the factors that should be considered in establishing the minimum specification.³⁴⁷

C1.3.2 The minimum services specification

In December 2011, the COAG Energy Council endorsed the Smart Meter Infrastructure (SMI) Minimum Functionality Specification (MFS) that was developed by the National Smart Metering Program. The SMI MFS was developed in the context of the functionality requirements for the advanced metering infrastructure as part of a potential DNSP-led rollout that may be mandated by a jurisdictional Minister.³⁴⁸ The COAG Energy Council attached the SMI MFS to its rule change request and noted that the SMI MFS could provide a basis for the functionality requirements and performance levels where parties may consider installing advanced meters.

The COAG Energy Council's rule change request notes that the NER currently contain "minimal regulation of the provision of remote communications in relation to a metering installation". The rule change request proposes that, in light of future developments of meters with advanced functionality, the current rules on the provision of electronic data facilities be revised.³⁴⁹

In June 2014, the COAG Energy Council asked that AEMO provide advice on a minimum functionality specification for advanced meters to, among other things, inform a competitive framework for metering services. In developing this advice, AEMO was required to consider the services an advanced meter should provide to:³⁵⁰

- support billing and settlement in the market;
- support efficient business practices;
- enable the efficient, reliable and safe operation of the national grid; and

³⁴⁶ COAG Energy Council, rule change request, October 2013, p15.

³⁴⁷ Ibid.

³⁴⁸ The provision for a jurisdiction to mandate a roll out of advanced meters has subsequently been removed from the NEL.

³⁴⁹ COAG Energy Council, rule change request, October 2013, pp17-18.

³⁵⁰ COAG Energy Council, terms of reference, AEMO advice on smart meter functionality and a shared market protocol, p4.

- provide an accessible and secure platform for the delivery of flexible tariffs and demand side and data services to consumers and other Market Participants.

AEMO's advice was delivered in November 2014 and forms the basis of the minimum services specification set out in the draft rule. This is discussed in section C1.4.3.

C1.4 Stakeholder views

In submissions, stakeholders generally agreed that the specification should cover services enabled by the metering installation instead of functionality. Stakeholders considered that mandating technical requirements would limit competition, innovation and technology neutrality. Metering Providers and prospective Metering Coordinators proposed that they are best placed to determine the technical aspects of their advanced metering infrastructure.

C1.4.1 Governance of the minimum services specification

There were divergent views on the party best placed to develop and maintain the minimum services specification.

Responses to the consultation paper indicated that the majority of stakeholders supported AEMO being responsible for establishing and maintaining the minimum services specification, with industry consultation.³⁵¹ However, several stakeholders considered that the IEC should either have full responsibility for determining the minimum services specification or should provide advice to AEMO.³⁵² Simply Energy was of the view that the appropriate governance arrangements for the minimum services specification would be a committee or working group of AEMO and industry stakeholders.³⁵³

At the AEMC's fifth stakeholder workshop on 9 October 2014, stakeholders were presented with several options for how a minimum services specification could be governed under the NER. Stakeholders raised divergent views on the level of detail that should be included in the NER compared with AEMO procedures. One stakeholder noted that performance standards were vital for both defining a service and determining the likely costs of providing that service.

At this workshop, there was discussion about whether AEMO should be responsible for both setting the minimum services specification and the more detailed procedures. Some considered that this approach would expedite any changes to the minimum services specification, allowing for a faster and more flexible process. However, some argued that the focus should be on outcomes rather than on the speed of the process.

³⁵¹ AGL, submission on consultation paper, p9; Origin Energy, submission on consultation paper, p9; Vector, submission on consultation paper, p19; Secure Australasia, submission on consultation paper, p3; ERM Power, submission on consultation paper, p15.

³⁵² Energex, submission on consultation paper, p7; ENA, submission on consultation paper, p31; SA Power Networks, submission on consultation paper, p11.

³⁵³ Simply Energy, submission on consultation paper, p9.

One stakeholder expressed concern with AEMO being the ultimate decision maker. Another suggested that there be a more democratic approach to determining and changing the minimum services specification, such as an industry body whereby each participant would have a vote.

AEMO supported having the list of services in the NER, with details regarding applicable service levels and performance standards set out in procedures. AEMO considered that this would be consistent with how other metering procedures are governed under the NER. One stakeholder supported this option on the basis that it would ensure consideration of the NEO, and indicated that some consumer groups find it easier to engage with the consultation process for rule changes. However, Market Participants did not generally consider that AEMO's consultation procedures were more limited than the rule change consultation process, and noted that AEMO is also required to have regard to the NEO under the NEL.

There was discussion about whether the NER would have to include sufficient detail to ensure that the scope of the services, and thereby the likely costs of the services, are certain.

Consumer groups advocated for a role in the ongoing governance of the minimum services specification.

C1.4.2 The minimum services specification

A variety of views were held on the appropriate services to include in the minimum services specification.

Retailers were of the view that the minimum services specification should support the minimum services required for a contestable retail market. They proposed that the specification should be less exhaustive than that which was developed by the SMI MFS or the minimum functionality specification for the Victorian AMI program.

DNSPs were concerned that retailers and Metering Coordinators would develop a specification based on their commercial needs, with little consideration of potential network benefits. On this basis they argued for a more comprehensive minimum services specification.

C1.4.3 AEMO advice on a minimum functionality of advanced meters

In November 2014, AEMO delivered advice to the COAG Energy Council on a minimum functionality specification for advanced meters.³⁵⁴ AEMO's advice stated that it used the following criteria to assess the services that could be mandated:

- the interests of the market to deliver efficient business processes and low transaction costs;

³⁵⁴ AEMO, Minimum Functionality of Advanced Meters, Advice to COAG Energy Council, November 2014.

- the broader market and society's interest in meter accuracy, safety and security; and
- the common interest in being able to provide efficient network services and efficient pricing of those services.

AEMO identified a list of the services that could be provided through advanced meters, assessed them against the above criteria and allocated them to one of three categories:

- "Primary services" were those AEMO considered should form part of any minimum services specification.
- "Secondary services" were those that AEMO considered may be included in a minimum services specification if advanced meters were rolled out on a non-competitive basis as part of a rollout mandated by a jurisdiction.
- "Value added services" were those that AEMO considered did not meet the above criteria and should not be included in the minimum services specification, but could be negotiated.

Table C1.1 outlines the services that AEMO allocated to each category.

Table C1.1 AEMO's advice on minimum specification of advanced meters

Primary services	Secondary services	Value added services
De-energisation (turn electricity supply off remotely)	Re-energisation (remotely arming the meter to enable the customer to reconnect supply via a switch at the meter)	Enabling a Home Area Network (HAN)
Re-energisation (turn electricity supply on remotely)	Load limiting (the ability to remotely establish or remove a limit that restricts the amount of energy that can be consumed)	Supply failure and restoration notifications
Meter read - on demand (obtained remotely as required by a retailer, customer or another authorised party)	Load management (turning designated loads off and on at a customer's premises, remotely on command, or under a schedule)	Metering installation asset management
Meter read - scheduled (obtained remotely as per contracted dates and times)	Local access to a metering system via a registered device (connectivity with the meter from a device owned and operated by the customer or their agent)	Safety monitoring
Meter installation enquiry (remotely obtaining energy)		

Primary services	Secondary services	Value added services
information, meter status and usage data)		
Meter reconfiguration (to remotely enable access to new tariffs and new arrangements, such as solar connections and energy demand tariffs)		

C1.5 Commission's analysis

This section sets out:

- the Commission's rationale for introducing a minimum services specification rather than a minimum functionality specification;
- the Commission's draft rule and rationale for including provisions for the minimum services specification in the NER, with service levels, standards and technical requirements to be developed by AEMO in procedures;
- the Commission's draft rule and rationale for deciding which services to include in the minimum services specification;
- the conditions under which the minimum services specification will be required to be satisfied; and
- interactions between the minimum services specification and the shared market protocol.

C1.5.1 Functionality versus services specification

The Commission considers that the minimum specification for small customers should be based on the services that the metering installation must be capable of supporting rather than the functional components that the metering installation must include.

Focussing on services provides metering manufacturers with greater opportunity to innovate around how they provide particular service outcomes, rather than mandating a particular technology they must use or how it must operate. This approach is expected to help deliver consumers and other parties the services that they want at a lower cost.

Existing specifications contained in clause 7.3.1 the NER relating to requirements for metering installations, such as their components, remain unchanged under the draft rule.³⁵⁵ The existing metering installation component requirements³⁵⁶ specify

³⁵⁵ This clause is renumbered as clause 7.8.2 of the NER in the draft rule.

³⁵⁶ Clause 7.8.2 of the NER in the draft rule.

metrology-related components that are required for all metering installations so that they can accurately record, store and communicate energy consumption information.

The minimum services specification will sit alongside those existing requirements. It specifies the services that new and replacement metering installations for small customers must be capable of providing. These services are not related to basic metrology functions, and instead relate to advanced metering services.

C1.5.2 Governance of the minimum services specification

A list of minimum services that all new and replacement metering installations for small customers must be capable of providing is set out in the draft rule. This list of services is discussed in the next section. The Commission agrees with stakeholder comments that the services included in the NER must be specified in sufficient detail to provide certainty of the nature and scope of the services that a metering installation must be capable of providing. The draft rule sets out detailed definitions of each of the services (see Schedule 7.5 of the NER in draft rule).

AEMO will be required to establish, maintain and publish procedures that set out, for each service specified in the minimum service specification:³⁵⁷

- minimum service levels, including service availability (eg at what times the can service be requested - such as 8.00am to 8.00pm) and completion timeframes (eg the service must be completed within a period - such as within one hour of the request being received); and
- minimum standards, including completion rates against the service levels (eg 95% of services are completed and provided successfully when assessed against the minimum service levels) and accuracy requirements.

AEMO's procedures may also include technical requirements for one or more of the services specified in the minimum service specification. Applicable technical requirements are expected to be most relevant for the meter installation enquiry and advanced meter re-configuration services. For example, the draft rule sets out at a relatively high-level the four operational parameters that, as a minimum, must be capable of being set under the advanced meter re-configuration service. There is likely to be benefit in AEMO specifying further technical requirements for those parameters in the procedures.

AEMO may include these procedures within the existing Service Level Procedures or develop new procedures.

The purpose of the service levels and standards is to provide greater certainty to metering manufacturers and others regarding the specifications that the metering installation will be required to meet. Mandating service levels and standards for those services included in the minimum services specification may also reduce transaction

³⁵⁷ Clause 7.8.3(c) of the NER in the draft rule.

costs associated with negotiating terms and conditions for access to those services. Finally, having a consistent set of service levels and standards may facilitate price comparisons between Metering Coordinators.

Developing the minimum services specification requires an assessment of the costs and benefits of various services across the supply chain, including an assessment of:

- the broader benefits that various services are expected to bring to the market;
- incentives for parties deploying advanced meters to include services with broader market benefits;
- the likelihood that services will be taken up such that consumers will not be required to pay for meters that are capable of providing services that will not benefit them; and
- the likelihood that services will be most efficiently provided via a meter rather than some other technology.

Ultimately, the more services included in the minimum services specification, the higher the cost for small customers. Small customers would be required to pay for a metering installation capable of providing those services even if they do not use them. The Commission considers the trade-offs between costs imposed on small customers and services provided by advanced meters are best addressed through specifying the minimum service specification in the NER. This allows for a whole-of-market perspective and consideration of whether inclusion of certain services is likely to be in the long term interests of small customers.

Any person will be able to propose a change to the minimum services specification via the rule change process. This is appropriate given the variety of parties that will have an interest in the minimum services specification. Further, the rule change process involves a clearly understood, consultative approach whereby any changes will be assessed having regard to the NEO.

However, AEMO is better placed to develop the detailed service levels and standards. This is consistent with certain other arrangements related to metering in the NER whereby technical details relating to the regulatory framework are set out in procedures that are developed and maintained by AEMO. For example, Chapter 7 of the NER sets out provisions relating to, among other things, the collection and provision of metering data and the provision of metering data services.³⁵⁸ These provisions are supported by AEMO's Service Level Procedures for Metering Providers and Metering Data Providers within the NEM, which detail the obligations, technical requirements and performance levels associated with the processes of meter reading, data collection, data processing and adjustment, aggregation and delivery of metering data.

³⁵⁸ See current clause 7.1.1(a) of the NER for a complete list of provisions that Chapter 7 covers.

Any amendments to the minimum services specification would require subsequent amendments to AEMO's service levels and standards. The Commission acknowledges that this approach may be more time consuming than if the minimum services specification was set out in procedures and determined by AEMO. However, this approach is appropriate to ensure the market-wide impacts of changing the minimum services specification are assessed via a clearly defined, consultative process, thereby minimising uncertainty for participants in the metering services market.

C1.5.3 Services to be included in the minimum services specification

The advice provided by AEMO on the minimum functionality of advanced meters forms the basis of the minimum services specification set out in the draft rule. Under the draft rule, the minimum services specification includes the following services:

- *Remote disconnection service.* This service is the remote disconnection of a small customer's premises via the metering installation. Parties that are able to request a remote disconnection will be limited to the LNSP and the Financially Responsible Market Participant.
- *Remote reconnection service:* This service is the remote reconnection of a small customer's premises via the metering installation. As for remote disconnection, the parties that are able to request a remote reconnection service will be limited to the LNSP and the Financially Responsible Market Participant.
- *Remote on-demand meter read service:* This service is the remote retrieval of metering data from the metering installation for a specified point or points in time and the provision of such data to the requesting party. This includes the retrieval and provision of reactive energy metering data and/or active energy metering data (for imports and/or exports of energy measured by the meter), interval metering data and accumulated metering data for the start and end of the period specified in the request. The parties that are able to request a remote scheduled meter read service are those parties listed in clause 7.15.5(a) of the NER in the draft rule.
- *Remote scheduled meter read service:* This service is the remote retrieval of metering data from a metering installation on a regular and ongoing basis and the provision of such data to the requesting party. This includes the retrieval and provision of reactive energy metering data and/or active energy metering data (for imports and/or exports of energy measured by the meter), interval metering data and accumulated metering data for the start and end of the period specified in the request. The parties that are able to request a remote scheduled meter read service are those parties listed in clause 7.15.5(a) of the NER in the draft rule.
- *Meter installation inquiry service:* This service is the remote retrieval of information from, and related to, a specified metering installation and the provision of such information to the requesting party. Table S7.5.1.1 of the NER in the draft rule sets out the seven types of information that the metering installation must (as a minimum) be capable of providing. These include: supply status; voltage;

current; power; frequency; average voltage and current; and the contents of the meter log including information on alarms. The parties that are able to request a remote meter installation enquiry service are the LNSP and the Financially Responsible Market Participant, and any other person to whom a small customer has given its prior consent under clause 7.15.4(b)(2) of the NER in the draft rule.

- *Advanced meter reconfiguration service:* This service is the remote setting of the operational parameters of the meter. Table S7.5.1.1 of the NER in the draft rule sets out the four operational parameters that, as a minimum, must be capable of being set. Parameters that must be capable of being set, as a minimum, include: the activation or deactivation of a data stream or data streams; altering the method of presenting energy data and associated information on the meter display; thresholds for alarms; and the parameters that specify how the voltage, current, power, supply, frequency, average voltage and average current measurements are calculated. The parties that are able to request an advanced meter reconfiguration service will be limited to the DNSP and the retailer.

The Commission considered the trade-offs in determining the list of services in the minimum services specification. Regulating a comprehensive list of services would provide greater certainty to parties regarding the services that an advanced meter must be capable of providing. However, there is a risk that regulation may over-specify the minimum services specification. This could result in consumers having to pay for meters that are capable of providing services that ultimately are not taken up, are of no benefit to them or could be provided in a more cost effective way through alternative technologies.

For example, the "last gasp" service requires an advanced meter provide an alert if the supply of energy through the meter is disrupted. This service could be used to detect network outages, provided there are a sufficient number of meters with this capability within a designated area.³⁵⁹ However, this capability would add approximately \$10 to the cost of each meter, which is likely to be passed on to consumers through their retail charges.³⁶⁰ Alternatively a metering installation inquiry service, which forms part of the minimum services specification, potentially supports a similar outcome at a much lower cost to customers.

Having a relatively low minimum services specification would allow the market to determine the services that consumers want at a price they are willing to pay. Therefore the Commission has only included services in the minimum services specification where it considers that, if provided, these services are likely to deliver benefits to the majority of consumers receiving those services at a relatively low cost.

³⁵⁹ Also known as 'supply failure and restoration notifications'. AEMO classified this service as a value-added service. AEMO notes that the ENA submitted that more than 60 per cent of metering installations within a designated area would be required to support this service. See AEMO, Minimum Functionality of Advanced Meters, Advice to COAG Energy Council, November 2014, p13.

³⁶⁰ This figure was suggested during an AEMO workshop regarding the development of its advice on the minimum functionality of advanced meters for the COAG Energy Council.

The likely benefits of these services are set out in Table C1.2.

Table C1.2 Potential benefits to consumers of the minimum services

Service	Potential consumer benefits
Remote disconnection	Remote disconnection services will allow both retailers and DNSPs to disconnect a premises without the need for a site visit. This may provide cost savings, which could be passed through to consumers. Remote disconnections could also provide greater convenience and lower costs for consumers that vacate a premises.
Remote re-connection	Remote reconnection services will allow for faster re-connection for a customer following a remote disconnection or if a consumer moves into a new premises. It will also allow faster reconnection of customers that have been wrongfully disconnected. As with remote disconnections, retailers and DNSPs could benefit through lower costs, which are expected to be passed on to consumers.
Remote on-demand meter read	This service facilitates faster and less costly final meter reads for the purpose of a final bill. Coupled with the remote disconnection service, this may lower costs to consumers when they vacate a premises. This service could also make the process of switching retailer faster by allowing final meter reads to occur more quickly. As a consequence, consumers may have greater confidence to participate in the retail market. Third party service providers could also use this service to support the provision of new products and services to customers.
Remote scheduled meter read	This service provides for faster and more accurate market settlement and billing. Consumers may benefit from, among other things, the possibility of more regular billing to avoid "bill shock" and less reliance on estimated reads. It also allows settlement in the wholesale market to be based on a consumer's actual consumption, rather than the average load profile for a consumer in that distribution area.
Meter installation inquiry	This service allows DNSPs to better manage their networks by analysing data relating to, for example, loss of supply, voltage, current, power and supply frequency. Consumers may benefit from better management of supply interruptions, improved quality of supply, and lower network charges.
Advanced meter reconfiguration	This service allows meters to be reconfigured remotely to support the uptake of, or changes to, the above services without the need for a site visit. This may lower costs to parties accessing those services, which are expected to be passed on to consumers in the form of lower prices.

In practice, the Commission expects that most metering installations will exceed the minimum services specification. Many of the advanced meters currently available are capable of providing a number of services in addition to those listed above, such as load control. Further, retailers, DNSPs and energy service companies will be able to negotiate with Metering Coordinators prior to the installation of meters to include the services they consider necessary and are willing to pay for.

Over time, this approach will allow the market to determine the appropriate balance of services. Consumers will influence the services their meters include through their choice of retail and energy management services offered by retailers and energy service companies. DNSPs will also be able to negotiate for the services that they consider will allow them to operate their networks more efficiently or with improved reliability or quality of supply.

Metering Coordinators are expected to have an incentive to include services additional to the minimum services specification to reduce the risk of meter churn. If a Metering Coordinator installs a meter that is not capable of providing the range of services that a consumer, and therefore a retailer, is likely to want, it risks having its meter stranded. This may occur if a consumer changes retailer and the new retailer appoints a different Metering Coordinator that can provide the desired range of services.

Many services that can be provided through the meter can already be provided through alternative technologies. Therefore, over-specifying the minimum services specification could risk stifling innovation and development in those services. For example:

- Devices that sense current can be clipped onto outgoing wires from the circuit box. These sensors are Wi-Fi-enabled and allow for real-time monitoring of energy use at a level as granular as the wiring of the premises.
- Advanced meters connected to in home display arguably have already been superseded by mobile phone applications and web portals.
- Smart appliances are able to be remotely controlled via the internet without the need for load control equipment to be included in the metering installation.

The Commission is cognisant that technology is constantly evolving and developing, and therefore alternative ways to provide services may emerge. These technologies could potentially provide the same service as an advanced meter at a lower cost. Providing a relatively low minimum services specification therefore avoids the risks of locking in outdated, and potentially more expensive, technology.

Under the draft rule, the minimum services specification will apply to new and replacement metering installations installed at a small customer connection points. The minimum services specification will not apply to metering installations installed for large customers or connection points that do not have a retail customer. The Commission considers that large customers are in a better position to negotiate for the advanced metering services that they require and so a minimum services specification is not necessary. Requiring a minimum services specification to apply to large customers may unduly inhibit commercial negotiations.

C1.5.4 Meeting the minimum services specification

Under the draft rule, a Metering Coordinator must ensure that any new or replacement metering installation in respect of a connection point of a small customer is a type 4

metering installation that meets the minimum services specification, subject to the exception noted below.³⁶¹ A metering installation meets the minimum services specification if it is capable of providing the services listed in Table S7.5.1.1 of the NER in the draft rule, and it is connected to a telecommunications network³⁶² that enables remote access to the metering installation.³⁶³

Several stakeholders noted that there may be instances where there is no existing telecommunications network to facilitate remote acquisition at a metering installation, such as in remote areas. As it may be prohibitively expensive for a Metering Coordinator to build a telecommunications network to provide remote access (or pay a telecommunications operator to extend its network), the Commission has decided that Metering Coordinators in this situation will be able to apply to AEMO for an exemption.

The draft rule provides that AEMO may exempt a Metering Coordinator from complying with the requirement to install a type 4 metering installation that meets the minimum services specification in respect of a small customer connection point if the Metering Coordinator demonstrates to AEMO's reasonable satisfaction that there is no existing telecommunications network which enables remote access to the metering installation at that connection point.³⁶⁴ An exemption may be for one or more periods of up to five years each.

If such an exemption is granted, any new or replacement metering installation for a small customer at that connection point must still be capable of providing all of the services listed Table S7.5.1.1 of the NER. However, the requirement that the metering installation is connected to a telecommunications network that enables remote access to the metering installation would not apply. These metering installations will be classified as type 4A metering installations.

Where AEMO grants such an exemption, the meter would need to be manually read. Currently all manually read interval metering installations are classified as type 5 metering installations.

Under the draft rule, type 4A metering installations must have sufficient memory to store at least 200 days of interval energy data, which is the current requirement for type 5 metering installations.³⁶⁵ This compares to at least 35 days for a type 4 metering installation (which is remotely read and so less memory is required). Other consequential changes are made to the schedules to Chapter 7 to incorporate type 4A metering installations.³⁶⁶

³⁶¹ Clause 7.8.3 of the NER in the draft rule.

³⁶² This is defined in the NER as "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".

³⁶³ Clause S7.5.1 of the NER in the draft rule.

³⁶⁴ Clause 7.8.4 of the NER in the draft rule.

³⁶⁵ Clause 7.8.2(a)(11) of the NER in the draft rule.

³⁶⁶ See for example the amendments to Schedule 7.4 of the NER in the draft rule.

The existing requirements and criteria related to each metering installation type, as currently set out in Schedule 7.2 of the NER, will not change. The existing metering installation types 1-7 will remain, with a new metering installation type 4A added.

The draft rule also introduces a definition of a "small customer metering installation", which is defined as a metering installation in respect of the connection point of a small customer which meets the minimum services specification or which is required to meet the minimum services specification under clauses 7.8.3(a) and 7.8.4(d) of the draft rule. A type 4A metering installation is not a small customer metering installation.

The Metering Coordinator must ensure that energy data is retrieved by remote access for each small customer metering installation for which it is responsible.³⁶⁷

While all new and replacement metering installations for small customer connection points must be *capable* of providing the services set out in the minimum services specification, the Metering Coordinator is not required to *provide* those services. This is consistent with the Commission's decision that there will be no access regulation at the start of the market, as discussed in Appendix E. Therefore DNSPs, retailers and others will need to negotiate for the provision of the services set out in the minimum services specification, just as they would for any other service.

C1.5.5 Links to a shared market protocol

While there are other services that could be provided by advanced meters that have not been included in the minimum services specification, these other services may be captured by the shared market protocol on which AEMO is currently formulating technical advice to the COAG Energy Council. In addition, the AEMC is currently developing advice to the COAG Energy Council on the governance and implementation of the shared market protocol.

A shared market protocol is an electronic platform that allows parties to communicate regarding the services that will be offered by advanced meters. It also defines the format of the messages sent between the parties to provide those services. A shared market protocol is a default method of communication and does not preclude parties from agreeing to alternative methods of communication.

A shared market protocol is intended to promote competition by reducing barriers to entry for new retailers and energy service companies, while not inhibiting innovation. For example, a shared market protocol would prevent a situation where an energy service company needs to have different systems to communicate with different Metering Coordinators.

The Commission's advice on the implementation of a shared market protocol,³⁶⁸ due to be provided to the COAG Energy Council at around the same time as the final

³⁶⁷ Clause 7.3.2(f) of the NER in the draft rule.

determination for this rule change, will need to address how a shared market protocol would interact with services provided both under the minimum services specification and by the market. The Commission's expectation is that the shared market protocol could set out a communication method for all commonly available advanced services. This is likely to include:

- the advanced services set out in the minimum services specification;
- the "secondary services" set out in AEMO's advice on the minimum functionality of advanced meters; and
- the "value added services" set out in AEMO's advice on the minimum functionality of advanced meters.

Therefore although a number of advanced services may not be captured within the minimum services specification, these services may still be captured within the shared market protocol.

C1.5.6 Evolving technologies and processes, and development of the market

Clause 7.13 of the NER currently sets out provisions related to evolving technologies and processes and development of the market. Among other things, this clause:

- provides that evolving technologies or processes that meet or improve the performance and functional requirements of Chapter 7 or facilitate the development of the market may be used if agreed between the relevant Market Participant, LNSP and AEMO, provided that it does not materially and adversely affect the interests of others;
- requires AEMO to, at least annually, publish a report on the application of evolving technologies and processes;
- requires AEMO to, at least annually, submit a report to the AEMC on the extent to which Chapter 7 of the NER may need to be amended to accommodate evolving technologies and processes or the development of the market;
- requires AEMO to, at least annually, publish a report on the impact of the introduction of retail competition on the wholesale market; and
- requires Ministers to, by 20 June 2009, conduct a review on type 5 and 6 metering installations and the metrology procedure.

The Commission considers that this clause is no longer necessary or appropriate in the context of the new framework set out in the draft rule.

368 See:
<http://www.aemc.gov.au/Markets-Reviews-Advice/Implementation-advice-on-the-Shared-Market-Protocol>

Under the draft rule, parties will be free to use any evolving technologies and processes that they wish, subject to the existing NER requirement, the requirements of the minimum services specification, and any future requirements of a shared market protocol. AEMO, LNSPs and retailers should not have a role under the NER in agreeing which evolving technologies and processes can be used by other parties.

The provision referring to a report on the impact of retail competition on the wholesale market is no longer required given the time that has now passed since the introduction of retail competition in most jurisdictions.

Accordingly, this clause has been removed in the draft rule.

C2 Opt out arrangements

Summary

This appendix outlines the opt out arrangements under the draft rule.

Under the draft rule, any new metering installation installed at a small customer's connection point must be a type 4 metering installation that meets the minimum services specification (subject to a limited AEMO exemption power, as discussed in Appendix C1).

Small customers will be able to opt out of having a type 4 metering installation that meets the minimum services specification installed as part of a "new meter deployment" (as defined in the draft rule) and retain their existing metering installation.

More specifically, the draft rule requires retailers to notify their small customers of a proposed replacement of the small customer's meter under a new meter deployment and provide them with the ability to opt out of having a new meter installed. The retailer is not required to comply with the notification and opt out process if it is authorised to undertake the new meter deployment under the terms of the customer's market retail contract.

Meters installed in all other scenarios, including for "maintenance replacements" (as defined in the draft rule), faults and new houses or developments, will need to meet the minimum services specification. The Commission considers that providing an ability for small customers to opt out in these scenarios is neither practical nor appropriate, and is not in the long term interests of consumers. Accordingly, the draft rule does not provide an opt out right in these circumstances.

C2.1 Introduction

This appendix outlines the circumstances in which small customers will be able to opt out of having a new meter installed and the corresponding requirements under the draft rule.

There are five potential scenarios where a small customer would have a new meter installed:

1. The consumer chooses a product or service that their existing meter cannot support, eg a time of use tariff or load control.
2. A retailer and its appointed Metering Coordinator (possibly in coordination with the LNSP or another party) deploys advanced meters to its consumers as part of a "new meter deployment", eg to achieve operational efficiencies.
3. A new meter is installed as part of a "maintenance replacement".

4. A meter needs to be replaced due to it being found faulty or otherwise not compliant with the requirements set out in the NER.
5. A new house or residential development is built and a meter needs to be installed to enable connection to the network.

In scenario 1, the consumer has initiated the change and, in turn, the installation of an advanced meter in order to receive the new product or service. In scenarios 2-4, the consumer has not initiated the change to their meter and in scenario 5 no existing meter is in place. It is therefore relevant to consider whether the consumer should be provided with the ability to 'opt out' of receiving a meter that meets the minimum services specification in each of these scenarios.

The remainder of this appendix sets out:

- current arrangements relating to the installation of meters for small consumers;
- the relevant elements of the COAG Energy Council's rule change request;
- stakeholder views including submissions to the consultation paper and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasoning for the draft rule.

C2.2 Current arrangements

Under the NER the Responsible Person (typically the DNSP for small customers) must, for each metering installation for which it is responsible, ensure that (amongst other things):

- the installation is provided, installed and maintained in accordance with the NER, the metrology procedure and other procedures authorised under the NER;³⁶⁹ and
- the components, accuracy and testing of metering installations complies with the requirements of the NER, metrology procedure and other procedures authorised under the NER.³⁷⁰

The NER and metrology procedure establish minimum requirements for meters to enable, among other things, the accurate collection of metering data for billing and settlement purposes.

The NER do not generally prevent a Responsible Person from installing or altering a metering installation to exceed these minimum requirements. Some jurisdictions have implemented their own regulatory requirements beyond the minimum requirements

³⁶⁹ Current clause 7.2.5(d)(1) of the NER.

³⁷⁰ Current clause 7.2.5(d)(2) of the NER.

set out in the NER and the metrology procedure for the specification of meters to be installed by the Responsible Person.

The remainder of this section sets out the current arrangements for the installation of a meter under each scenario.

C2.2.1 Scenario 1: Consumer takes up a product or service that requires a new meter to be installed

A consumer's decision to take up a new product or service that requires a new meter to be installed is given effect under a contract between the consumer and their retailer. There is currently no requirement under the NER or NERR for a retailer to give their customer an ability to opt out of the installation of a new meter to enable the product or service.³⁷¹

C2.2.2 Scenario 2: New meter deployment

The NER does not explicitly prohibit retailers from deploying advanced metering to residential and small business premises. However, as discussed in Appendix D2, uncertainty around the exit fee payable to the DNSP for regulated meters³⁷² and the previous bundling of metering charges with distribution use of system charges by DNSPs has hindered retailers' business case to do so to date. As in scenario 1, there is currently no NER or NERR requirement for the retailer to provide its customer with the ability to opt out of the installation of an advanced meter in these circumstances.³⁷³

C2.2.3 Scenario 3: Maintenance replacement³⁷⁴

The Responsible Person must arrange for testing to be carried out to ensure that the metering installations for which it is responsible comply with the requirements set out in the NER, the metrology procedure and other procedures under the NER.

The Responsible Person must ensure that testing of a metering installation is carried out in accordance with the NER (notably, the requirements set out in current clause 7.6.1 and schedule 7.3) or in accordance with an asset management strategy that sets out an alternative testing practice and is approved by AEMO.³⁷⁵ In both cases, the Responsible Person must ensure that the testing of the metering installation is carried out in accordance with a test plan that has been registered with AEMO.³⁷⁶

³⁷¹ Specifically, small customers do not currently have ability to opt out in the way that is being proposed under the new meter deployment scenario.

³⁷² A regulated meter refers to a meter in respect of which the service of providing, installing and maintaining the meter is classified as a direct control service.

³⁷³ Specifically, small customers do not currently have ability to opt out in the way that is being proposed under the new meter deployment scenario.

³⁷⁴ Note that the term 'maintenance replacement' is not defined in the current rules.

³⁷⁵ Current clause S7.3.1(c)(1)-(2) of the NER.

³⁷⁶ Current clause S7.3.1(c)(3) of the NER.

The Responsible Person may arrange for a replacement of meters following sample testing of meter populations. If testing shows that the accuracy of a metering installation does not comply with the requirements of the NER, the Responsible Person must advise AEMO and arrange for the accuracy of the metering installation to be restored in a timeframe agreed with AEMO.³⁷⁷ In some cases, the entire population or sub-population of meters will be replaced. DNSPs, as the Responsible Person for the majority of small customers, currently replace, on average, around 0.3-3 per cent of their total meter fleets each year under a maintenance replacement.³⁷⁸

The NER does not explicitly require the Responsible Person to notify a consumer that their meter will be replaced as part of a maintenance replacement, or provide them with an ability to opt out of the specification of meter that will be installed. The new metering installation must meet the minimum requirements set out in the NER and any additional regulatory requirements established by jurisdictions.

However, meter replacement often requires an interruption to the consumer's supply of electricity. In most cases this will be a 'planned interruption', which is defined as "an interruption of the supply of energy for the planned maintenance, repair or augmentation of the transmission system; or the planned maintenance, repair or augmentation of the distribution system, including planned or routine maintenance of metering equipment; or the installation of a new connection or a connection alteration".³⁷⁹

The DNSP is required to notify the retail customer of the planned interruption at least four business days before the date of the interruption in the form specified in the NERR, and use its best endeavours to restore supply as soon as possible.³⁸⁰

C2.2.4 Scenario 4: Replacement due to fault

A "metering installation malfunction" is defined in the NER as the full or partial failure of the metering installation in which it does not:

- (a) meet the requirements of schedule 7.2 of the NER; or
- (b) record, or incorrectly records, energy data; or
- (c) allow, or provides for, collection of energy data.³⁸¹

The NER currently requires the Responsible Person to arrange for repairs to be made to:

³⁷⁷ Current clause 7.6.2 of the NER.

³⁷⁸ This is an approximate figure based on information provided by several DNSPs.

³⁷⁹ See rule 88 of the NERR.

³⁸⁰ Rule 90 of the NERR. This rule is a civil penalty provision.

³⁸¹ See Chapter 10 of the NER.

- a type 1, 2 or 3 metering installation to address a metering installation malfunction as soon as practicable but no later than two business days after being notified of the malfunction; and
- a type 4, 5, 6 or 7 metering installation to address a metering installation malfunction as soon as practicable but no later than 10 business days of being notified of the malfunction.³⁸²

For small customers, the majority of whom have a type 5 or 6 metering installation, replacement meters are installed by the Metering Provider that has been appointed by the LNSP (as the Responsible Person). DNSPs currently replace, on average, around 1-3 per cent of their total meter fleets each year for reasons related to failure or non-compliance.³⁸³

Generally, the consumer will continue to receive electricity even though their metering installation is faulty. An estimate of the consumer's electricity consumption will be made by the Metering Data Provider until a working meter is installed. The estimate is usually performed over a longer period than the time to replace the meter because in many cases the Metering Data Provider does not know when the fault occurred.

There is no explicit requirement in the NER for the Responsible Person to notify a consumer that their metering installation is faulty and will be replaced, or provide them with an ability to opt out of the specification of meter that is installed in fault scenarios. The new metering installation must meet the requirements in the NER and any additional regulatory requirements established by jurisdictions.

As noted in scenario 3, meter replacement often requires an interruption to the consumer's supply of electricity. In the majority of fault scenarios this will be characterised as a 'planned interruption', in which case the DNSP is required to notify the consumer at least four business days before the date of the interruption in the form specified in the NERR, and use its best endeavours to restore supply as soon as possible.

If the metering installation has failed due to physical damage that was considered dangerous (eg a meter fire) the DNSP may need to carry out an 'unplanned interruption'. In general terms, an unplanned interruption is defined as an interruption of the supply of energy to carry out unanticipated or unplanned maintenance or repairs in any case where there is an actual or apprehended threat to the safety, reliability or security of the supply of energy.³⁸⁴ In this case, the DNSP is required to make information about the interruption available to the consumer within 30 minutes

³⁸² Current clause 7.3.7(a) of the NER. Such requirements do not apply if an exemption has been obtained by the Responsible Person from AEMO under current clause 7.3.7 of the NER.

³⁸³ This is an approximate figure based on information provided by several DNSPs.

³⁸⁴ See rule 88 of the NERR.

of being advised of the interruption, or as soon as practicable, in the form specified in the NERR, and use its best endeavours to restore supply as soon as possible.³⁸⁵

C2.2.5 Scenario 5: New house or development

Under the NER, a Market Participant must ensure that there is a registered metering installation at a connection point before the Market Participant participates in the market in respect of that connection point.³⁸⁶ In the case of a new house or development, it is often the developer or builder who will organise connection to the network through the retailer or directly with the local DNSP.

The provision and installation of a meter currently forms part of the basic connection services provided by the LNSP. The DNSP will facilitate connection to the network by carrying out connection services and, as Responsible Person, providing and installing the metering installation through its Metering Provider. The ongoing provision of metering services is governed by the deemed standard connection contract between the LNSP and the consumer.³⁸⁷ In NSW, under the *Scheme for the Accreditation of Service Providers to Undertake Contestable Services*, a consumer may choose a service provider accredited under the scheme to carry out connection services and install a metering installation at the consumer's premises.³⁸⁸

A meter installed in a new house or development must meet the requirements in the NER and any additional regulatory requirements established by jurisdictions.

C2.3 Rule proponent's view

C2.3.1 Scenario 1: Consumer takes up a product or service that requires a new meter to be installed

The COAG Energy Council proposed that where a consumer takes up a product or service that requires their meter be replaced or upgraded, the retailer must:

- inform the consumer of any additional costs resulting from the consumer's request; and
- obtain the consumer's consent to the additional costs prior to proceeding with the change.³⁸⁹

³⁸⁵ Rule 91 of the NERR. The requirement to use best endeavours to restore supply as soon as possible is a civil penalty provision.

³⁸⁶ Current clause 7.1.2(a)(1) of the NER.

³⁸⁷ Schedule 2 of the NERR. This applies in NECF jurisdictions only.

³⁸⁸ Scheme for the Accreditation of Service Providers to Undertake Contestable Services made in accordance with the Electricity Supply (General) Regulation 2001 (NSW) and administered by NSW Trade and Investment.

³⁸⁹ COAG Energy Council, rule change request, October 2013, p29.

C2.3.2 Scenario 2: New meter deployment

The COAG Energy Council proposed that where a retailer initiates a change or upgrade to a meter, and this change has not been requested by the consumer, then it 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 them; or
- obtain the prior consent of the consumer where the change in meter results in changes to the costs charged to the consumer or the services available to them.³⁹⁰

C2.3.3 Scenarios 3-5

The rule change request proposes that jurisdictions should be able to define the functions of meters that are installed in 'new and replacement'³⁹¹ situations and whether these meters must meet, or be capable of meeting, the national smart meter minimum functionality specification.³⁹²

The rule change request proposes that a jurisdiction may require that new and replacement metering installations provide some, all or different functions to those outlined in the minimum functionality specification, and that these provisions would be specified through the jurisdictional material in the metrology procedure.

C2.4 Stakeholder views

C2.4.1 Scenario 1: Consumer takes up a product or service that requires a new meter to be installed

Stakeholders did not comment on this scenario in submissions to the consultation paper.

C2.4.2 Scenario 2: New meter deployment

In submissions to the consultation paper, several stakeholders expressed support for the COAG Energy Council's proposed approach.³⁹³ These stakeholders indicated support for there being a requirement on retailers to obtain the consumer's explicit

³⁹⁰ COAG Energy Council, rule change request, October 2013, p29.

³⁹¹ The Commission's interpretation of the rule change request is that 'new and replacement' situations cover scenarios 3-5 in this draft determination.

³⁹² COAG Energy Council, rule change request, October 2013, p16.

³⁹³ EnerNOC, submission on consultation paper, p2; SA Power Networks, submission on consultation paper, p6; CUAC, submission on consultation paper, p1.

informed consent³⁹⁴ for the deployment where it would result in changes to the charges or services in the customer's contract, or its ability to use energy.³⁹⁵

However, other stakeholders considered that a requirement to obtain explicit informed consent, or 'opt in'³⁹⁶ arrangements more broadly, would be costly and onerous for both retailers and consumers.³⁹⁷

Several stakeholders supported there being an ability for consumers to 'opt out'³⁹⁸ of receiving an advanced meter under a new meter deployment.³⁹⁹ These stakeholders considered that an opt out arrangement is more appropriate than an opt in arrangement where there is no change to the consumer's metering costs or services available to them.⁴⁰⁰

EWON indicated support for an opt out approach as a means of achieving greater penetration of advanced meters, but suggested that additional consumer safeguards would be needed to ensure that the consumer is clearly advised of their ability to opt out and provided with sufficient information to make an informed decision.⁴⁰¹ ERM Power considered that an opt out provision, if adopted, should be designed to ensure that consumers have sufficient opportunity to make an informed decision without excessively delaying the benefits enabled by the uptake of advanced meters.⁴⁰²

Secure Australasia did not favour opt in or opt out arrangements, considering that this would inhibit the uptake of more advanced metering.⁴⁰³

394 Explicit informed consent is defined in section 39 of the NERL. In general terms, explicit informed consent is consent given by a small customer to a retailer where the retailer, or a person acting on behalf of the retailer, has clearly, fully and adequately disclosed all matters relevant to the consent of the customer, and the customer gives their consent to the relevant transaction in writing, verbally (in way that can be verified) or by electronic communication.

395 AGL, submission on consultation paper, p6; AER, submission on consultation paper, p10; CUAC, submission on consultation paper, p1; Metropolis, submission on consultation paper, p6; ATA and other consumer groups, submission on consultation paper, p4.

396 'Opt in' refers to where the prior consent of the consumer must be obtained by the retailer to make a change or upgrade the meter

397 EDMI, submission on consultation paper, p9; Simply Energy, submission on consultation paper, p7; Lumo Energy, submission on consultation paper, p5; Vector, submission on consultation paper, p10.

398 Opt out refers to where the consumer must be informed of the change or upgrade to the meter and given an opportunity to refuse the change/upgrade. If the consumer does not opt out within a prescribed period, the retailer can proceed with the change/upgrade.

399 EDMI, submission on consultation paper, p9; CUAC, submission on consultation paper, p1; Lumo Energy, submission on consultation paper, p5; ATA and other consumer groups, submission on consultation paper, p4.

400 AGL, submission on consultation paper, p6; Metropolis, submission on consultation paper, p6; Origin Energy, submission on consultation paper, p5; ERAA, submission on consultation paper, p3.

401 EWON, submission on consultation paper, p2.

402 ERM Power, submission on consultation paper, p13.

403 Secure Australasia, submission on consultation paper, p2.

C2.4.3 Scenarios 3-5

In submissions to the consultation paper, most stakeholders did not support the COAG Energy Council's proposal that jurisdictions determine the functionality of meters installed in 'new and replacement' scenarios. Their concerns were that this would:

- compromise national consistency and interoperability;
- put investment at risk;
- stifle innovation and competition;
- increase costs; and
- limit economies of scale.⁴⁰⁴

The ATA was strongly opposed to the proposal, suggesting that allowing jurisdictions to decide on the functionality of new and replacement meters would be a backwards step in the context of broader NEM reforms.⁴⁰⁵ Alinta Energy was of the view that the objective and costs of jurisdictional differences need to be justified and only permitted where there is a demonstrable need or market failure.⁴⁰⁶ Vector proposed that jurisdictions should be able to mandate service outcomes, but not the technical specifications of meters.⁴⁰⁷ EDMI recognised that multiple minimum specifications would lead to multiple compliance standards, but suggested that jurisdictions should not be required to apply the national specification.⁴⁰⁸

Several DNSPs expressed support for jurisdictional provisions on new and replacement meters.⁴⁰⁹ Some were of the view that, while a national approach to metering is preferred, jurisdictional arrangements may be appropriate given the different characteristics of each jurisdiction.⁴¹⁰ The NSW DNSPs also supported the proposal, provided that essential network services were included in the jurisdictional specifications.⁴¹¹

⁴⁰⁴ Vector, submission on consultation paper, p19; EDMI, submission on consultation paper, p15; Landis+Gyr, submission on consultation paper, p2; Calvin Capital, submission on consultation paper, p2; Secure Australasia, submission on consultation paper, p2; ERM Power, submission on consultation paper, p3; ERAA, submission on consultation paper, p5; Simply Energy, submission on consultation paper, p10; AGL, submission on consultation paper, p11; Origin Energy, submission on consultation paper, p9; Lumo Energy, submission on consultation paper, p8; ESAA, submission on consultation paper, p2; Metropolis, submission on consultation paper, p9; ATA and other consumer groups, submission on consultation paper, p3.

⁴⁰⁵ ATA and other consumer groups, submission on consultation paper, p3.

⁴⁰⁶ Alinta Energy, submission on consultation paper, p2.

⁴⁰⁷ Vector, submission on consultation paper, p19.

⁴⁰⁸ EDMI, submission on consultation paper, p15.

⁴⁰⁹ Energex, submission on consultation paper, p7; Victorian DNSPs, submission on consultation paper, p23; SA Power Networks, submission on consultation paper, p11.

⁴¹⁰ ENA, submission on consultation paper, p32.

⁴¹¹ NSW DNSPs, submission on consultation paper, p16.

Landis+Gyr was of the view that advanced meters should be installed in a new and replacement situations to reach a critical mass. However, it supported the ability for consumers to opt out in these scenarios so as to enable business operational efficiencies without compromising consumers' empowerment.⁴¹²

Metropolis considered that DNSPs should be required to provide advance notice of required meter replacements to support competition.⁴¹³

C2.4.4 Outcomes of the fifth stakeholder workshop

The fifth stakeholder workshop focused on whether small customers should have an ability to opt out of having an advanced meter installed at their premises in scenarios 2-5. The workshop considered the option of not introducing any ability for small customers to opt out in these scenarios because:

- there may be benefits in a consistent approach between the scenarios to avoid a situation where a consumer exercises its ability to opt out under a new meter deployment, but has no ability to do so if the meter is later found to be faulty; and
- introducing an ability to opt out in a way that makes it an enforceable and meaningful choice in scenarios 3-5 would require significant changes to the regulatory framework and may be difficult to achieve in practice.

Stakeholders at the workshop presented mixed views on this proposal. Several jurisdictional government representatives expressed concern about not providing small customers with an ability to opt out under scenarios 2-5.

Some retailers explained their desire to make sure that their consumers do not feel forced to accept an advanced meter as part of a new meter deployment, and therefore considered an opt out provision to be appropriate in this scenario. A number of retailers supported opt out arrangements in new meter deployment, maintenance replacement and new scenarios, but acknowledged that providing an opt out in fault scenarios would be difficult in practice.

Several other stakeholders suggested that consumers should be able to opt out of the services that the meter is capable of supporting, not the meter itself.

C2.5 Commission's analysis

The Commission's draft determination in relation to opt out arrangements distinguishes between scenarios where the consumer's meter is still functional and scenarios where it needs to be replaced.

⁴¹² Landis+Gyr, submission on consultation paper, p2.

⁴¹³ Metropolis, submission on consultation paper, p9.

In the new meter deployment scenario (scenario 2), the existing meter is still functional, complies with the requirements of the NER and would otherwise not need to be replaced. Under the draft rule, in this scenario a retailer is able to deploy advanced meters to its small customers, but those customers are able to opt out of the deployment and retain their existing meter. This is a right that is not currently provided under the NER or NERR.

In scenarios 3-5, it is necessary or prudent to install a new meter in order for the metering installation to be compliant with the minimum requirements set out in the NER, including to ensure data integrity and the safety of the metering installation. The draft rule does not allow small customers to opt out of receiving a meter that meets the minimum services specification in these scenarios. This approach represents a continuation of current arrangements whilst recognising advances in technology.

Providing an ability to opt out in scenarios 3-5 would be neither practical nor appropriate. The Commission considers that a better way to protect consumers is through their ability to choose whether to take up any of the products and services that are enabled by the advanced meter, rather than choosing the meter itself. Further, providing an ability to opt out in these scenarios may lock in old technologies that are not in the long term interests of consumers.

In any scenario, consumers will continue to have the ability to choose the products and services that they consider best meet their needs. The provision of an advanced meter will not dictate consumers' choice in the products and services they receive, but rather may expand the range of products and services available to them. For example, advanced meters allow for more granular and useful energy usage information and can provide more pricing options for consumers. Advanced meters can also enable DNSPs to apply network tariff structures that send signals to consumers about the network costs associated with their electricity use.⁴¹⁴

Jurisdictions have powers to protect consumers if their concerns relate to a consumer's choice in products and services. For example, the NERL contains a provision that allows jurisdictions to require retailers to offer particular standing offer tariff structures, eg a flat tariff, to small customers with an interval meter.⁴¹⁵ The COAG Energy Council is also proposing changes to the NERR to provide additional consumer protections on the use of load control and supply capacity control.⁴¹⁶

The Commission's analysis of each scenario and the approach to each scenario under the draft rule is set out in detail below.

⁴¹⁴ See AEMC, National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014, rule determination, 27 November 2014.

⁴¹⁵ Section 22 of the NERL.

⁴¹⁶ See: <http://www.scer.gov.au/workstreams/energy-market-reform/demand-side-participation/smart-meters/consumer-protections>

C2.5.1 Scenario 1: Consumer takes up a product or service that requires a new meter to be installed

This scenario is already permitted under the NERR. If a small customer chooses to take up a product or service that requires a new meter to be installed (eg direct load control) this arrangement would be governed by the consumer's contract with the retailer. There is currently no ability under the NER or NERR for the consumer to opt out of the installation of a new meter to enable the product or service.⁴¹⁷ Consequently, no changes to the NERR are proposed.

C2.5.2 Scenario 2: New meter deployment

The draft rule introduces the following definition into the NERR:

“new meter deployment means the replacement of the existing electricity *meter* of one or more small customers which is implemented by a retailer other than where the replacement is:

- (a) at the request of the relevant small customer or to enable the provision of a product or service the customer has agreed to acquire;
- (b) a *maintenance replacement*; or
- (c) as a result of a *metering installation malfunction*.”

The Commission considers that any arrangements supporting a new meter deployment should:

- be simple and practical from a consumer’s perspective;
- promote consumer participation and confidence in the retail and energy services markets;
- support innovation and investment in the provision of metering and related services; and
- minimise regulatory costs.

The Commission considers that a retailer should be able to deploy advanced metering to its consumers where it sees a business case to do so, but that consumers should be provided with an ability to opt out of the deployment and retain their existing meter. Under a new meter deployment, the existing meter is still functional, complies with the requirements of the NER and would otherwise not need to be replaced. There is no technical reason why the meter should be replaced (as there is in fault or maintenance replacement situations), so it will be up to the relevant retailer to communicate the benefits of having a more advanced meter to the consumer.

⁴¹⁷ Specifically, small customers do not currently have ability to opt out in the way that is being proposed under the new meter deployment scenario.

The "new meter deployment" definition will cover situations where a retailer seeks to replace a small customer's existing type 6 meter installation or type 5 metering installation with a meter that meets the minimum services specification (subject to the exceptions listed in the definition above). It will also apply to situations where a retailer proposes to replace an existing, working meter that meets the minimum services specification with a new advanced meter, for example where the new meter has additional capabilities that exceed the minimum services specification.

The Commission considers it to be appropriate that the opt out arrangements apply in all circumstances where a meter is being replaced as part of a "new meter deployment". In these circumstances, consumers should be notified of the proposed replacement of their meter and any upfront charges that will apply under their retail contract as a result of the deployment, and be given an ability to opt out.

Notification process

The draft rule requires retailers to give their small customers notification of a proposed deployment and provide them with the ability to opt out of having a meter that meets the minimum services specification installed.⁴¹⁸

The minimum notification requirements are set out in Table C2.1.

Table C2.1 Minimum notification requirements for a new meter deployment

Requirement	Reasoning
<p>The retailer must provide two prior written notices to its customer:</p> <ul style="list-style-type: none"> • the first no earlier than 60 business days and no later than 20 business days before the proposed installation; and • the second no earlier than 10 business days after the first notice and no later than 10 business days before the proposed installation. 	<p>This requirement gives a reasonable amount of time for the retailer to inform the consumer of the proposed replacement of their meter as part of the deployment, and for the consumer to make a decision about whether to opt out. The first notice must be sent no earlier than 60 business days prior to the installation due to, among other factors, the risk that if notices are sent a long time prior to the installation the customer at the address may change between the time of the first notice and the time of the installation.</p>
<p>The customer can opt out at any time after receiving the first notice, up until the date specified in the notification (last opt out date). The last opt out date must be no earlier than three business days before the expected date on which the retailer proposes to replace the customer's meter.</p>	<p>Allowing the customer to opt out at any time following notification maximises the opportunity they have to opt out.</p>

⁴¹⁸ Rule 59A of the NERR in the draft rule.

Requirement	Reasoning
<p>Each written notice must contain at least the following content:</p> <ul style="list-style-type: none"> • that the customer may opt out of having its meter replaced as part of the proposed deployment by informing the retailer in writing, electronically or by telephone (and any other method made available by the retailer) at any time up to the date specified in the notice; • the last day on which customers may exercise their right to opt out; • any upfront charges the consumer will incur under its retail contract as a result of the new meter deployment; and • the expected date and time on which the retailer proposes to replace the customer's meter; and • the retailer's contact details. 	<p>Regulating the minimum content of the notices will ensure that consumers are informed of their right to opt out and how to exercise this right.</p>

This notification process provides a consistent and enforceable mechanism for retailers to notify consumers of a proposed deployment and their ability to opt out, and for consumers to make a decision that is consistent with their preferences.

The draft rule provides that the retailer is not required to comply with the notification and opt out process if the retailer is authorised to undertake the new meter deployment under the terms of the customer's market retail contract.

The Commission explored the possibility of requiring retailers to communicate any price changes expected as a result of having an advanced meter installed and any price consequences of opting out. For example, the Smart Grid Smart City trial found that the cost to the consumer of retaining a manually read meter will increase over time as more advanced meters are deployed, particularly if the consumer is one of few in their area requiring a manual meter read.⁴¹⁹

Providing consumers with information about the costs of having an advanced meter compared with the costs of retaining an existing meter might be useful for the consumer in deciding whether to opt out. However, under the draft rule retailers are not required to do this because:

- Retailers will have an incentive to communicate the benefits of any proposed deployment, which may include an assessment of possible price impacts if a consumer chooses to opt out and retain their existing meter.

⁴¹⁹ Smart Grid, Smart City, National cost benefit assessment, July 2014, p196.

- It will be difficult for the retailer to quantify future price impacts (for example, potential price increases to cover changes to manual meter reading costs) in a way that accurately informs the consumer’s decision to allow the installation or opt out.
- Retailers may have some flexibility to change the prices of their services within an existing retail contract.⁴²⁰ While providing the consumer with information on the relative costs of each meter type may be useful for the consumer in deciding whether to opt out, it does not prevent retailers from varying the price of this service in future (subject to the NERR and contract terms and conditions).⁴²¹ It is therefore unclear whether providing consumers with this information at the time of the proposed deployment will help them make a decision.

Installing a new meter often necessitates an interruption to the consumer’s electricity supply. DNSPs are currently required to notify small customers when supply is interrupted. An interruption to carry out a deployment of advanced meter would constitute a ‘planned interruption’, in which case the DNSP will be required to notify the customer at least four business days before the date of the interruption in a form specified in the NERR, and use its best endeavours to restore supply as soon as possible.⁴²² This arrangement has not been amended through the draft rule.

The draft rule inserts a new rule 91A in the NERR, which requires the Metering Coordinator and DNSP to assist each other and cooperate where the installation, maintenance, repair or replacement of metering equipment requires an interruption to supply at the customer's premises.

C2.5.3 Scenario 3: Maintenance replacement

The draft rule introduces the following definition into the NERR:

“maintenance replacement means the replacement of a small customer’s existing electricity *meter* by a retailer that is based on the results of sample testing of a *meter* population carried out in accordance with Chapter 7 of the NER:

- (a) which indicates that it is necessary or appropriate, in accordance with *good electricity industry practice*, for the *meter* to be replaced to ensure compliance with the *metering rules*; and

⁴²⁰ Retailers can change their standing offer prices under a standard retail contract once every 6 months (see Schedule 1, clause 8.2(b) of the NERR). Changes to market retail contracts can only occur in accordance with the terms and conditions set out in the contract.

⁴²¹ Note that from 1 May 2015, retailers operating in NECF jurisdictions will be required to better inform consumers about how prices may change when they enter into a market retail contract, in particular by disclosing whether prices can vary and when the consumer will be notified of any price variation. See AEMC, National Energy Retail Amendment (Retailer price variations in market retail contracts) Rule 2014, rule determination, 23 October 2014.

⁴²² Rule 90 of the NERR.

- (b) details of which have been provided to the retailer under Chapter 7 of the NER, together with the results of the sample testing that support the need for the replacement.”

This definition is introduced for the purposes of establishing an exception in the definition of a "new meter deployment", with the effect that the opt out requirements do not apply to maintenance replacements.

The Commission considers that small customers should not be able to opt out of receiving a meter that meets the minimum services specification in maintenance replacement scenarios.

This is consistent with current arrangements. Currently, small customers do not have the ability under the NER or NERR to opt out of having a meter that meets the requirements of the NER installed if their existing meter is signalled for replacement as a result of testing.⁴²³

Providing an ability for small customers to opt out in these circumstances would require additional regulation to provide consumers with a meaningful and enforceable choice in the period between the meter being recognised as needing replacement and the installation of a new meter.

An ability to opt out of a maintenance replacement is likely to create confusion and may result in poorer outcomes for consumers. If an opt out were provided, consumers would only be able to retain their existing meter until it fails, at which point it would be replaced with an advanced meter.

Opting out of a maintenance replacement would be likely to result in more meters failing. This would increase costs for Market Participants and consumers, and may result in poorer service for consumers, who would be without a working meter and billed on an estimate of their electricity consumption until the failed meter was replaced.

Under the draft rule, a Metering Coordinator will be subject to the same obligations in respect of meter testing as currently apply to Responsible Persons under the NER and procedures under the NER.⁴²⁴ This responsibility will remain with the DNSP where it becomes the initial Metering Coordinator under the transitional arrangements.

Under the draft rule, where the Metering Coordinator or AEMO undertakes testing of a metering installation under clause 7.9.1 of the NER, the Metering Coordinator or AEMO (as the case may be) must:

- inform the Financially Responsible Market Participant that testing has been undertaken; and

⁴²³ Specifically, small customers do not currently have ability to opt out in the way that is being proposed under the new meter deployment scenario.

⁴²⁴ Note that AEMO may change aspects of the procedures to accommodate the introduction of the Metering Coordinator role.

- make the test results available in accordance with clauses 7.9.1(h) and (i) and, on request of the Financially Responsible Market Participant, to the Financially Responsible Market Participant.

C2.5.4 Scenario 4: Replacement due to a fault

The Commission considers that small customers should not be able to opt out of receiving a meter that meets the minimum services specification in fault scenarios.

This is consistent with current arrangements. Small customers do not currently have the ability under the NER or the NERR to opt out of having a meter that meets the requirements of the NER installed if their existing meter is found to be faulty.⁴²⁵

The NER currently requires the Responsible Person to arrange for repairs to be made to a type 1-3 metering installation as soon as practicable but no later than two business days after being notified of the malfunction, and a type 4-7 metering installation as soon as practicable but no later than 10 business days after being notified of the malfunction.⁴²⁶

Providing small customers with an ability to opt out could create a time delay between the fault occurring and a new meter being installed. As faults cannot be anticipated, providing consumers with a notice period in which they could opt out would necessarily extend the period between the when the fault occurs and the installation of a new meter. If the opt out provisions under the new meter deployment scenario were replicated for fault scenarios, this delay would be at least 20 business days.

This could increase the financial risk to the retailer if the consumer's electricity consumption is not being measured, and may cause the consumer to be billed on an estimate of their energy consumption over a longer period. This could lead to higher costs for all consumers and more estimated meter reads, neither of which is in the long term interest of consumers. The Commission considers that a working meter should be installed as soon as possible and therefore consumers should not have the ability to opt out in fault scenarios.

The Commission explored the possibility of allowing the retailer to determine the consumer's preference before the fault occurs. This would involve retailers providing prior notice to their customers of their ability to opt out of receiving a meter that meets the minimum services specification in the event that their existing meter is found to be faulty. Following feedback from several retailers and further analysis, the Commission considers that this is not a practical solution because:

⁴²⁵ Specifically, small customers do not currently have ability to opt out in the way that is being proposed under the new meter deployment scenario.

⁴²⁶ Current clause 7.3.7(a) of the NER.

- it would require the retailer to notify all of their customers, at a potentially significant cost, of their ability to opt out in a scenario that, in most cases, is unlikely to occur;⁴²⁷
- it will be difficult for consumers to make an informed decision about whether to exercise their opt out right in these circumstances; and
- this requirement would be difficult to implement and enforce.

The Commission considers that a requirement to provide an opt out is neither workable nor appropriate in fault situations. Additional regulation would be required to provide small customers with an ability to opt out in a way that is meaningful and enforceable.

As the initial Metering Coordinator for type 5 and 6 metering installations, the DNSP can continue to carry out repairs to a metering installation as part of its regulated business where the meter does not need to be replaced.⁴²⁸ The arrangements outlined below refer only to fault scenarios where the meter needs to be replaced rather than repaired.

As noted above, the Metering Coordinator has certain obligations under the draft rule in relation to notifying other parties of test results. Where the DNSP is the Metering Coordinator for a type 5 or 6 metering installation and the meter is found to be faulty, the DNSP's appointment or deemed appointment (as the case may be) as Metering Coordinator for the connection point under the transitional arrangements will cease⁴²⁹ and the retailer will need to appoint a new Metering Coordinator to arrange the installation of a new meter.

The Commission proposes to retain the existing timeframes within which the Metering Coordinator (previously the Responsible Person) must arrange for repair or replacement of a faulty metering installation.⁴³⁰ The Commission recognises that the requirement for the DNSP (where it is the initial Metering Coordinator under the transitional arrangements) to notify the retailer and for the retailer to appoint a new Metering Coordinator may introduce a time lag into the process. However, it is reasonable to expect that retailers will prepare for fault scenarios by putting in place arrangements with DNSPs and other parties undertaking the Metering Coordinator

⁴²⁷ As noted in section C2.2.4, DNSPs currently only replace, on average, around 1-3 per cent of their total meter fleets each year for reasons related to failure or non-compliance.

⁴²⁸ Provided that the services for these meters continue to be classified by the AER as direct control services.

⁴²⁹ If the metering installation of the small customer is faulty, a new metering installation that meets the minimum services specification will need to be installed under clause 7.8.3 of the NER in the draft rule. If the installation and maintenance of this new metering installation is not classified as a direct control service, the retailer will need to appoint a Metering Coordinator in respect of that installation. Subject to the distribution ring-fencing guidelines to be developed by the AER under rule 6.17.2 of the NER in the draft rule, this may be a Metering Coordinator business of the DNSP or another party.

⁴³⁰ See clause 7.8.10(a) of the NER in the draft rule.

role before the new Chapter 7 of the NER commences. This will enable it to arrange installation of a new meter within the existing regulated timeframes.

C2.5.5 Scenario 5: New house or development

The Commission considers that metering installations for small customers must meet the minimum services specification where a new house or development is built. Where a metering installation is installed at a new connection for a small customer, the Metering Provider must ensure that the metering installation is a type 4 metering installation that meets the minimum services specification, unless the Metering Coordinator has obtained an exemption in respect of that connection point.⁴³¹

Providing an ability to opt out in this scenario is not practical, particularly in large developments such as new apartment buildings. In these cases the developer will arrange connection and metering arrangements for each apartment. It is not the intent of this rule change to provide developers with an ability to install meters in residential developments that do not meet the minimum services specification, particularly where they may have an incentive to arrange the lowest cost solution, eg accumulation meters, which are unlikely to provide benefits to consumers over the long term.

C2.5.6 Arrangements in Victoria

This opt out requirement is contained in amendments to the NERR in the draft rule. The NERR does not currently apply in Victoria because it has not adopted the NECF.

Accordingly, this opt out right will not apply in Victoria unless it adopts the NERR at a later date. The Victorian Government and Essential Services Commission (Victoria) should consider whether to make amendments to the Electricity Retail Code for consistency with the amendments to the NERR contained in the draft rule. If made, these amendments would provide for Victorian consumers to opt out of receiving a new meter that meets the minimum services specification where their retailer plans to replace their existing working meter, including advanced meters which were deployed under the AMI Program.

⁴³¹ Under clause 7.8.4 of the draft rule, a Metering Provider AEMO may exempt a Metering Coordinator from complying with the requirement to install a type 4 metering installation that meets the minimum services specification in respect of a connection point if the Metering Coordinator demonstrates to AEMO's satisfaction that there is no existing telecommunications network to enable remote access to the metering installation at that connection point.

C3 Meter reversion

Summary

This appendix outlines the Commission's approach to meter reversion under the draft rule.

As discussed in Appendix C1, any new or replacement metering installation, installed at a small customer's premises, will be required to meet the minimum services specification (subject to a limited AEMO exemption power). The draft rule therefore prevents a Metering Coordinator from replacing an existing metering installation at a small customer's connection point with one that does not meet the minimum services specification.

Accordingly, an explicit "no reversion" clause preventing an interval meter being replaced with an accumulation meter is not necessary and is not contained in the draft rule.

The Commission is of the view that these arrangements will support investment in advanced metering and the services enabled by those meters. Allowing Metering Coordinators to remove meters that meet the minimum services specification and replace them with meters that do not meet that specification would not be in the long term interests of consumers or the market, and would undermine the benefits of having a minimum services specification.

C3.1 Introduction

This appendix outlines the Commission's draft determination with respect to meter reversion requirements in the draft rule.

A reversion policy clarifies whether an existing meter can be replaced with one of a lower functionality. For example, a reversion policy could prevent a Metering Coordinator from replacing an interval meter with an accumulation meter.

The remainder of this appendix sets out:

- current arrangements in relation to reversion policies;
- the relevant elements of the COAG Energy Council's rule change request;
- stakeholder views, including submissions to the consultation paper and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasoning for the draft rule.

C3.2 Current arrangements

The NER currently states that a Responsible Person cannot replace a device capable of producing interval data with a device that only produces accumulation data, unless the metrology procedure permits it.⁴³²

Jurisdictions can amend the application of the metrology procedure in relation to type 5, 6 or 7 metering installations, including the replacement of a device capable of producing interval energy data with a device that only produces accumulated energy data.⁴³³ The metrology procedure outlines the jurisdictional variations under this rule, the majority of which prevent a Responsible Person from replacing an interval meter with an accumulation meter.⁴³⁴

C3.3 Rule proponent's view

The COAG Energy Council proposes to maintain the current arrangement that allows jurisdictions to determine their own reversion policies through the metrology procedure.⁴³⁵

C3.4 Stakeholder views

There were few comments on this proposal in submissions to the consultation paper. AGL supported the establishment of a no reversion policy to mitigate the risk of meter displacement.⁴³⁶ The ESAA was of the view that consumers should not have the option to revert to a meter with lower functionality, considering that no reversion would ensure progression toward a more efficient system and help minimise asset stranding costs.⁴³⁷

Stakeholders discussed the issue at the fifth stakeholder workshop. The ENA expressed a concern that the availability of network services enabled by advanced meters would be compromised if consumers were able to revert from a meter that met the minimum services specification. The South Australian Government pointed out that it often receives requests from consumers who had a certain meter installed in error, and that it might be important to allow reversion to placate consumers who objected to having an advanced meter installed at their premises. Metropolis indicated that reversion is not always straightforward, as the functionality and services enabled by meters cannot be easily compared like-for-like.

⁴³² Current clause 7.2.5(d)(7) of the NER.

⁴³³ Current clause 7.14.2(d)(1) of the NER.

⁴³⁴ Section 2.6 of the NEM metrology procedure.

⁴³⁵ COAG Energy Council, rule change request, October 2013, p17.

⁴³⁶ AGL, submission on consultation paper, p11.

⁴³⁷ ESAA, submission on consultation paper, p2.

C3.5 Commission's analysis

The Commission is of the view that allowing small customers to revert from a meter that meets the minimum services specification to a meter that does not meet that specification would not be in the long term interests of consumers.

It would threaten the investment made by parties to install and access the services enabled by advanced meters. It would also remove the benefits to consumers that are available from advanced meters. This is likely to result in increased costs to the consumer and less choice of services. The provision of an advanced meter will not dictate consumers' choice in the products and services they receive, but rather may expand the range of products and services available to them to choose from.

The draft rule requires any new or replacement metering installations for small customers to meet the minimum services specification.⁴³⁸ Consequently, small customers will not be able to revert from a meter that meets the minimum services specification to a meter that does not meet that specification.

The draft rule does not contain an explicit "no reversion" provision stating that a consumer with an interval meter cannot revert to an accumulation meter. Such a clause is unnecessary, because the provisions regarding the minimum services specification have a similar effect and would prevent the installation of any new accumulation meters for small customers. The existing rules already prevent the installation of accumulation meters for large customers.

The draft rule does not amend the existing provisions regarding jurisdictional material in the metrology procedure, which allow jurisdictions to specify guidelines for the replacement of a device capable of producing interval data with a device that is only capable of producing accumulation data.⁴³⁹ Jurisdictions can only include such material in relation to type 5, 6 and 7 metering installations.⁴⁴⁰ No new type 5 or 6 metering installations can be installed under the draft rule.⁴⁴¹ Any jurisdictional guidelines are therefore unlikely to be necessary and will not be relevant to meters that are installed after the new Chapter 7 of the NER commences.

438 Clause 7.8.3(a) of the NER in the draft rule.

439 This clause is renumbered as clause 7.16.4 in the draft rule.

440 Type 7 metering installations relate to uses such as public lighting and are not relevant in this context.

441 All new metering installations for small customers will be classified as type 4 (remotely read interval meters) or type 4A metering installations (where an AEMO exemption allows them to be manually read interval meters).

D Network regulatory arrangements

Overview of Appendix D

This appendix sets out the arrangements under the draft rule in relation to the following network regulatory arrangements that may be required to support the competitive provision of metering, including:

- D1 Unbundling of metering charges from distribution use of system charges.
- D2 Cost recovery for regulated meters.
- D3 Ring-fencing arrangements for a DNSP taking on the Metering Coordinator, Metering Provider and/or Metering Data Provider role.
- D4 Arrangements for a DNSP to access the network-related services enabled by advanced meters.

D1 Unbundling of metering charges

Summary

This appendix outlines the Commission's draft determination in relation to the unbundling of metering charges from distribution use of system charges.

The draft rule does not amend the NER to require the AER to unbundle metering charges from distribution use of system charges, as was proposed in the rule change request.

The majority of charges for regulated metering services have been, or will be, unbundled from distribution use of system charges in recent or upcoming distribution regulatory determinations, without specific requirements in the NER. The Commission considers that it is appropriate that the AER continue to determine the classification of services and control mechanisms in accordance with the existing regulatory framework, rather than the rules being amended to specify a particular approach for metering services only.

The Commission's draft rule requires the LNSP to take on the Metering Coordinator role for type 7 metering installations.⁴⁴² The direct relationship that currently exists between the DNSP and the customer for the provision of type 7 metering services is not easily translated to the new competitive arrangements where it will be the responsibility of the retailer to appoint a Metering Coordinator. The Commission does not see value in introducing specific arrangements to allow other parties to provide type 7 metering services where there is no evidence of significant potential for competition in this space.

D1.1 Introduction

This appendix outlines the Commission's draft determination in relation to the unbundling of metering charges from distribution use of system charges. This appendix does not address the issue of whether metering charges should be separately identified on a consumer's retail bill, which is set out in Appendix B2.

This appendix covers:

- an overview of the current arrangements, including how metering charges are recovered by DNSPs;
- the COAG Energy Council's rule change request regarding the unbundling of metering charges from distribution use of system charges;
- stakeholder views on the consultation paper; and

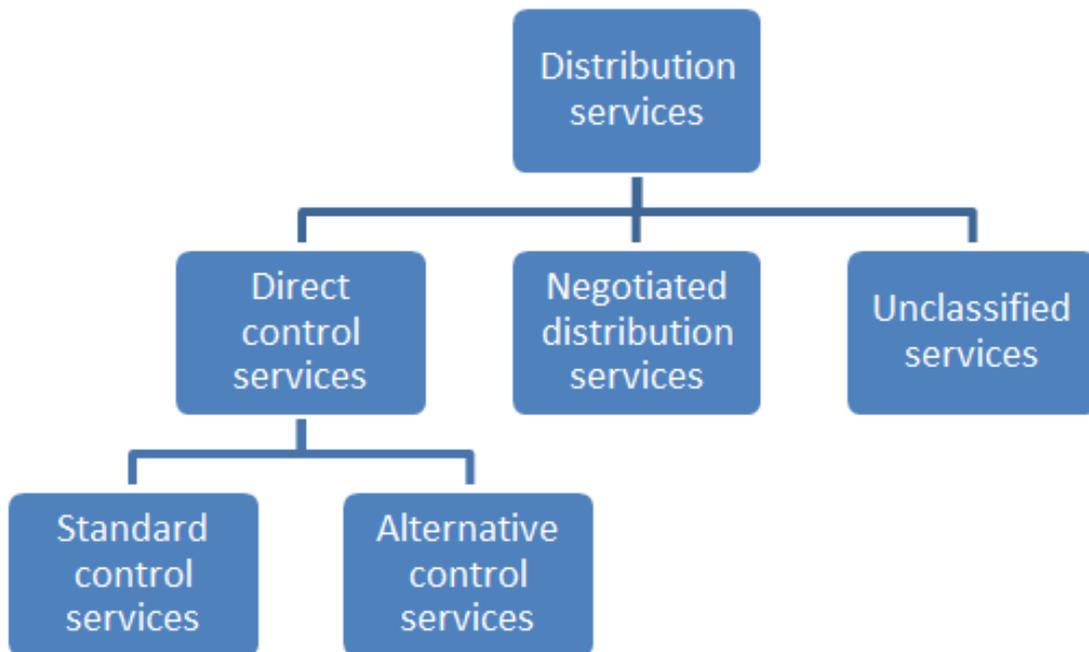
⁴⁴² Type 7 metering installations are not a physical meter but rather a reconciliation between DNSPs and the users of that service using an algorithm to determine the throughput of energy, eg for public lighting and traffic lights.

- the Commission’s analysis of the key issues and reasons for its draft rule.

D1.2 Current arrangements

As part of the regulatory determination process, the AER determines how, if at all, the services provided by a DNSP should be regulated. Figure D1.1 outlines the different classes of distribution services for the purposes of economic regulation under the NER.

Figure D1.1 Classification of distribution services



The AER may classify the services provided by a DNSP as either a direct control service or a negotiated distribution service.⁴⁴³ If the AER decides not to classify a distribution service, the service is not regulated under the NER, ie it is unclassified.⁴⁴⁴ The classification process determines how the costs of providing a regulated service will be recovered by the DNSP during a regulatory control period.

There are two categories within direct control services - standard control services and alternative control services. The AER classifies a service as a standard control service where it is central to electricity supply and is relied upon by most (if not all) consumers. The costs of providing standard control services are shared by all consumers. The AER classifies a service as an alternative control service where it is a customer-specific or customer-requested service that may have the potential to be provided on a competitive basis rather than exclusively by the DNSP. The costs of providing these services are charged only to consumers using the service.

⁴⁴³ Clause 6.2.1(a) of the NER.

⁴⁴⁴ With the exception of connection services under Chapter 5A, see note under clause 6.2.1 of the NER.

Negotiated services are those that the AER considers require a less prescriptive regulatory approach because parties have sufficient market power to negotiate the arrangements for their provision.⁴⁴⁵ The costs of providing these services are negotiated between the DNSP and the party wishing to receive the service in accordance with a framework set out in Chapter 6 of the NER.

In classifying a direct control service as a standard control or alternative control service, the AER must have regard to a number of factors, including:

- the potential for development of competition in the relevant market and how the classification might influence that potential; and
- the extent to which the costs of providing the relevant service are directly attributable to the person to whom the service is provided.⁴⁴⁶

If the AER classifies a service as a direct control service, it must then determine the means by which it will impose controls over the prices of and/or revenues derived from that service. This is referred to as the control mechanism.⁴⁴⁷

Most distribution services are classified as standard control services, and the revenue required to provide these services is recovered in full from consumers through distribution use of system charges.

D1.2.1 Economic regulation of type 5 and 6 metering services by the AER

Services provided with respect to type 5 metering installations and type 6 metering installations meters have generally been classified by the AER as a standard control service. This means that DNSPs are able to bundle charges for these metering services into the distribution use of system charge that all consumers pay, regardless of whether the consumer uses the service. If the AER changes the classification of a service from standard control to alternative control, charges for the service are unbundled from distribution use of system charges and only paid by those consumers using the service.

Figure D1.2 outlines the AER's current (C) and proposed (P) classification of metering services by type for DNSPs across the NEM.

445 AER, Final framework and approach for Energex and Ergon Energy, AER, April 2014, p9.

446 Clause 6.2.2(c) of the NER.

447 Clause 6.2.5 of the NER.

Figure D1.2 Classification of metering services⁴⁴⁸

	Type 1-4	Type 5-6		Type 7
		Installation	Provision, maintenance, meter reading and data services	
ACT (2014-19) ^P	Unregulated	Alternative Control	Alternative Control	Alternative Control
NSW (2014-19) ^P		Unregulated		Standard Control
Qld (2015-20) ^P		Alternative Control		
SA (2015-20) ^P	Negotiated*			Alternative Control
Tas (2012-17) ^C	Unregulated	Alternative Control		
Vic (2016-21) ^P	Unregulated (excludes advanced meters that were installed as part of the AMI program)	Unregulated: New type 5-6 meters.		Alternative Control
		Alternative Control: Existing type 5-6 meters and advanced meters installed under the AMI program.		

As the figure shows, type 5 and 6 metering services are already, or will be at the next regulatory reset, classified as alternative control services (or unregulated as is proposed for new type 5 and 6 metering installations in Victoria). This means that charges for these services are already, or will soon be, unbundled from distribution use of system charges NEM-wide.

The AER has moved to classify type 5 and 6 metering services as alternative control services because of growing evidence that they have the potential to be provided on a competitive basis, rather than solely by DNSPs. The AER also considers that reclassifying these services as alternative control services removes a barrier to consumers taking up an unregulated advanced metering service and is consistent with the intent of this rule change.⁴⁴⁹

⁴⁴⁸ Sources: ACT: AER, Stage 1 Framework and approach paper for ActewAGL, March 2013, p9. NSW: Stage 1 Framework and approach paper for Ausgrid, Endeavour Energy and Essential Energy, March 2013, p26. Qld: AER, Final Framework and approach for Energex and Ergon Energy, April 2014, p40. SA: AER, Final Framework and approach for SA Power Networks, April 2014, p28. Tas: AER, Final Distribution Determination: Aurora Energy, April 2012, p9. Vic: AER, Preliminary positions on replacement framework and approach for CitiPower, Jemena, Powercor, SP AusNet, United Energy, 24 October 2014, pp50-53. * In SA there are two legacy groups of customers with type 1-4 meters for whom metering services are classified as an alternative control service (ie customers consuming 160-750 MWh p.a. that had a meter installed prior to 1 July 2000 and customers consuming more than 750 MWh p.a. that installed a meter prior to 1 July 2005).

⁴⁴⁹ AER, Final framework and approach for Energex and Ergon Energy, April 2014, p41.

D1.2.2 Type 7 metering installations

Type 7 metering installations are not a physical meter but rather a reconciliation between DNSPs and the users of that service using an algorithm to determine the throughput of energy, eg for public lighting and traffic lights.

The AER has classified type 7 metering services as standard control services in NSW, Queensland and South Australia, with charges bundled into distribution use of system charges. In its decision to classify these services as such, the AER noted that there was no indication of significant potential for type 7 metering services to be provided competitively.

In the ACT, Tasmania and Victoria, type 7 metering services are classified as alternative control services. This means that DNSPs charge the costs of providing this service directly to the customer. The customer in these jurisdictions is usually a local council or government agency, who then recovers this cost through rates or taxes. In these jurisdictions, the alternative control classification is consistent with the service classification determined by jurisdictional regulators before this responsibility was transferred to the AER.

D1.3 Rule proponent's view

The COAG Energy Council is of the view that the bundling of metering charges with distribution use of system charges in some jurisdictions is affecting decisions about metering. In particular, a consumer that has its regulated metering installation, replaced with an advanced meter would pay both the charges passed on by the retailer for the new meter and the charges passed on by the DNSP through distribution use of system charges.⁴⁵⁰

The rule change request proposed that each DNSP should be required to unbundle metering charges for any meters included in its regulatory asset base from its distribution use of system charges at the next regulatory determination.

D1.4 Stakeholder views

Most stakeholders have indicated support for the unbundling of metering charges from distribution use of system charges.⁴⁵¹ In submissions on the rule change request, several DNSPs noted that type 5 and 6 metering services had already been unbundled

⁴⁵⁰ COAG Energy Council, rule change request, October 2013, p6.

⁴⁵¹ AER, submission on consultation paper, p5; ERM Power, submission on consultation paper, p13; EnergyAustralia, submission on consultation paper, p5; Lumo Energy, submission on consultation paper, p7; Vector, submission on consultation paper, p13.

from distribution use of system charges and therefore no changes to the NER were required.⁴⁵²

AGL considered that the NER does not effectively ensure that metering costs are separated from energy transport costs and suggested that the AER review the classification of metering services to ensure this.⁴⁵³ Origin Energy agreed that metering charges should be unbundled from distribution use of system charges, but considered that the AER will need to determine the best allocation of costs to ensure that unbundled charges are not diluted by retaining some metering costs as standard control services.⁴⁵⁴ Metropolis shared this view, and proposed that the NER clearly define which parts of a DNSP's metering services/assets are recovered where, and how further costs are to be treated.⁴⁵⁵

Vector considered unbundling in the context of exit fees for regulated meters, proposing that the unbundled metering charge include a portion of residual costs that would need to be recovered by the DNSP if a regulated meter is replaced or upgraded by another party.⁴⁵⁶

D1.5 Commission's analysis

D1.5.1 Type 5 and 6 metering services

The Commission considers that the ability of the AER to determine the classification of distribution services, including metering services, in accordance with the existing regulatory framework will support the development of competition in the provision of metering services.

Charges for type 5 and 6 metering services are already, or will be at the next regulatory determination, unbundled from distribution use of system charges NEM-wide. As noted above, the current NER provisions allow the AER to determine the classification of distribution services and how the various cost components of these services will be recovered.

The Commission considers it to be appropriate that the AER continue to determine the classification of services and control mechanisms in accordance with the existing regulatory framework. Amending the NER to specify a particular approach for metering services only would be a significant departure from current arrangements.

⁴⁵² SA Power Networks, submission on consultation paper, p8; NSW DNSPs, submission on consultation paper, p13; Ergon Energy, submission on consultation paper, p9; Energex, submission on consultation paper, p5.

⁴⁵³ AGL, submission on consultation paper, p8.

⁴⁵⁴ Origin Energy, submission on consultation paper, p7.

⁴⁵⁵ Metropolis, submission on consultation paper, p7.

⁴⁵⁶ Vector, submission on consultation paper, p13. Exit fees are addressed in Appendix D2.

The Commission is therefore of the view that the NER does not need to be amended in this regard.

D1.5.2 Type 7 metering services

The AER has indicated in its recent regulatory determinations that it does not consider that there is significant potential for competition in providing type 7 metering services. In its framework and approach paper for the SA Power Networks 2015-2020 regulatory determination, the AER also considered that the incremental costs incurred by SA Power Networks in providing type 7 metering services were likely to be minimal relative to total service costs, and that there would be no net benefit of unbundling type 7 metering services from distribution use of system charges.⁴⁵⁷

The Commission is of the view that the NER should not require the AER to unbundle type 7 metering services from distribution use of system charges. The Commission considers that the AER should continue to assess the classification of type 7 metering services as part of the distribution regulatory determination process in accordance with the existing regulatory framework.

As noted above, type 7 metering services are provided through a direct relationship between the DNSP and the customer, ie there is no retailer. This direct relationship is not easily translated to the new competitive framework where it is the responsibility of a retailer to appoint a Metering Coordinator. Specific arrangements would need to be put in place for the provision of type 7 metering services.

The Commission does not see value in establishing arrangements to allow other parties to provide type 7 metering services unless there is strong evidence of potential for competition to emerge in this space. The draft rule therefore requires DNSPs to be the Metering Coordinator for type 7 metering installations. This is consistent with the current arrangement that requires the LNSP to be the Responsible Person for type 7 metering installations.⁴⁵⁸

⁴⁵⁷ AER, Final framework and approach for SA Power Networks, April 2014, p33.

⁴⁵⁸ Clause 7.6.4(a) of the NER in the draft rule.

D2 Cost recovery for regulated metering services

Summary

This appendix outlines the Commission's draft determination in relation to cost recovery arrangements for regulated metering services in NEM jurisdictions other than Victoria (arrangements for Victoria are discussed in Appendix F).

A DNSP may have residual costs to recover if a consumer switches from a regulated metering service to an unregulated metering service before the costs of the regulated service have been fully recovered. This is most likely to arise if a consumer's existing interval meter or accumulation meter is replaced with an advanced meter before the end of its economic life.

The draft rule maintains existing arrangements, whereby the AER determines an appropriate means for a DNSP to recover the residual costs of metering services as part of the distribution regulatory determination process, in accordance with the principles and objectives in the existing regulatory framework.

D2.1 Introduction

This appendix addresses cost recovery arrangements for regulated metering services in NEM jurisdictions other than Victoria. Cost recovery arrangements for advanced meters installed under the AMI program in Victoria are set out in Appendix F.

This appendix covers:

- an overview of how residual costs are recovered under the existing arrangements;
- a description of the COAG Energy Council's proposed approach to the recovery of residual costs related to metering services;
- stakeholder views expressed in submissions to the consultation paper and in stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for its draft rule.

D2.2 Current arrangements

The costs of providing type 5 and 6 metering services are currently regulated NEM-wide by the AER as a direct control service.⁴⁵⁹ A direct control service is also referred to as a regulated metering service in this appendix. DNSPs recover the costs of providing these assets and services to consumers over a period determined by the AER

⁴⁵⁹ Refer Appendix D1. The exception is the installation of type 5 and 6 metering installations in NSW, which is an unregulated service.

in distribution regulatory determinations. In most jurisdictions, type 1-4 metering services are not regulated by the AER.⁴⁶⁰ If a consumer or other party seeks to upgrade or replace an existing, regulated meter with an advanced meter, the DNSP may not have fully recovered the costs of the regulated investment. This is particularly likely if the meter has not yet reached the end of its useful life. Charges to recover the residual costs of regulated meters have commonly been referred to by the AER and other stakeholders as 'exit fees'.

As discussed in Appendix D1, charges for type 5 and 6 metering services are, or are in the process of becoming, unbundled from distribution use of system charges across the NEM. The proposed introduction of competition through this rule change has caused the AER to consider options for DNSPs to recover residual, regulated metering costs.

The AER has previously approved exit fees for metering services provided by SA Power Networks to allow it to recover residual costs when a customer moves to an unregulated metering service.⁴⁶¹ In November 2014, the AER published its draft decision on cost recovery arrangements for regulated metering services provided by the ACT and NSW DNSPs.⁴⁶² On 23 March 2015, the AER published a consultation paper on an alternative approach to that which was made in its draft decision.⁴⁶³ Submissions made to the consultation paper will inform the AER's final decision for the ACT and NSW DNSPs, and the preliminary decisions for the Queensland and South Australia DNSPs.

There is also an existing provision in the NER that requires retailers and DNSPs to negotiate in good faith to ensure that the DNSP is reasonably compensated when a type 5, 6 or 7 metering installation is altered in such a way that it leads to a change in classification of the metering installation type and therefore causes the DNSP to no longer be the Responsible Person.⁴⁶⁴ It is unclear whether DNSPs are relying on this clause to recover residual costs if the meter is replaced or upgraded, and how a commercial negotiation between the retailer and the DNSP on appropriate compensation would operate in circumstances where the AER has made a regulatory determination on arrangements for cost recovery.

⁴⁶⁰ In South Australia, type 1-4 metering services are classified as negotiated distribution services, and there are two legacy groups of customers for whom type 1-4 metering services are classified as alternative control services. Refer Appendix D1.

⁴⁶¹ SA Power Networks, Annual pricing proposal 2014-15, SA Power Networks, 28 May 2014, p89.

⁴⁶² See for example: AER, Draft decision on Ausgrid distribution determination - Attachment 16 - Alternative control services, November 2014, p29-49.

⁴⁶³ AER, consultation paper, Alternative approach to the recovery of the residual metering capital costs through an alternative control services annual charge, March 2015.

⁴⁶⁴ Current clause 7.3A(g) of the NER.

D2.3 Rule proponent's view

The COAG Energy Council proposed that a reasonable exit fee should be determined by the AER and applied when another party replaces a DNSP as Metering Coordinator at a connection point.⁴⁶⁵

The rule change request proposes to remove the current arrangement that requires retailers and DNSPs to negotiate in good faith to determine an appropriate exit fee. In its place, the COAG Energy Council proposes to give the AER explicit responsibility to assess residual metering costs and determine the exit fee to be charged to recover those costs.

The rule change request proposes the following criteria that the AER would need to have regard when determining the magnitude and components of the exit fee:

- The fee must be reasonable.
- The fee should be based on the average depreciated value of the stock of existing type 5 or 6 metering installations, and operating costs.
- The fee may include efficient and reasonable costs of transferring the consumer to another Metering Coordinator.
- The fee for type 5 metering installations may differ from the fee for type 6 installations.
- The DNSP cannot recover an exit fee for a meter installed after the commencement of a jurisdictional new and replacement policy that is not compliant with that policy.

The rule change request also proposes that the AER could consider whether a cap on the exit fee would be appropriate and, if so, the level of the cap.⁴⁶⁶

The COAG Energy Council indicates that the objective of the proposed arrangement is to establish an exit fee that reasonably compensates a DNSP when its regulated meter is replaced, but one not so high that it inhibits investment and innovation in advanced metering services.⁴⁶⁷

D2.4 Stakeholder views

Stakeholder submissions indicated that the existing regulatory frameworks do not provide sufficient certainty on:

- how a DNSP can recover its residual costs; and

⁴⁶⁵ COAG Energy Council, rule change request, October 2013, p12.

⁴⁶⁶ Ibid., p31.

⁴⁶⁷ Ibid., p6.

- the exit fee that might be payable by a party seeking to replace or upgrade a regulated meter.

Stakeholders have indicated that this uncertainty is acting as a major impediment to investment in advanced metering under the current NER provisions.

In submissions to the consultation paper and in subsequent discussions at stakeholder workshops, stakeholders agreed that DNSPs should be able to recover the costs associated with an existing, regulated meter that is no longer required.⁴⁶⁸ Stakeholders also considered that changes need to be made to the existing provision in the NER that requires parties to negotiate in good faith to determine appropriate compensation for the DNSP in certain circumstances.

D2.4.1 Magnitude of the exit fee

In considering the magnitude of the exit fee, a number of retailers, meter providers and meter manufacturers indicated that a high, upfront exit fee would be a significant barrier to entry and would deter a market-led investment in advanced metering.⁴⁶⁹ EDMI supported a uniform exit fee structure to allow DNSPs to recover their investment without distorting the market.⁴⁷⁰ EnergyAustralia supported clearly defined exit fees with a transparent, reducing fee path to provide the market with investment certainty.⁴⁷¹

Several consumer groups were of the view that consumers should not have to bear the costs of decisions made by DNSPs over which they had no influence. These groups were concerned that there is potential for DNSPs to be excessively compensated for previous business decisions, and sought clarification on the concept of an exit fee and the circumstances where one would apply.⁴⁷²

Some stakeholders were of the view that new investment decisions should not have to take sunk investment costs into account, and that there should be no exit fee at all.⁴⁷³

⁴⁶⁸ Vector, submission on consultation paper, p2; AGL, submission on consultation paper, p8; ERAA, submission on consultation paper, p4; NSW DNSPs, submission on consultation paper, p14; Origin Energy, submission on consultation paper, p7; SA Power Networks, submission on consultation paper, p8.

⁴⁶⁹ Vector, submission on consultation paper, p2; ERAA, submission on consultation paper, p4; Metropolis, submission on consultation paper, p7; Origin Energy, submission on consultation paper, p7.

⁴⁷⁰ EDMI, submission on consultation paper, p11.

⁴⁷¹ EnergyAustralia, submission on consultation paper, p5.

⁴⁷² SACOSS, submission on consultation paper, p2; ATA and other consumer groups, submission on consultation paper, p5; PIAC, submission on consultation paper, p1.

⁴⁷³ Metropolis submission, 17 June 2014, p7; Vector submission, 29 May 2014, p2.

D2.4.2 Proposed criteria

A number of stakeholders shared the view that the proposed criteria regarding the components and magnitude of the exit fee were appropriate.⁴⁷⁴ The NSW DNSPs considered that the exit fee should comprise only two components: residual asset costs and administration costs. This is in line with the approach put forward in their 2015-19 regulatory proposals.⁴⁷⁵

ERM Power emphasised the importance of determining a separate fee for type 5 and 6 metering installations and recalculating the average age of existing meter stocks annually. ERM Power considered that this would provide an efficient price signal to replace older meters first.⁴⁷⁶

While some stakeholders were of the view that a cap on the exit fee would be appropriate,⁴⁷⁷ most DNSPs considered that a cap would be unnecessary because the exit fee payable should be no less than the true cost imposed by the meter's replacement.⁴⁷⁸

The ENA was of the view that the exit fee should apply regardless of whether the new Metering Coordinator decides to retain or replace the existing meter.⁴⁷⁹ SA Power Networks considered that ownership of the old meter should transfer to the new retailer or Metering Provider when the exit fee is paid.⁴⁸⁰

D2.4.3 Party to determine the fee

Many stakeholders supported the proposal that the AER have a more explicit role in determining exit fees.⁴⁸¹ Two retailers were of the view that this should occur in open consultation.⁴⁸² Ergon Energy considered that the AER should not determine the

474 ENA, submission on consultation paper, p27; Energex, submission on consultation paper, p5; SA Power Networks, submission on consultation paper, p9; ERM Power, submission on consultation paper, p13.

475 NSW DNSPs, submission on consultation paper, p14.

476 ERM Power, submission on consultation paper, p14.

477 EnergyAustralia, submission on consultation paper, p5; ATA and other consumer groups, submission on consultation paper, p5.

478 ENA, submission on consultation paper, p27; Energex, submission on consultation paper, p5; NSW DNSPs, submission on consultation paper, p15; SA Power Networks, submission on consultation paper, p9.

479 ENA, submission on consultation paper, p24.

480 SA Power Networks, submission on consultation paper, p8.

481 Vector, submission on consultation paper, p16; AER, submission on consultation paper, p5; AGL, submission on consultation paper, p8; ATA and other consumer groups, submission on consultation paper, p5; Energex, submission on consultation paper, p5; ERM Power, submission on consultation paper, p14; Origin Energy, submission on consultation paper, p7; SA Power Networks, submission on consultation paper, p8; Simply Energy, submission on consultation paper, p9; Lumo Energy, submission on consultation paper, p7.

482 AGL, submission on consultation paper, p8; Simply Energy, submission on consultation paper, p9.

methodology or level of the exit fee, but rather approve the fees proposed by DNSPs in accordance with a set of high level principles in the NER.⁴⁸³

The AER proposed that it should determine exit fees using its own discretion, and that any specification of criteria in the NER should be kept at the principles level only, similar to those proposed in the rule change request. The AER also indicated that it would consult stakeholders on the development of exit fees, and that it would prefer a nationally consistent approach.⁴⁸⁴

D2.4.4 Terminology

Several DNSPs questioned whether the term 'exit fee' was appropriate, and suggested that 'meter transfer fee' or 'residual meter charge' would be a more accurate description.⁴⁸⁵

D2.4.5 Other options

The NSW DNSPs submitted that there was no lack of clarity or transparency under the current arrangements, indicating that the AER already has a role in determining exit fees for type 5 and 6 metering services because it regulates these services.⁴⁸⁶ A number of DNSPs were of the view that the process for determining exit fees should not be any different to other fees approved by the AER through the regulatory determination process.⁴⁸⁷

Several stakeholders presented alternative methods of recovering the costs of a regulated metering service. The AER put forward a number of options, including recovering residual metering costs through: a higher annual metering charge with a low exit fee, a lower annual metering charge with a high exit fee, or from all consumers through distribution use of system charges.⁴⁸⁸

SA Power Networks considered that some cost components could be retained or transferred back into the standard control services regulatory asset base and recovered through distribution use of system charges.⁴⁸⁹ Vector expressed support for an appropriate unbundled legacy metering charge, with residual costs remaining in the standard control services regulatory asset base and recovered through distribution use of system charges over a considerable period of time.⁴⁹⁰

483 Ergon Energy, submission on consultation paper, p10.

484 AER, submission on consultation paper, p5.

485 SA Power Networks, submission on consultation paper, p8; NSW DNSPs, submission on consultation paper, p14.

486 NSW DNSPs, submission on consultation paper, p5.

487 Ergon Energy, submission on consultation paper, p10; NSW DNSPs, submission on consultation paper, p5; Energex, submission on consultation paper, p5.

488 AER, submission on consultation paper, p5.

489 SA Power Networks, submission on consultation paper, p9.

490 Vector, submission on consultation paper, p3.

Metropolis was of the view that all costs should be recovered through distribution use of system charges rather than exit fees, to spread the burden across all network users equally and provide an incentive to upgrade to more advanced metering as the costs of a regulated metering service increase.⁴⁹¹

D2.5 Commission's analysis

The COAG Energy Council's rule change request is designed to remove barriers to the competitive provision of energy products and services.

The Commission considers that the application of the current clause 7.3A(g) of the NER is unclear. This clause requires retailers and DNSPs to negotiate in good faith to ensure that the DNSP is reasonably compensated when a type 5, 6 or 7 metering installation is altered in a way that it leads to a change in classification of the metering installation type causing the DNSP to no longer be the Responsible Person. This clause is deleted in the draft rule.

In determining a more efficient and transparent approach for cost recovery, the Commission has considered:

- whether DNSPs should be able to recover any residual costs associated with a regulated meter that is replaced or upgraded by another party before these costs have been fully recovered;
- the costs that would need to be recovered and the likely magnitude of these costs; and
- how the costs should be recovered, and whether any changes to the NER are required to facilitate this.

D2.5.1 Should DNSPs be able to recover any residual costs?

The NEL provides that a DNSP should be given a reasonable opportunity to recover at least the efficient costs it incurs in providing direct control network services and complying with a regulatory obligation or requirement.⁴⁹²

DNSPs are currently required to be the Responsible Person for type 5-7 metering installations and, where requested by the Market Participant, type 1-4 metering installations.⁴⁹³ DNSPs have invested in assets, infrastructure and systems where they are the Responsible Person for regulated metering services, with the assumption that they would recover the costs of doing so. These investments form part of the DNSP's regulatory asset base, allowance for which has been approved by the AER in

⁴⁹¹ Metropolis, submission on consultation paper, p7.

⁴⁹² Section 7A of the NEL.

⁴⁹³ Current clause 7.2.3(a) of the NER. The DNSP will be the Responsible Person for type 1-4 metering installations where the Market Participant has requested an offer from the DNSP to do so, the DNSP has made an offer and the Market Participant has accepted the offer.

distribution regulatory determinations under the requirements of the existing regulatory framework.

DNSPs pay the upfront capital costs of providing metering services but recover these costs from consumers over a longer period. This arrangement benefits consumers because the cost of the service is spread over time, rather than charged upfront. However, a DNSP may not have fully recovered these costs if a consumer moves to an unregulated metering service.

The Commission's view is that DNSPs should be able to recover the residual costs of the investments they have made to provide a regulated metering service. This view was supported by all stakeholders in submissions and at stakeholder workshops.

D2.5.2 What are the costs that would need to be recovered?

Consultation with stakeholders has indicated that there are a range of costs that may need to be recovered by a DNSP if a consumer switches from a regulated metering service. These include:

- Asset costs, including the cost of the meter itself.
- Non system asset costs, including vehicles and equipment.
- Capitalised cost of labour to install and maintain the meter.
- Operational costs, including IT/system costs and meter reading costs.
- Administration costs, including processing the transfer and disposing of the asset.

D2.5.3 Options for cost recovery

The COAG Energy Council's rule change request and the Commission's subsequent consultation paper did not explicitly discuss other means by which a DNSP could recover the costs associated with an existing, regulated type 5 or 6 metering installation that is no longer required.

As noted by some stakeholders in submissions to the consultation paper, there are a range of ways these costs could be recovered. The Commission, in consultation with the AER, has considered a number of options, including:

- an exit fee that recovers the full costs of the metering service that is no longer required directly from the party that seeks to replace or upgrade it;
- allowing all residual costs to be recovered from all consumers through distribution use of system charges; and

- a combination of the above approaches, eg some costs could be recovered directly from the party that seeks to replace or upgrade the meter, and remaining costs through distribution use of system charges.

An exit fee that recovers all residual costs associated with a metering service that is no longer required would mean that the consumer moving to an unregulated service would face the full cost of their decision to do so (assuming this cost is passed on by the retailer). This can help to promote allocative efficiency by providing consumers with an appropriate price signal to invest in a new or upgraded meter when it is efficient to do so.

High exit fees are likely to limit a business case to invest in advanced metering services, by signalling that it may not be efficient to invest in a new or upgraded meter. This may stall the uptake of advanced meters. On the other hand, a low or zero exit fee may mean that the consumer or their retailer does not face a high (or any) upfront fee to move to a competitive metering service, which may result in inefficient meter replacements.

DNSPs have indicated that they do not have detailed information on the exact technical and economic life of their existing meter stocks. Therefore, a fully cost reflective exit fee for each individual meter is not practical to achieve. A degree of cross subsidisation would occur if a flat exit fee was set based on an assumption of the average economic and technical life of existing type 5 and 6 metering installations.

In addition, in many cases the decision on what metering installation type (ie type 5 or type 6) to install was not made by the consumer but by the local DNSP. A fully cost reflective exit fee may mean that consumers with a type 5 metering service would pay a higher exit fee than consumers with a type 6 metering service, even though they had no influence over the decision on what metering installation type was installed.

A degree of cross subsidisation would also occur if costs were recovered through distribution use of system charges. Consumers who do not have their existing, regulated meter replaced or upgraded would subsidise the cost of those who do.

In their 2014-19 regulatory proposals, the NSW DNSPs set out their proposed exit fees for type 5 and 6 metering services in the 2014-19 regulatory control period. The AER held a workshop with stakeholders in September 2014 to discuss the proposed fees and put forward alternatives for the recovery of residual metering costs, in light of the implications and objectives of this rule change request.⁴⁹⁴

The AER published its draft decision on the ACT and NSW distribution determinations in November 2014, in which it proposed to allow the ACT and NSW DNSPs to recover the costs of the regulated metering service in the following way:

- Annual, unbundled metering charges: To recover meter asset costs (existing and replacement), supporting asset costs and operational costs.

⁴⁹⁴ Slides from the workshop are available on the AER website.

- Upfront charges: To recover the full costs of new, customer-requested meters.
- Exit charges: To recover the administrative costs incurred as customers switch from the regulated metering service.
- Distribution use of system charges: To recover costs that remain unrecovered as customers switch from the regulated metering service.

Further information on the AER's draft decision is available on the AER website.

On 23 March 2015, the AER published a consultation paper on an alternative approach to the recovery of residual metering capital costs from that which was made in its draft decision.⁴⁹⁵ The consultation paper notes that its draft decision to add residual metering capital costs to the regulatory asset base for standard control services on an annual basis is not appropriate under the NER.

Submissions made to the consultation paper will inform the AER's final decisions for the ACT and NSW DNSPs, and the preliminary decisions for the Queensland and South Australian DNSPs.

D2.5.4 Draft rule

The Commission considers that the arrangements for a DNSP to recover the residual costs of its regulated metering service should be determined by the AER in accordance with the existing regulatory framework. Accordingly, the draft rule maintains the existing arrangements.

The existing regulatory framework sets out a number of matters that guide the AER's assessment of how a DNSP can recover the costs of a regulated service. These include:

- The NEO, as set out in section 7 of the NEL.
- Revenue and pricing principles, as set out in section 7A of the NEL.
- Distribution pricing principles, as set out in rule 6.18 of the NER.
- Provisions regarding the classification of distribution services and applicable control mechanism, as set out in rule 6.2 of the NER.

In its draft decision for the ACT and NSW DNSPs, the AER explains that the following regulatory objectives were relevant to its consideration of cost recovery arrangements for regulated meters:

- The ability for DNSPs to recover the costs it incurred in providing a regulated metering service, as captured by the revenue and pricing principles in the NEL.

⁴⁹⁵ AER, consultation paper, Alternative approach to the recovery of the residual metering capital costs through an alternative control services annual charge, March 2015.

- Visibility on costs, as captured by the provisions regarding the classification of services in the NER and the NEO more broadly.
- Limiting cross subsidies and achieving cost reflectivity, as captured by the NEO.
- Not inhibiting competition and promoting efficient outcomes in the long term interest of consumers, as captured by the NEO and the provisions regarding the classification of services in the NER.⁴⁹⁶

These considerations reflect those that the AEMC, AER and a number of stakeholders have identified as important when considering the recovery of residual costs in the context of a competitive market for metering and related services.

D2.5.5 Implications of the draft rule

The draft rule does not predetermine a mechanism for the recovery of a DNSP's residual metering costs. Nor does it predetermine the extent of cross subsidisation that may result between consumers who have their meter upgraded and those who do not. The proposed approach leaves this judgement to the AER within the bounds of the existing regulatory framework.

This approach will not provide absolute certainty to parties looking to make investment decisions in advanced metering and services until regulatory determinations are finalised and the level of the exit fee, if any, becomes clear.

However, the AER's draft decision on cost recovery arrangements for the ACT and NSW regulatory determinations, the subsequent consultation paper on alternative cost recovery arrangements and its final decision in April 2015, will provide some guidance on the AER's likely approach for other jurisdictions. Stakeholders also have the opportunity to be involved in the AER's distribution regulatory determination process, through providing submissions or attending the AER's forums and workshops.

The NER could provide more certainty by either requiring that there be an exit fee, setting the level of the fee and/or prescribing the specific costs that the exit fee would comprise. This would require the NER to prescribe the service classification and control mechanism of specific metering services. This would be a significant departure from current arrangements and would restrict the AER's flexibility to determine arrangements that recognise the characteristics of each DNSP's regulated metering service.

D2.5.6 Cost recovery in practice

The AER will determine how a DNSP can recover residual, costs of regulated metering services as part of a distribution determination, including whether exit fees will apply.

⁴⁹⁶ See for example: AER, Draft decision on Ausgrid distribution determination - Attachment 16 - Alternative control services, November 2014, p36.

An exit fee payment, if any, would be triggered when a new Metering Coordinator replaces or upgrades an existing, regulated meter. For small customers, the retailer would be responsible for paying the regulated exit fee at the time it appoints a competitive Metering Coordinator to a customer's site. The retailer would decide how much, if any, of the exit fee is passed on to the consumer and how much it absorbs.

Payment of the regulated exit fee in these circumstances would not give rise to a transfer of ownership of the existing meter. Any transfer of ownership should be a commercial arrangement between the DNSP and the new Metering Coordinator.

The AER's draft decisions for the ACT and NSW DNSPs does not go into detail about the circumstances where an exit fee would apply. However, the AER may need to determine whether the exit fee should be payable when the existing meter is found to be faulty or due for replacement. The Commission considers that an exit fee should not apply in these circumstances.

D3 Distribution ring-fencing arrangements

Summary

This appendix sets out the Commission's draft determination with respect to distribution ring-fencing arrangements.

The draft rule requires the AER to develop national ring-fencing guidelines for the accounting and functional separation of the provision of direct control services from other services provided by DNSPs, which can include legal separation.

Under the current NER provisions, the AER "may" prepare such a guideline. The draft rule provides that the AER must prepare and publish this guideline by 1 July 2016.

This guideline is expected to set out, among other things, any applicable ring-fencing requirements for a DNSP that takes on the Metering Coordinator, Metering Provider or Metering Data Provider roles.

The Commission considers that a DNSP taking on the Metering Coordinator, Metering Provider and/or Metering Data Provider role in a competitive segment of the market should be subject to some form of ring-fencing from these businesses.

D3.1 Introduction

This appendix sets out the Commission's draft determination with respect to ring-fencing arrangements for DNSPs undertaking the Metering Coordinator, Metering Provider and/or Metering Data Provider roles.

This appendix covers:

- the current ring-fencing arrangements as they apply to DNSPs;
- the COAG Energy Council's proposal in relation to ring-fencing arrangements;
- stakeholder views expressed in submissions to the consultation paper and at stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for its draft rule.

Under the draft rule a LNSP currently acting as the Responsible Person providing metering services at a connection point will become the initial Metering Coordinator for that connection point. A DNSP's competitive metering business may also compete with other Metering Coordinators for the provision of metering services. Given the potential for a DNSP to operate in the contestable market, it is relevant to consider whether any ring-fencing is required.

ring-fencing is an economic regulatory tool that can be used to promote competitive neutrality. In simple terms, ring-fencing is designed to limit the ability a regulated service provider may otherwise have to confer an unfair advantage on an affiliate operating in a contestable market by engaging in the following types of behaviours:

- cross-subsidising the affiliate’s services in the contestable market with revenue derived from its regulated services;
- providing the affiliate with access to commercially sensitive information acquired through the provision of regulated services; and/or
- restricting the access other participants in the contestable market have to the infrastructure services, or providing access on less favourable terms than its affiliate.

Some of the measures that regulators have used to ring-fence regulated services from contestable services are set out in Table D3.1.

Table D3.1 Ring-fencing measures

Measures	Behaviour targeted	What it entails
Legal separation	Decision making and cross-subsidisation of contestable services	<p>Legal separation usually requires:</p> <ul style="list-style-type: none"> • the regulated and contestable services to be carried out by separate legal entities; and • any interaction between the two entities to be established through formal contractual and reporting arrangements. <p>The same parent company may own the two entities, so legal separation on its own will not be sufficient to prevent all the types of behaviour listed above.</p>
Accounting (financial) separation	Cross-subsidisation of contestable services	Accounting separation usually requires the regulated service provider to maintain separate accounts for regulated and contestable services. Some regulators also require compliance with a prescribed cost allocation methodology and/or explicitly prohibit cross-subsidisation.

Measures	Behaviour targeted	What it entails
Full or partial operational separation	Sharing of commercially sensitive information and decision making	Operational separation may involve, to varying extents: <ul style="list-style-type: none"> the physical separation of staff from the regulated service provider with access to confidential information from the affiliate's staff, or restrictions on working for both businesses; the separation of information systems, or restrictions on access to systems with confidential information; and/or the separation of the regulated service provider's decision making body from the affiliate's decision making body.
Equal access to information	Sharing information	If there are legitimate reasons for information disclosure, some regulators require certain information obtained by a regulated service provider in connection with their regulated business to be provided to third parties.
Non-discriminatory access provisions	Discriminatory access to services	This measure requires the regulated service provider to provide access on a non-discriminatory basis.

The ring-fencing measures set out in this table may be viewed as lying on a spectrum with less onerous measures, such as accounting separation and partial operational separation, at one end of the spectrum and more onerous measures, such as legal and full operational separation, at the other end.

D3.2 Current arrangements

In electricity, ring-fencing has traditionally focused on the accounting and operational separation of DNSPs from generation, retail and other contestable works, including, connections, extensions and/or meter installation. However, provision has been made in Chapter 6 of the NER for ring-fencing to be applied more broadly.

The relevant provisions are contained in rule 6.17 of the NER. This rule states that the AER may develop a distribution ring-fencing guideline that requires the accounting and functional separation of the provision of direct control services⁴⁹⁷ from other services. The rule sets out a non-exhaustive list of legal, operational and accounting separation measures that the AER may include in a guideline.⁴⁹⁸ This rule also requires DNSPs to comply with any ring-fencing guideline developed by the AER.

⁴⁹⁷ A direct control service is a service that is regulated by the AER. There are two types of direct control services: standard control services and alternative control services. See Appendix D1.

⁴⁹⁸ Clause 6.17.2(b) of the NER sets out a non-exhaustive list of ring-fencing measures the AER may include in the guideline and the circumstances in which each measures could be applied. This

In 2011-12, the AER considered whether a NEM-wide distribution ring-fencing guideline should be developed and concluded that there would be merit in doing so.⁴⁹⁹ This work was halted in late 2012 to accommodate the Better Regulation review and the rule changes that were expected to flow from the Power of Choice review, including this rule change.⁵⁰⁰

While a distribution ring-fencing guideline under rule 6.17 is yet to be developed, DNSPs are still required to comply with the following ring-fencing measures:

- Jurisdictional ring-fencing guidelines – These guidelines were developed by jurisdictional regulators prior to the introduction of the NER and require varying degrees of accounting and functional separation of DNSPs from specified contestable services, such as generation, retail and in some jurisdictions, contestable works.⁵⁰¹
- The cost allocation principles set out in an AER approved Cost Allocation Method – Amongst other things these principles are designed to prevent costs being shifted between standard control, alternative control, negotiated distribution and unregulated services and the prices paid for these services being artificially inflated or discounted.⁵⁰²
- The annual Regulatory Information Notice (RIN) process – This AER reporting process requires DNSPs to separately account for and report on the costs incurred and revenue derived from standard control, alternative control, negotiated distribution and unregulated services using the approved Cost Allocation Method. The AER also requires an independent auditor to assess whether the Cost Allocation Method has been employed.⁵⁰³

D3.3 Rule proponent's view

Under the COAG Energy Council's rule change request, the local DNSP will become the initial Metering Coordinator for those meters for which it is currently the Responsible Person. A DNSP's competitive metering business may also become the Metering Coordinator at a particular site if appointed to that role.

clause also allows the AER to include provisions to add to, or waive a DNSP's obligations under the guidelines.

499 AER, Position paper – Electricity Distribution Ring-fencing Guidelines, September 2012, p11.

500 <http://www.aer.gov.au/node/12493>

501 Clause 11.14.5(b)(3) of the NER provides for these guidelines to remain in force until such time as they are amended, revoked or replaced by guidelines under a 'new regulatory regime' (as defined in clause 11.14.2 of the NER).

502 AER, Final Decision: Electricity distribution networks – Cost allocation guidelines, June 2008, p5.

503 The AER has informed the Commission that it also requires: DNSPs to include a statutory declaration from an officer of the business that the information is true and correct; an audit of financial information in accordance with Australian Audit Standards; and an assurance review of non-financial information.

So that the DNSP's Metering Coordinator business competes with other Metering Coordinators on a competitively neutral basis, the COAG Energy Council proposes that:

- the DNSP's Metering Coordinator be required to compete with others in the market on a 'ring-fenced basis';⁵⁰⁴ and
- the AER may develop ring-fencing arrangements to facilitate competitive neutrality.⁵⁰⁵

D3.4 Stakeholder views

The responses to this aspect of the COAG Energy Council's rule change proposal touched on a range of issues, including:

- the circumstances in which ring-fencing should be required;
- the businesses that a DNSP should be ring-fenced from;
- the form that the ring-fencing arrangements should take; and
- how the ring-fencing arrangements should be given effect.

These issues are discussed below.

D3.4.1 Circumstances in which ring-fencing should be required

Most stakeholders agree that if a DNSP's Metering Coordinator is competing with others in a competitive segment of the market, then the DNSP should be ring-fenced from the Metering Coordinator to ensure that it does not confer an unfair advantage on its Metering Coordinator by:⁵⁰⁶

- cross-subsidising its contestable services through its regulated services;
- providing it with access to commercially sensitive information; or
- not informing customers that are able to appoint their own Metering Coordinator that they can choose who takes on that role.

Different views were expressed about whether ring-fencing should apply from the day the rules come into effect or from when competition becomes effective. Questions were

504 COAG Energy Council, rule change request, October 2013, p11.

505 Ibid., p13.

506 AER, submission on consultation paper, p4; AGL, submission on consultation paper, p9; ERM Power, submission on consultation paper, p10; EnergyAustralia, submission on consultation paper, p6; ERAA, submission on consultation paper, p4; EDMI, submission on consultation paper, p12; Vector, submission on consultation paper, pp21-22; SA Power Networks, submission on consultation paper, p10.

also raised about whether ring-fencing is necessary if a DNSP's Metering Coordinator is operating in a segment of the market where competition is unlikely to emerge and services remain regulated.

For example, the ENA, Ergon Energy and SA Power Networks considered that DNSPs should be able to continue to offer a metering service as part of their regulated business until such time as the market has developed and there is no longer a demand for a regulated metering service.⁵⁰⁷

EnergyAustralia and Simply Energy, on the other hand, considered that ring-fencing should be required as soon as the new rules come into effect.⁵⁰⁸ Origin Energy took a slightly different view and suggested that ring-fencing be required once the costs of all meters, metrology and related services are deregulated.⁵⁰⁹

The AER expressed a similar view to Origin Energy and noted that for type 5-6 metering installations, measures in addition to the existing accounting separation and cost allocation requirements should only be required if these services become unregulated (ie if the service classification changes from direct control services).

Vector supported ring-fencing if DNSPs choose to enter the competitive market and noted the following:

“Ring-fencing is most appropriate if the distributor’s metering business is continuing to compete in the competitive market for smart meters. It may be more efficient and cost effective for all parties to have type 5-7 metering businesses remain with the distributors as they wind down and the meters are gradually replaced.⁵¹⁰”

This view was echoed by a number of stakeholders at the second stakeholder workshop, with some noting that ring-fencing may not be required if a DNSP is operating in a segment of the market where competition is unlikely to emerge, or may take some time to emerge.

D3.4.2 Businesses that DNSPs should be ring-fenced from

The rule change proposal only contemplates ring-fencing being applied to ensure competitive neutrality between a DNSP’s Metering Coordinator and other Metering Coordinators in the market. At the second stakeholder workshop, a number of retailers, prospective Metering Coordinators and meter manufacturers noted the potential for a DNSP to confer an unfair advantage on its Metering Coordinator

507 Ergon Energy, submission on consultation paper, p14; ENA, submission on consultation paper, p35; SA Power Networks, submission on consultation paper, p12.

508 EnergyAustralia, submission on consultation paper, p6; Simply Energy, submission on consultation paper, p10.

509 Origin Energy, submission on consultation paper, p10.

510 Vector, submission on consultation paper, p22.

through a Metering Provider or Metering Data Provider subsidiary. They suggested therefore that the DNSP also be ring-fenced from these two businesses.

D3.4.3 Form of the ring-fencing arrangements

The form that the ring-fencing arrangements should take was subject to detailed comment from DNSPs, the ENA, retailers and the ERAA.

The ENA and several DNSPs were of the view that the existing accounting ring-fencing measures and reporting requirements embodied in the Cost Allocation Methods are sufficient to ensure a level playing field.⁵¹¹ They also consider that subjecting DNSPs to additional ring-fencing measures, such as legal and operational separation, would increase costs and act as a barrier to achieving network benefits because most of the services are 'inward looking'.⁵¹²

AGL, ERM Power, EnergyAustralia and the ERAA were of the view that more stringent forms of ring-fencing, including legal and full operational separation, would be required to prevent a DNSP from conferring an unfair advantage on its Metering Coordinator, Metering Provider or Metering Data Provider.⁵¹³ EnergyAustralia considered that these types of measures were required to provide certainty and confidence in the market and to encourage entry and investment.⁵¹⁴

D3.4.4 How the ring-fencing arrangements should be implemented

While there was some divergence of views on the form that the ring-fencing arrangements should take, the stakeholders that attended the second stakeholder workshop generally agreed that:

- The existing jurisdictional ring-fencing guidelines, which apply to the provision of specific contestable services, cannot accommodate the proposed market arrangements.⁵¹⁵
- The AER should be accorded responsibility for deciding what ring-fencing measures to employ and set these out in a new distribution ring-fencing guideline.

511 ENA, submission on consultation paper, p30; Ergon Energy, submission on consultation paper, pp12-13; Victorian DNSPs, submission on consultation paper, p25; NSW DNSPs, submission on consultation paper, p17.

512 ENA, submission on consultation paper, p30; Ergon Energy, submission on consultation paper, p12; Energex, submission on consultation paper, p6; Victorian DNSPs, submission on consultation paper, p25.

513 AGL, submission on consultation paper, p9, ERM Power, submission on consultation paper, p10; EnergyAustralia, submission on consultation paper, p6; ERAA, submission on consultation paper, p4.

514 EnergyAustralia, submission on consultation paper, p6.

- The distribution ring-fencing guideline provisions in clause 6.17 of the NER are sufficiently flexible to enable the AER to put in place appropriate ring-fencing measures and no additional prescription is required in the NER to deal with the new market arrangements.
- The AER should be required to develop the guideline before the new Chapter 7 of the NER comes into effect so that DNSPs have time to comply with any new obligations.

D3.5 Commission's analysis

Consistent with the views of the COAG Energy Council and the majority of stakeholders, the Commission considers that if a DNSP takes on the role of Metering Coordinator, Metering Provider and/or Metering Data Provider and performs this role in a competitive segment of the market⁵¹⁶, it should be ring-fenced from these businesses⁵¹⁷ to some extent to limit its ability to:

- cross-subsidise the contestable services carried out by these businesses through its regulated services; and/or
- provide these businesses with access to commercially sensitive information that is not available to others in the market.⁵¹⁸

The Commission also agrees with the COAG Energy Council and stakeholders that the AER should be responsible for determining the form that the ring-fencing arrangements should take and should set these out in the distribution ring-fencing guideline that is provided for by clause 6.17 of the NER.⁵¹⁹

So that DNSPs have sufficient time to put in place the necessary ring-fencing arrangements for the new market arrangements, the AER will be required to develop

⁵¹⁵ See also AER, submission on consultation paper, p4; AGL, submission on consultation paper, p9; ERAA, submission on consultation paper, p4; EnergyAustralia, submission on consultation paper, p6; Metropolis, submission on consultation paper, p9.

⁵¹⁶ Refer section D3.5.1 below.

⁵¹⁷ COAG Energy Council, rule change request, October 2013, p11. While the COAG Energy Council only referred to Metering Coordinators, the Commission agrees with stakeholders that if a DNSP has an interest in a Metering Provider or Metering Data Provider that is operating in a competitive segment of the market, it should also be ring-fenced from these businesses to ensure that they are not used as a vehicle to achieve the same anti-competitive outcomes.

⁵¹⁸ The types of information that retailers and prospective Metering Coordinators indicated could unfairly advantage a DNSP's metering entities, include information on: the likely timing of meter replacement, which could be adduced through information on the age of a customer's existing meter or metering faults; where the meter is located and conditions at the customer's site; and applications for new connections that require a meter to be installed.

⁵¹⁹ COAG Energy Council, rule change request, October 2013, p13.

and publish the guideline by 1 July 2016, which is one year before the new Chapter 7 of the NER will commence.⁵²⁰

When developing the guideline, the AER may wish to consider:

- the types of behaviours that DNSPs could engage in that would operate to the detriment of competition in the market;
- the extent to which existing NER provisions, such as cost allocation requirements, achieve some of the objectives of ring-fencing and therefore reduce the need for additional ring-fencing requirements; and
- the costs of implementing the measures and the effectiveness of these measures.

The Commission's views on some of the issues that the AER may wish to consider are set out in the next section.

The AER will be responsible for monitoring and enforcing a DNSP's compliance with the ring-fencing guideline. If a DNSP fails to comply with the guideline, the following enforcement options will be available:

- the AER can seek an order from the Court declaring that there has been a breach, which may include an order that the DNSP cease the activity constituting the breach, take appropriate remedial action or implement a compliance program;⁵²¹ or
- the AER can seek injunctive relief if a DNSP has engaged in, or is likely to engage in, conduct in breach of its ring-fencing obligations.⁵²²

D3.5.1 Potential influence of competition and service classification on when ring-fencing will be required and the degree of ring-fencing

The Commission's view is that if a DNSP's Metering Coordinator, Metering Provider and/or Metering Data Provider is operating in a competitive segment of the market then the DNSP should be ring-fenced from these businesses.

The term 'competitive segment of the market' is used because there may be segments of the market where competition does not emerge, or takes time to emerge.⁵²³ Stakeholders have indicated that the provision of type 5-7 metering services could fall into this category.

⁵²⁰ Clause 6.17.2 of the NER currently states that the AER 'may' develop a guideline. The draft rule requires the AER to develop a guideline within the specified period. The development of the guideline will be subject to the standard distribution consultation process.

⁵²¹ Section 61(2) of the NEL.

⁵²² Section 61(3) of the NEL.

⁵²³ This point was made in both the AER's and Vector's submissions. See AER, submission on consultation paper, p4; Vector, submission on consultation paper, p22.

Typically, if there is no competition for the provision of a distribution service or if there is just the potential for competition, the service will be classified as a direct control service (standard control or alternative control) and regulated. It is therefore possible that metering services in some segments of the market continue to be classified as a direct control service and regulated, while in other segments of the market the services will be unregulated.

Given this potential, the AER may wish to consider whether the same degree of ring-fencing should be applied if a DNSP decides to:

- operate in the competitive segment of the market and compete with other Metering Coordinators, Metering Providers and/or Metering Data Providers; or
- just provide direct control metering services as the initial Metering Coordinator for existing type 5 and type 6 metering installations and not operate in the competitive segment of the market.

If the AER was to decide to employ this service classification based approach, then the following would need to occur if the direct control service classification changed:

- the DNSP would need to comply with the ring-fencing measures applicable to DNSPs providing unregulated services from the date the AER's service classification decision comes into effect; and
- the retailer would be required to pay an exit fee to the DNSP, to the extent that such a fee is established by the AER as part of its regulatory determination.

D4 Access to network-related services

Summary

This appendix addresses ways in which DNSPs may access the network-related services and functions enabled by advanced meters.

Under the Commission's draft rule:

- Where advanced meters are already in place, DNSPs may negotiate for access to the services enabled by advanced meters through a commercial arrangement with the Metering Coordinator. As set out in Appendix E, the draft rule does generally not regulate the terms and conditions of the provision of services by Metering Coordinators.
- Where advanced meters are not already in place, DNSPs can help facilitate the installation of advanced meters through Metering Coordinators and seek to recover the costs of doing so through the regulatory process.

If a DNSP cannot negotiate a satisfactory arrangement with the Metering Coordinator to access the services enabled by advanced meters, the draft rule allows DNSPs to continue to use their existing network devices or install new network devices for the purpose of operating or monitoring their networks. This provision will allow DNSPs in Victoria to continue to use the meters they have installed under the AMI program as network devices.

D4.1 Introduction

This appendix provides an overview of the Commission's draft determination with respect to arrangements to enable DNSPs access to the network-related services and functions enabled by advanced meters.

This appendix covers:

- an overview of the network-related services that may be enabled by advanced meters and the potential benefits of these services;
- a description of the COAG Energy Council's proposed model for DNSP access to the network-related services enabled by advanced meters;
- stakeholder views expressed in submissions to the consultation paper and in stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for its draft rule.

D4.2 Current arrangements

Advanced meters could be used to provide a range of services to consumers, retailers, energy service companies and DNSPs.

From a DNSP's perspective, the services that are most likely to be of value are those that can be used to:

- defer the need for network augmentation and encourage more efficient utilisation of the network including, for example, through the use of DSP measures such as direct load control, time of use pricing, critical peak pricing and other pricing options; or
- manage the reliability, quality, safety and overall performance of the network and access other operational efficiencies, including network planning and forecasting.

The potential network operational efficiencies and DSP benefits associated with these services have been found to be significant in a number of independent studies that have been conducted over the last five years.⁵²⁴ It is important that under the new market arrangements DNSPs are able to negotiate access to these services to obtain the benefits and pass these on to consumers in the form of lower network tariffs and/or service quality improvements.

The manner in which DNSPs may access these services under the draft rule is explored in further detail in the remainder of this appendix.

DNSPs have been able to access many of these services in Victoria, where advanced meters have been rolled out as part of a government-mandated, DNSP-led program. In other jurisdictions, access to the full suite of advanced metering services has been limited because DNSPs have been prevented from installing advanced meters as part of their regulatory activities, unless it is required to overcome operational difficulties.⁵²⁵

⁵²⁴ See for example, Deloitte, *Advanced metering infrastructure cost benefit analysis*, 2 August 2011, Oakley Greenwood, *Victorian Smart Meter Cost Benefit Analysis Report*, 2010 and Energeia, *Review of the Potential Network Benefits of Smart Metering*, May 2014.

⁵²⁵ With the exception of Victoria and South Australia, type 1-4 metering services are currently classified as unregulated services. This means that DNSPs cannot install meters with remote reading capability and recover the costs of doing so through regulated revenue unless current clause 7.3.4(f) of the NER is satisfied. This clause allows a DNSP to alter a type 5-7 metering installation to make it capable of remote acquisition if it decides that operational difficulties reasonably require the metering installation to be capable of remote acquisition. Current clause 7.3.4(h) of the NER further states that for the purposes of paragraph (f), operational difficulties may include locational difficulties where the metering installation is at a site where access is difficult or on a remote rural property.

D4.3 Rule proponent's view

Under the COAG Energy Council's rule change proposal, a DNSP seeking access to the network-related services of advanced meters will be able to offer payment for those services to the Metering Coordinators operating in its network area. The COAG Energy Council also suggested that the AER may establish competitive procurement requirements to ensure competitive neutrality between a DNSP's Metering Coordinator and any other Metering Coordinator that wishes to provide these services.⁵²⁶

D4.4 Stakeholder views

Responses to this aspect of the COAG Energy Council's rule change proposal primarily focused on:

- how DNSPs will access network-related services when advanced meters have already been installed;
- the role that DNSPs could play in facilitating the installation of advanced meters to gain access to network-related services; and
- the services or functionality that would be available in new meters. This issue is being dealt with through the minimum services specification, which is discussed in Appendix C1.

Stakeholder views on this issue form part of a broader discussion on whether there is a need to regulate the relationship between a Metering Coordinator and other parties seeking access to the services enabled by advanced meters. This is discussed further in Appendix E.

D4.4.1 Access to network-related services when meters have been installed

The AER was of the view that if advanced meters have already been installed, DNSPs should be required to negotiate with Metering Coordinators and enter into a commercial arrangement for the provision of these services.⁵²⁷

While the ENA and DNSPs accepted that under the proposed arrangements they will need to negotiate access to the services they require, they expressed a number of concerns about their ability to access services at an efficient cost because of the 'market power' Metering Coordinators may possess in these negotiations.⁵²⁸ To address these concerns, the ENA, the NSW DNSPs and the Victorian DNSPs suggested that:⁵²⁹

⁵²⁶ COAG Energy Council, rule change request, October 2013, p13.

⁵²⁷ AER, submission on consultation paper, p6.

⁵²⁸ ENA, submission on consultation paper, pp7-8; Victorian DNSPs, submission on consultation paper, pp19-22; NSW DNSPs, submission on consultation paper, pp2,12-13,15.

⁵²⁹ Ibid.

- Metering Coordinators be subject to some form of light handed regulation to ensure that network-related services are provided on a cost reflective basis; and
- if an agreement cannot be reached with a Metering Coordinator, DNSPs should have the option to bypass the Metering Coordinator if it is efficient to do so, including by leaving existing network devices in place or installing new devices, or in Victoria by using existing advanced meters as network devices.

Concerns were also raised by some DNSPs about the effect that churn in the Metering Coordinator role at a particular site would have on:

- the degree of certainty they could have about how long they will be able to access the services at a particular location and the terms and conditions they will be subject to; and
- the transaction costs they may incur.

Several DNSPs at the second stakeholder workshop claimed that the uncertainty created would not allow them to rely on access to network-related services as an alternative to network augmentation or installing their own network devices.

The ATA expressed similar concerns about the ability of DNSPs to access network functions at a fair and reasonable cost, noting that consumers may have ‘little or no interest in the many smart meter functions and services that their meter is capable of’. The ATA’s view was that metering access and charges should be regulated.⁵³⁰

D4.4.2 Role DNSPs could play in facilitating the installation of advanced meters

Through submissions and the second stakeholder workshop, stakeholders identified a number of ways in which DNSPs seeking to access advanced meter enabled services could facilitate the installation of advanced meters, including:

- (a) Helping to fund the installation of advanced meters by providing an upfront capital contribution to Metering Coordinators in their network area in return for securing access to network-related services for a defined period of time.
- (b) Helping to underwrite the installation of advanced meters by entering into a long-term agreement with Metering Coordinators in their network area for the provision of network-related metering services. The key difference between this option and option (a) is that network-related metering services would be paid for as and when they are received rather than upfront.
- (c) Carrying out its own targeted installation of advanced meters as part of their regulated business, financed out of their overall revenue allowance that is approved by the AER.

⁵³⁰ ATA and other consumer groups, submission on consultation paper, p7.

The Metering Coordinator under options (a) and (b) may be retailer owned, a third party operator or the DNSP's own ring-fenced Metering Coordinator.

In the AER's view, DNSPs should be required to obtain services through a commercial arrangement with a Metering Coordinator⁵³¹ either through options (a) or (b), and should not be allowed to install advanced meters as part of their regulated business, option (c).⁵³²

The AER considered that DNSPs should not be allowed to install meters as part of their regulated business as this could:⁵³³

- inhibit effective competition because DNSPs are guaranteed cost recovery under the rules and they will also be a procurer of services in the market; and
- limit the choices available to customers, both in terms of who takes on the Metering Coordinator role and service offerings.

This view was echoed by AGL, Origin Energy, ERM Power, Vector and Metropolis.⁵³⁴

The AER and a number of retailers also raised concerns about the potential for DNSPs to favour their own Metering Coordinators under options (a) and (b).⁵³⁵ To address this concern, Origin Energy, ERM Power and EnergyAustralia suggested that DNSPs should be required to carry out a transparent competitive tender process (potentially overseen by the AER) to ensure that they do not just grant the work to their unregulated Metering Coordinators.⁵³⁶

In contrast to the position taken by the AER and retailers on option (c), the ENA and a number of DNSPs have contended that DNSPs should be able to install meters as part of their regulated business, where it is prudent and efficient to do so for network purposes, even if only for a limited time until the competitive market develops.⁵³⁷ SA Power Networks submitted:⁵³⁸

531 Either an independent Metering Coordinator or its own Metering Coordinator where the necessary ring-fencing arrangements in place.

532 AER, submission on consultation paper, p6.

533 AER, submission on consultation paper, pp6-7.

534 AGL, submission on consultation paper, p8; Origin Energy, submission on consultation paper, p8; ERM Power, submission on consultation paper, p14; Metropolis, submission on consultation paper, p8; Vector, submission on consultation paper, p17.

535 AER, submission on consultation paper, p7; Origin Energy, submission on consultation paper, p8; ERM Power, submission on consultation paper, p14; Vector, submission on consultation paper, p17; EnergyAustralia, submission on consultation paper, p5.

536 Origin Energy, submission on consultation paper, p8; ERM Power, submission on consultation paper, p14; Vector, submission on consultation paper, p17; EnergyAustralia, submission on consultation paper, p5.

537 ENA, submission on consultation paper, pp28-30; SA Power Networks, submission on consultation paper, pp9-10; Ergon Energy, submission on consultation paper, p11; Energex, submission on consultation paper, p6.

538 SA Power Networks, submission on consultation paper, pp9-10.

“when the LNSP submits the project to the AER as part of its regulatory submission, there should ideally be certainty both that the necessary access to advanced metering can be achieved, and of the associated cost of access. Where the LNSP proposes to install its own meters, it has this certainty. In a competitive market where:

- advanced metering is widely available through third party metering providers,
- the relevant network-related services are offered in a consistent way by all providers through a common interface, and
- LNSPs have long-term certainty of pricing for access to these services across multiple providers,

then LNSPs can build a business case to put to the AER based on purchasing access from other parties. These market conditions do not yet exist, and it will take some time for them to develop in the proposed market. Moreover, LNSPs have raised concerns that the proposed market arrangements are not sufficient to guarantee these outcomes. LNSPs should have the opportunity to deploy advanced metering to support a regulated program where it is prudent and efficient to do so, at least as a transitional measure while the market develops. This does not preclude a LNSP that has budgeted to install its own meters from choosing instead to purchase access to metering services from other providers if the market can deliver the same outcome for lower cost – in fact under a RIT-D test LNSPs are required to implement the more efficient solution.”

At the second stakeholder workshop, a number of other DNSPs noted that making a business case to use advanced metering enabled services provided by other parties, i.e. options (a) and (b), as an alternative to network augmentation under the RIT-D framework would be difficult given the uncertainty surrounding:

- the terms and conditions of access that will be sought by Metering Coordinators; and
- whether they will still be able access to the services if the Metering Coordinator changes.

Energex also noted that DNSPs would be reliant on retailers and other Metering Coordinators that may have little interest in providing network-related services.⁵³⁹

DNSPs stated in the second stakeholder workshop that they would be unlikely to provide an upfront capital contribution due to the uncertainty about whether they would still be able to access the services if the Metering Coordinator changes.⁵⁴⁰ Given

⁵³⁹ Energex, submission on consultation paper, p6.

⁵⁴⁰ Because the meter may be replaced, or the new Metering Coordinator may decide not to offer the same terms and conditions of access.

this uncertainty, DNSPs suggested that an ongoing payment for services was more likely than upfront funding.

The ATA also supported the ability of DNSPs to carry out a targeted and regulated deployment of advanced meters, and noted that without this DNSPs may be deterred from implementing cost effective DSP because of uncertainty about cost recovery.⁵⁴¹ PIAC expressed a similar view and noted that allowing DNSPs to carry out a targeted deployment was more likely to be in the long term interests of consumers because they are more likely to be able to deploy the meters at a lower cost than a 'piecemeal competitive retailer-led roll out'.⁵⁴²

D4.5 Commission's analysis

In reaching its draft decision, the Commission has been cognisant of the need to allow for the potential network-related benefits associated with advanced meters to be obtained by DNSPs and passed onto consumers.

The remainder of this section sets out:

- how DNSPs will be able to access advanced metering enabled services when the meters have already been installed;
- the role that DNSPs will be able to play in facilitating the installation of advanced meters; and
- how DNSPs may seek to recover the costs of network-related services enabled by advanced metering.

D4.5.1 Access to network-related services when meters have been installed

Consistent with the COAG Energy Council's proposal, if advanced meters have already been installed and DNSPs reach an agreement with the Metering Coordinator to access the network-related services enabled by the metering installation, then the terms and conditions of access (including price) will be set out in a commercial agreement.

The following sections outline the Commission's analysis of key stakeholder concerns, including:

- the potential for Metering Coordinators to exert market power when negotiating access to network-related services;
- the uncertainties and transaction costs that DNSPs claim they will face under the new market arrangements; and

⁵⁴¹ ATA and other consumer groups, submission on consultation paper, p3.

⁵⁴² PIAC, submission on consultation paper, p1.

- the risk that a DNSP may favour its own Metering Coordinator when procuring metering services.

D4.5.2 Risk of Metering Coordinators exercising market power

As noted above, the ENA, DNSPs and the ATA have expressed concerns about the potential for a Metering Coordinator to exercise market power when dealing with DNSPs. Further analysis on this issue, and the Commission's conclusions, can be found in Appendix E.

Consumers will ultimately bear the consequences if a Metering Coordinator decides to exercise market power in its dealings with DNSPs. For example, if Metering Coordinators decide to prevent or restrict a DNSP's access to the services provided by the meters, then the network-related benefits of the meters will not be passed through to consumers in the form of lower prices or service quality improvements. Similarly, if Metering Coordinators decide to charge DNSPs prices for metering services that exceed what would prevail in a workably competitive market, then consumers will pay for this through higher distribution use of system charges.

Appendix E sets out the Commission's views on this issue in more detail, including factors that are expected to limit Metering Coordinators' ability to engage in this conduct.

Given the potential for consumers to be adversely affected, the Commission has decided that DNSPs will be allowed to continue to use existing network devices or install new network devices.

While the Commission recognises that allowing bypass through the installation of new network devices could lead to an inefficient duplication of assets, it expects that in most cases the threat of bypass, as opposed to actual bypass, would be sufficient to constrain any exercise of market power. The risk of inefficient duplication should be low, particularly given that this expenditure will need to be financed by the DNSP out of its overall revenue allowance that is approved by the AER.

To give effect to the bypass options, to the draft rule:

- prevents a Metering Coordinator from removing, damaging or rendering inoperable the DNSP's network devices without consent;
- provides that a DNSP may install a network device at or adjacent to a metering installation for the purpose of monitoring or operating its network; and
- requires a Metering Coordinator to cooperate with DNSPs who wish to install a network device and provide reasonable assistance to facilitate the installation.

DNSPs may only use such network devices in connection with the operation or monitoring of the DNSP's network. Network devices cannot be used by DNSPs for remote disconnection or reconnection. Information contained in a network device

(such as usage information) cannot be provided to any person except as permitted under the NER.

The network device provisions will also cover the DNSP's existing load control equipment that is contained in an existing meter or in a separate network device. The network device provisions will therefore give effect to the COAG Energy Council's proposal that a Metering Coordinator must ensure that DNSPs' existing load control equipment is retained if a meter is replaced.

In addition to the bypass options outlined above, there is certain information provided by advanced meters, for example voltage data, that is of value to DNSPs. This could potentially be provided in a similar manner to how energy data is currently provided to the market, in the standard file format via MSATS. This proposal was raised by stakeholders at the fifth stakeholder workshop and by participants in AEMO's reference group for the development of advice to the COAG Energy Council on the minimum services specification.

In its advice, AEMO indicates that there is a potential for the number of service requests through the Metering Coordinator to be reduced significantly if the standard file formats are updated to consider advanced metering information. AEMO recommended that the development of the minimum services specification and the shared market protocol be undertaken concurrently with a review of the standard format for delivering data to the market and participants.⁵⁴³

D4.5.3 Contracting uncertainties and transaction costs

DNSPs have raised concerns that their ability to access network-related services could be subject to a significant degree of uncertainty and transaction costs if the Metering Coordinator changes.

One potential remedy a DNSP could consider is to enter into framework agreements with most of the Metering Coordinators in its network. The term 'framework agreements' is used in this context to refer to an agreement that sets out the price and non-price terms and conditions of access that will apply when a DNSP deals with a particular Metering Coordinator at any site in its network.

The advantages that these types of agreements have over site specific contracts are that:

- the DNSP will have to enter into fewer contracts, which will reduce transaction costs; and
- if the Metering Coordinator changes at a site, and the new Metering Coordinator has entered into a framework agreement with the DNSP, that agreement will come into effect, which will further reduce transaction costs and provide the

⁵⁴³ AEMO, Minimum functionality of advanced meters, advice to COAG Energy Council, November 2014, p17.

DNSP with certainty about the conditions that will apply if the Metering Coordinator changes.

Alternatively, if DNSPs are only seeking access to the demand management functionalities they could enter into a contract with a third party DSP aggregator. Under this option, the DSP aggregator would be responsible for contracting with a sufficient number of Metering Coordinators in the network area to guarantee the provision of the required level of demand management over the required period. The contracting risks and transaction cost issues would therefore sit with the DSP aggregator, rather than the DNSP. It would then be up to the DSP aggregator to enter into framework agreements to manage these costs and risks.

As the preceding discussion highlights, there are a number of commercial arrangements that could be used to overcome the impediments cited by DNSPs. Therefore, the Commission does not expect the new market arrangements to act as a barrier to the efficient take up of network-related services by DNSPs.

D4.5.4 Risk of a DNSP favouring its Metering Coordinator business

In submissions received from a number of retailers and the AER, concerns were raised about the potential for a DNSP to favour its own Metering Coordinator when procuring access to the network-related services enabled by advanced metering. While these concerns were primarily raised in the context of advanced meters being installed by DNSPs as part of a regulated DSP program, they may also apply to an extent under a competitive framework. The Commission has therefore considered these concerns in this context.

In considering this issue, the Commission has considered the likelihood that a DNSP will be able to favour its own Metering Coordinator by only procuring services from it.

It is worth noting that under the proposed market arrangements DNSPs will have no role in the appointment of the Metering Coordinator at a particular site. They will therefore only be able to procure the services enabled by advanced meters from their own Metering Coordinator if it has been appointed to that role by a retailer, or large customer, at a relevant site. The risk of a DNSP only procuring services from its Metering Coordinator business is low.

The Commission also considered whether the rules in their current form will provide DNSPs with sufficient incentive to engage in competitive procurement practices when acquiring advanced metering enabled services.

The Commission understands that when assessing compliance with the operating and capital expenditure criteria in Chapter 6 of the NER, the AER carefully scrutinises related party transactions. Through this process, the AER has clearly signalled to

DNSPs that if their related party contracts have not been entered into as a result of a competitive tender process the following will occur:⁵⁴⁴

- the contracts will be subject to a greater degree of scrutiny; and
- the AER may decide not to allow some of the costs under this contract to be recovered if they are found to be imprudent or inefficient.

While the AER's review of related party transactions has to date focused on asset management contracts, there is no reason to expect that related party metering service contracts will be subject to less scrutiny. DNSPs that decide to enter into an agreement with their Metering Coordinators without conducting an open and competitive tender process will therefore risk having some of the costs payable under this contract excluded from their revenue requirement.

The Commission has therefore decided that it is unnecessary to include any requirement in the draft rule that DNSPs comply with competitive procurement principles as proposed by the COAG Energy Council.

Finally, it is worth noting that DNSPs are required by the RIT-D process to consult with interested parties on non-network solutions and to consider any non-network proposals that may be submitted through this consultation process. If the \$5 million cost threshold is met, this process will provide:

- Metering Coordinators with an opportunity to submit an offer to provide the DNSP with access to the DSP functionality in their advanced meters as a non-network solution; and
- DSP aggregators with an opportunity to submit an offer to provide the DNSP with DSP services that it has aggregated across a number of Metering Coordinators.

This process can be expected to impose additional discipline on DNSPs and make it more difficult to favour its own Metering Coordinator.

D4.5.5 Role DNSPs could play in facilitating the installation of advanced meters

During the consultation process stakeholders identified the following alternative roles that DNSPs could play in facilitating the installation of advanced meters in situations

⁵⁴⁴ See AER, Final decision: Victorian electricity distribution network service providers Distribution determination 2011-2015, October 2010, p152; AER, Draft decision Murraylink 2013-14 to 2022-23, November 2012, p36. The Commission is also aware that the risk of not being able to recover all of the costs under a related party transaction has prompted a number of regulated entities to rethink their approach to contracting and to engage in more competitive procurement practices. See AER, Access arrangement final decision Multinet Gas 2013-17, Part 2: Attachments, p143; AER, Final decision: Victorian electricity distribution network service providers Distribution determination 2011-2015, October 2010, p160; JGN, 2015-20 Access Arrangement Information Appendix 4.1 – JGN's pipeline service delivery model, 30 June 2014, pv.

where there is no advanced meter in place, but a DNSP has established that there would be a network benefit associated with the installation:

- (a) Provide an upfront capital contribution to Metering Coordinators in return for the provision of services over a defined period.
- (b) Enter into long-term contracts with Metering Coordinators for the provision of services.⁵⁴⁵
- (c) Install meters as part of its regulated business out of its overall revenue allowance that is approved by the AER, if it is prudent and efficient to do so.

Of the alternatives identified by stakeholders:

- Options (a) and (b) are consistent with the proposed rule change, although the Commission understands that option (a) is unlikely to be pursued by DNSPs because of the risk that the meter will churn before it receives the services it has paid for through the capital contribution.
- Option (c) is inconsistent with the proposed rule change, which envisages metering being provided under competitive arrangements.

The draft rule does not make any provision for option (c) for the following reasons:

- Allowing DNSPs to compete in a regulated capacity with others in the competitive segment of the market could have a detrimental effect on competition. It would also be contrary to the broader objectives of this rule change, which are to promote consumer choice and encourage the development of a workably competitive market.
- It would be impractical to implement this option under the proposed arrangements because to install the meters in its regulated capacity the following would need to occur:
 - The DNSP would need to be the Metering Coordinator at each site. This cannot be guaranteed without significant changes to the model set out in the draft rule because other parties can be appointed to this role and this is beyond the control of the DNSP.
 - The metering services would need to be classified as direct control services with charges for those services regulated by the AER.

As noted above, a DNSP will be able to help underwrite the installation of advanced meters and secure access to the services provided by these meters by entering into long-term contracts with the Metering Coordinators that operate within its network

⁵⁴⁵ While this option does not involve an upfront payment, it can still help to underwrite the installation of meters by the Metering Coordinator because it will provide the Metering Coordinator with a guaranteed revenue stream over the term of the contract for some of the services to be provided by the meter.

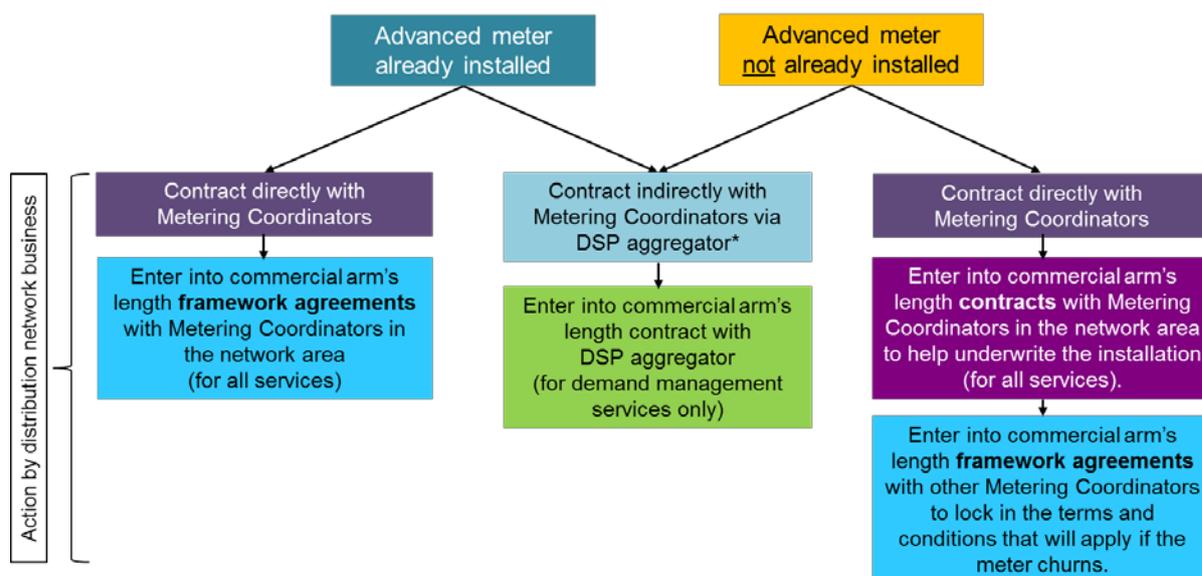
area. A DNSP could enter into framework agreements with other Metering Coordinators so that it has greater certainty about the terms and conditions of access it will face if there is churn. It could also enter into a long-term contract with a third party DSP aggregator, who would then take on the responsibility of entering into foundation contracts and framework agreements with Metering Coordinators in the network area.

The Commission considers that these commercial arrangements can be used to overcome the concerns raised by DNSPs about the lack of certainty they will have about their ability to access services and the terms and conditions of access if they do not own the meter.

D4.5.6 How DNSPs will recover the costs of acquiring these services

Figure D4.1 illustrates the alternative contractual arrangements that a DNSP could use when seeking access to the services enabled by advanced meters.

Figure D4.1 Alternative ways a DNSP could access network-related services and functions



Note that the Metering Coordinator may be retailer owned, a third party or the distribution network business's unregulated Metering Coordinator business.

** In this case it will be the DSP aggregator that contracts directly with the Metering Coordinators to help underwrite the installation.*

The manner in which DNSPs will be able to recover the costs incurred under these contractual arrangements will depend on the nature of the service acquired. However, in general they will be able to recover prudent and efficient costs they incur in acquiring these services in one of the following ways:

1. Including the costs in allowed expenditure at the start of the regulatory period (either operating or capital expenditure, depending on the type of project).
2. Funding the expenditure through savings created by deferring or avoiding capital expenditure that was included in the allowed expenditure for the regulatory period.

3. Including the costs in the Demand Management and Embedded Generation Connection Incentive Scheme for expenditure related to demand management.

From a consumer's perspective, the benefits associated with this expenditure including the benefits of deferred network augmentation, improvements in service quality or other operational efficiencies, should be passed through by DNSPs over time in the form of lower network tariffs and/or higher quality or reliability of services.

E Access to Metering Coordinator services

Summary

This appendix sets out the Commission's reasons for not regulating access to Metering Coordinator services.

Under the new arrangements contained in the draft rule, there are a number of possible risks to the effectiveness of competition. One such risk is that Metering Coordinators may be in a position where they can restrict access to metering services and products by not providing metering services under reasonable terms and conditions or at efficient prices.

However, many factors are likely to mitigate these risks. The ability of Metering Coordinators to exercise market power may be constrained by:

- The number of potential entrants into the market. Barriers to entry are low and the Commission is aware that a number of retailers and metering businesses are already considering establishing a Metering Coordinator business.
- The risk that metering assets will become stranded if Metering Coordinators restrict access to them. This will reduce the incentives on Metering Coordinators to deny access to their services, or to charge excessive prices to other retailers.
- The bargaining power of DNSPs as the only potential party interested in particular services. This will incentivise Metering Coordinators to negotiate with DNSPs and provide services at reasonable cost.
- The ability of consumers to switch retailers. If Metering Coordinators do not offer access to products and services that consumers value, their appointing retailer risks losing customers and market share. This reduces the incentives for Metering Coordinators to deny access to their services, or charge excessive prices to energy service companies.

In this context, the introduction of access regulation to better manage the potential emergence of competition issues is likely to introduce more costs than benefits. In particular, access regulation may significantly diminish the incentives for different parties to invest in metering services. Without these incentives, investment in advanced metering infrastructure and the services this would facilitate may fail to develop.

However, the Commission considers it prudent to assess the state of competition once the market has had time to evolve. Therefore the Commission recommends that the need for access regulation should be reviewed three years after the new Chapter 7 of the NER commences.

E.1 Introduction

This appendix considers the key competition issues that may emerge under a competitive framework for metering. It also considers whether some form of regulation may be required to address these issues.

The potential for competition issues to arise in the context of services provided by a Metering Coordinator were first considered in the AEMC's advice to the COAG Energy Council on a framework for open access and common communications standards for advanced meters.⁵⁴⁶ The advice examined, among other things, whether some form of regulation was required to manage the relationship between a Metering Coordinator and parties seeking access to advanced metering services. The advice did not reach a firm conclusion on this issue and proposed that it be more comprehensively considered as part of this rule change process.⁵⁴⁷

This appendix sets out the Commission's reasoning for its view that regulation of access to Metering Coordinator services is not required.

In this appendix, references to "regulation of access to Metering Coordinator services" (or similar terms) relate to regulation of the price and other terms and conditions for the supply of services by Metering Coordinators (including services enabled by advanced meters) to parties seeking access to those services. Various potential forms of access regulation are discussed in section E.4.3 below.

Although the Commission has decided not to regulate access to Metering Coordinator services to address the competition concerns discussed in this Appendix, some aspects of Metering Coordinator services will be regulated under the draft rule, as discussed in other Appendices. For example:

- where a DNSP acts as the initial Metering Coordinator for existing type 5 and 6 metering installations under the transitional arrangements, the draft rule contains provisions related to the terms and conditions on which the DNSP will be appointed to that role;
- prices for metering services provided in relation to type 5 and 6 metering installations will continue to be regulated by the AER (unless the AER changes how it classifies those services); and
- certain restrictions apply to who may access metering data and services provided by way of a metering installation.

This appendix covers:

- the relevant elements of the COAG Energy Council's proposal;

⁵⁴⁶ AEMC, Framework for open access and communications standards, final report, 31 March 2014.

⁵⁴⁷ Ibid., p24.

- stakeholder views expressed in submissions to the consultation paper and in workshops held by the AEMC on the relevant competition issues that may arise under the new arrangements; and
- the Commission’s analysis of the competition issues, and the feasibility and implications of a light-handed regulatory framework to address them.

E.2 Rule proponent's views

The COAG Energy Council’s rule change request asked the Commission to investigate whether any regulation is needed to address potential competition concerns that may emerge between Metering Coordinators and parties seeking access to their services.⁵⁴⁸ This includes the costs and benefits of introducing standard terms and conditions in metering contracts, which could outline the contract length, termination fees and exclusivity restrictions.⁵⁴⁹

Specifically, the rule change request sets out a number of issues to consider regarding the implications of the proposed approach, including whether:

- it introduces any 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 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; and
- 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, DNSPs or other service providers.

E.3 Stakeholder views

In submissions to the consultation paper and during stakeholder workshops, stakeholders expressed a range of views on the prospects for a competitive market in metering services.

⁵⁴⁸ COAG Energy Council, rule change request, October 2013, p10.

⁵⁴⁹ Ibid., p9.

Retailers were generally of the view that competition would be effective and that no regulation was required to govern commercial arrangements between Metering Coordinators and other parties seeking to use their services.

In contrast, the ENA expressed concern that Metering Coordinators may have incentives to set excessive prices for services DNSPs might require for supporting the operation of, and investment in, the network.⁵⁵⁰ The ENA proposed that DNSPs should either be able to retain existing network devices or install new ones that could perform the required network functions if they are not able to reach agreement with the Metering Coordinator. Alternatively, some form of regulation could be introduced that guaranteed access to the required data and services at the cost of provision.⁵⁵¹

Metering Providers and Metering Data Providers largely supported a competitive framework, but expressed mixed views on whether any regulation is necessary. Some metering businesses expressed the view that regulation is required to avoid meter churn, although did not provide details on what such regulation should look like.⁵⁵² Other metering businesses were strongly against any form of regulation and considered that the market is capable of preventing inefficient meter churn.⁵⁵³

EnerNOC expressed concerns about retailers performing the role of Metering Coordinator. It considered that this would introduce incentives for the Metering Coordinator to charge excessive prices for use of its metering functionality or refuse access to such functionality entirely.⁵⁵⁴ EnerNOC proposed standard contracts be developed for governing the relationship between Metering Coordinators and third parties, with provisions that prevented Metering Coordinators from including discriminatory prices, terms and conditions in their contracts.⁵⁵⁵

The AER also expressed some concerns in relation to the ability of retailers to become Metering Coordinators. The AER considered that some barriers to consumers switching retailers could be created if retailers could restrict access to the meters they control through their Metering Coordinators. The AER proposed the introduction of minimum regulatory requirements to mitigate barriers to consumers switching, although they did not specify what such requirements should be.⁵⁵⁶

E.4 Commission's analysis

In its advice on a framework for open access and common communication standards, the Commission determined that the nature of the competition issues that may arise in

550 ENA, submission on consultation paper, p7.

551 Ibid., p9.

552 Calvin Capital, submission on consultation paper, p2.

553 EDML, submission on consultation paper, p5; Metropolis, submission on consultation paper, p5; Landis & Gyr, submission on consultation paper, p9.

554 EnerNOC, submission on consultation paper, p1.

555 Ibid., p4.

556 AER, submission on consultation paper, p9.

relation to third party access to advanced metering services would depend in part on the role of the Metering Coordinator and who could appoint the Metering Coordinator.

The Commission noted that there is a greater case for a form of 'light-handed regulation' if the metering framework did not allow consumers the ability to appoint their own Metering Coordinator. The Commission considered that without an ability to appoint their own Metering Coordinator, consumers would need to first change their retailer in order to secure alternative metering services. This lack of transparency between consumers and Metering Coordinators could give Metering Coordinators scope to charge above efficient costs for metering services. Coupled with the costs that consumers may incur in changing retailers, this could increase costs for consumers.⁵⁵⁷

The Commission's draft rule gives large customers the option to appoint their own Metering Coordinator, but does not allow small customers this ability.⁵⁵⁸ The remainder of this appendix sets out the Commission's analysis of potential competition issues, given that small customers will not be able to directly appoint a Metering Coordinator. The Commission has drawn on the competitive metering market experiences of New Zealand and the United Kingdom to inform its analysis.

E.4.1 Competition issues

Three different ownership models for a Metering Coordinator are likely to arise under the draft rule:

1. A retailer sets up a Metering Coordinator business, or is otherwise affiliated with a Metering Coordinator. This is referred to as a '*Retailer Metering Coordinator*'.
2. A DNSP sets up a Metering Coordinator business, separate from its ring-fenced regulated business. This is referred to as a '*Distribution Metering Coordinator*'.
3. An independent third party metering business performs the role of Metering Coordinator. This is referred to as an '*Independent Metering Coordinator*'.

The Commission assessed whether any risks to effective competition that may require regulatory intervention are likely to arise under each of these ownership models. The Commission considers that risks to effective competition could manifest in two main ways:

- Any Metering Coordinator will have a degree of market power⁵⁵⁹ through its control of access to the consumer's meter. This may incentivise a Metering Coordinator to charge other parties wanting to access to the meter a higher price

⁵⁵⁷ AEMC, Framework for open access and communications standards, final report, 31 March 2014.

⁵⁵⁸ Refer Appendix B1.

⁵⁵⁹ Market power is used in this context to refer to the ability of the Metering Coordinator to exercise a level of discretion over the prices they charge, for a sustained period of time. Such discretion may occur in workably competitive markets but only for a limited period until new entry occurs or costs decrease.

than would otherwise be efficient. This may mean consumers pay higher than necessary charges for metering and related services.

- A Retailer Metering Coordinator could discriminate against third parties, including other retailers and energy service companies, in order to restrict the ability of that third party to provide services to a consumer. For example:
 - A Retailer Metering Coordinator may price discriminate against another retailer, raising the rival's costs and preventing it from competing effectively in the retail market.
 - Similarly, a Retailer Metering Coordinator could discriminate against an energy service company, affecting its ability to compete in the energy services market.

This behaviour could reduce competition in both the retail and energy services markets, increasing costs to consumers.

These two risks are explored in further detail below.

Risk that Metering Coordinators will set high prices

Metering Coordinators may seek to charge high prices for the services they provide as their control of access to a consumer's meter may allow them a degree of market power. In the absence of substitute services, there may be an incentive on Metering Coordinators to charge a higher price as a buyer of the services has no alternative but to deal with the Metering Coordinator for access to the services. This incentive could arise between a Metering Coordinator and any of the following parties:

- a new retailer;
- a DNSP; and/or
- an energy service company.

These relationships are considered separately below.

SCENARIO 1: Relationship between a new retailer and an incumbent Metering Coordinator

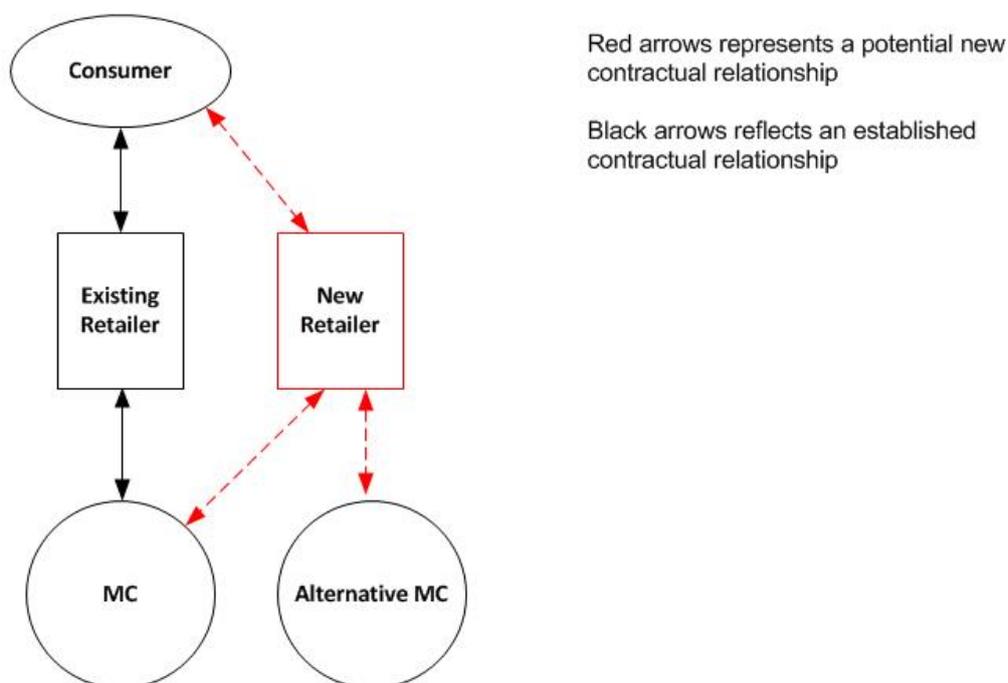
In this scenario a new retailer is seeking access to the services of an incumbent Metering Coordinator at one or more sites that it has acquired.

In this scenario, the term "incumbent" Metering Coordinator refers to the Metering Coordinator that is in place immediately prior to a consumer switching to a new retailer, noting that the new retailer may choose to engage a different Metering Coordinator.

Figure E.1 illustrates the relationships relevant to the pricing of metering services by a Metering Coordinator in the event of a consumer switching to a new retailer. For ease

of illustrating the key issues the diagrams that follow, assume the Metering Coordinator is also the Metering Provider and the Metering Data Provider.

Figure E.1 Relationship between a new retailer and an incumbent Metering Coordinator



New Retailer seeks access to an MC's services, can appoint an alternative MC

Under this scenario, an incumbent Metering Coordinator faces an incentive to charge a retailer for access to the advanced meter and related services a price that is somewhere just below the level it considers the prospective new retailer would have to pay an alternative Metering Coordinator to replace the meter and provide metering services. This incentive is the same regardless of how much of the fixed costs of the meter have already been recovered by the incumbent Metering Coordinator as the incentive is to maximise profits not just recover costs.

This opportunity may arise where the costs facing a prospective new retailer to engage an alternative Metering Coordinator are greater than the incumbent Metering Coordinator's costs. The full cost of a new meter represents the upper limit that an incumbent Metering Coordinator could charge. This could result in a duplication of the costs of meter provision for a consumer.

If the alternative Metering Coordinator engaged by the new retailer sets a price for metering services that recovers the full upfront costs of providing and installing a new meter, these costs are likely higher than being charged by the incumbent Metering Coordinator. The new retailer would have difficulty developing a bundled energy and metering product that was sufficiently attractive to entice the consumer to switch.

Therefore, the potential for an incumbent Metering Coordinator to charge up to the replacement costs of a new meter may create a barrier to switching in the retail energy market.

What factors might constrain this behaviour?

The ability of an incumbent Metering Coordinator to charge up to the replacement cost of the meter will be constrained by a number of factors. The most important of these factors is the ability, or potential ability, for the prospective new retailer's alternative Metering Coordinator to bypass or strand the existing meter.

If there are one or more alternative Metering Coordinators in the market, or the threat of entry is high, this will improve the ability of a prospective new retailer to negotiate an efficient price for metering services. Competition would force the incumbent Metering Coordinator to offer a price that is closer to its opportunity cost of providing metering services. The following paragraphs briefly explain how an efficient price for services may be determined.

The starting position for the negotiation from the perspective of the incumbent Metering Coordinator is the full costs of an alternative new meter. This sets the upper boundary to the price of access. However, this upper price boundary to the negotiation will depend on the nature of the available alternatives open to the prospective new retailer.

As noted above, some Metering Coordinators will expect the prospective new retailer to pay the full costs of providing and installing the meter, as well as the ongoing costs of providing metering services. Other Metering Coordinators might be willing to enter into a leasing or rental arrangement with the retailer for the provision of metering services, in which case the opportunity costs of not gaining access to the incumbent Metering Coordinator's metering functionality will be much lower.

Where meters are leased, the transaction charge for the initial installation of a meter at a consumer's premises will be much lower than the upfront capital cost of the meter, or possibly even zero. The Metering Coordinator may simply install the meter and the retailer starts paying the rental charge, which is typically a monthly or annual charge for use of the meter. If a consumer decides to switch to another retailer with whom the Metering Coordinator has a contract, the Metering Coordinator and retailer would make arrangements so that the rental payments are thereafter made by the retailer to whom the consumer has switched. These types of leasing arrangements are common in the New Zealand market and in the United Kingdom.

The lower boundary to the negotiation is represented by the lowest price offer the prospective new retailer believes it can achieve without the incumbent Metering Coordinator refusing to negotiate. This offer will be the incumbent Metering Coordinator's incremental cost of providing the prospective new retailer with access. Any price the incumbent Metering Coordinator receives above incremental cost will allow it to recover some of the sunk costs of the meter.

The incumbent Metering Coordinator does not want to risk asset stranding, in which case the fixed or sunk costs of the meter would not be recovered. Therefore the incumbent Metering Coordinator is likely to accept a price somewhere above the incremental costs of providing metering services. The prospective new retailer will accept somewhere below the full installation costs of a new meter, taking into account the alternatives it has available, such as whether it needs to buy or lease the meter.

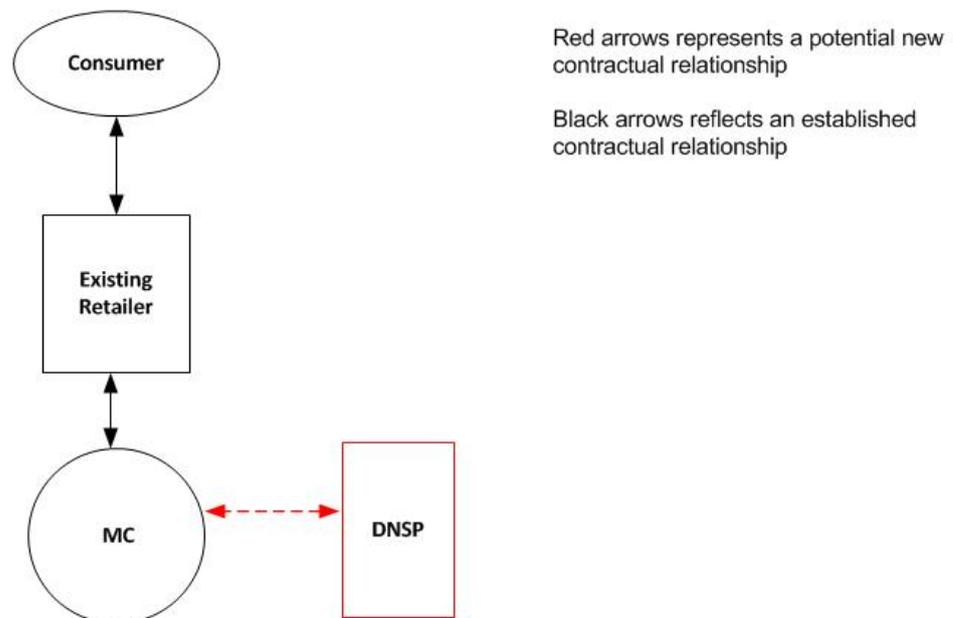
Consequently, competition should lead to efficient negotiated outcomes for the provision of metering services in a market where there is more than one Metering Coordinator, barriers to entry are low and/or there is a range of metering financing options available. The negotiated price will lie somewhere between the incremental cost of providing metering services and the full standalone costs of providing metering services by an alternative Metering Coordinator.

Such agreements for the provision of metering and related services would avoid inefficient meter churn. The benefits of this would be shared between the old retailer, the new retailer, the incumbent Metering Coordinator and the consumer.

SCENARIO 2: Relationship between a DNSP and a Metering Coordinator

Figure E.2 depicts a scenario in which a DNSP seeks offers from a Metering Coordinator to buy services that can assist the DNSP with operating and managing the network.

Figure E.2 Relationship between a DNSP and a Metering Coordinator



DNSP seeking access to MC services, cannot appoint an alternative MC

In the absence of competition, the Metering Coordinator will seek to charge as much as it can for its services sought by a DNSP. This will be at a level just below what it

considers the next best alternative is for the DNSP. Unlike in the previous scenario, the DNSP will not have the ability to appoint an alternative Metering Coordinator as a competitive response, as Metering Coordinators are appointed by retailers.

What factors might constrain this behaviour?

While DNSPs are not in a position to appoint another Metering Coordinator to a site, there are a range of other factors that may constrain the pricing behaviour of the Metering Coordinator.

First, a DNSP will be a monopsony buyer for the metering services it needs to manage the network and therefore is likely to have significant countervailing buying power for those services. Services such as voltage or power quality data are unlikely to be of interest to any other parties. If a DNSP decides not to purchase these services, the Metering Coordinator will have no alternative buyers.

This countervailing power of DNSPs should impose a strong incentive on Metering Coordinators to charge an efficient price for these services, particularly given the incremental costs of providing these services are very low. Further, providing services to DNSPs will provide Metering Coordinators with an additional source of revenue that may help support the initial business case for the deployment of advanced meters.

Second, for some network services, DNSPs will not need access to services at all connection points in order to operate the network effectively. Consequently, provided there are sufficient alternative Metering Coordinators at other connection points, if a particular Metering Coordinator chooses to raise its prices, other Metering Coordinators could offer a lower price or offer access to functionality and services on better terms at these other connection points.

Third, DNSPs will have the option of either retaining existing devices or installing new network devices. This allows them a credible threat to bypass the services of a Metering Coordinator if they consider the price charged by that Metering Coordinator is too high. The ability of DNSPs to install their own device provides an important constraint on the maximum price a Metering Coordinator could charge. This is discussed further in Appendix D4.

Finally, DNSPs may face competition from retailers or other third parties for some of the services they require, including load control. In a competitive market, the party that values the service or functionality the most will be willing to pay the highest price. In these circumstances the efficient negotiated price would not necessarily reflect the direct costs associated with installing and maintaining load control functionality, but rather the perceived value such functionality can deliver to consumers.

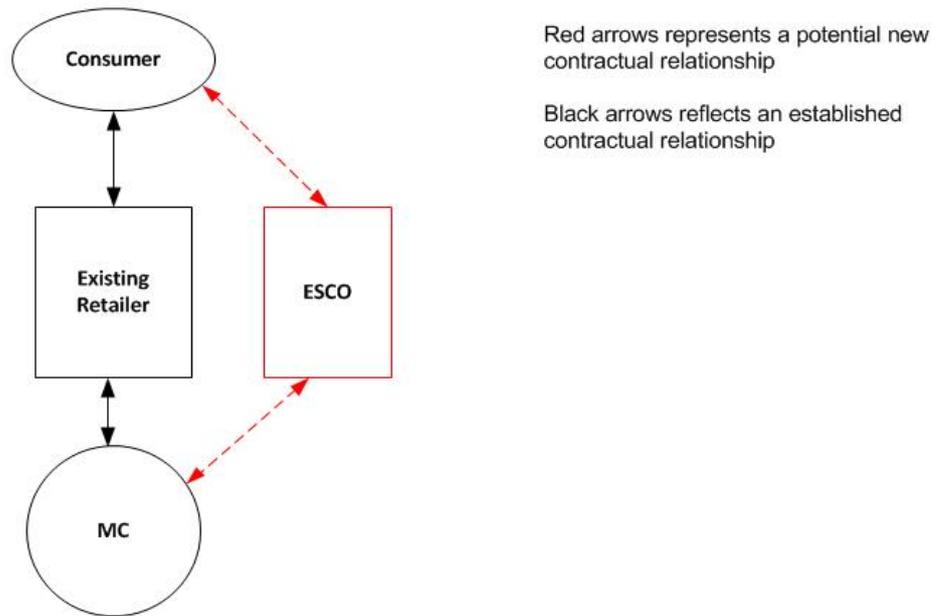
SCENARIO 3: Relationship between an energy service company and a Metering Coordinator

In this scenario an energy service company is seeking access to metering services provided by a Metering Coordinator. The Metering Coordinator will have incentives to charge as much as it can for its services sought by an energy service company. Like a

DNSP seeking access, an energy service company does not have the option of appointing its own Metering Coordinator.

This is shown in Figure E.3, which depicts a scenario in which an energy service company seeks the services of a Metering Coordinator to provide energy management services to consumers.

Figure E.3 Relationship between an energy service company and a Metering Coordinator



ESCO seeks access to MC services, does not have the option of alternative MC

What factors would constrain this behaviour?

One issue the energy service company faces is that it will be unable to appoint an alternative Metering Coordinator for a particular consumer if it is unhappy with the prices or other terms and conditions offered by the incumbent Metering Coordinator. While Metering Coordinators would have some incentive to negotiate with an energy service company on the basis that this would provide an additional source of revenue, this presents a potential competition concern for energy service companies.

A potential mitigating factor is that if consumers value energy management services, they will look for retailers, and so Metering Coordinators, that can provide these services. Provided the retail market is sufficiently competitive, a Metering Coordinator may risk losing a customer if does not provide metering services to energy service companies on sufficiently competitive terms and conditions. This may mean that if an energy service company is not satisfied with the terms and conditions offered by the incumbent Metering Coordinator, it may opt to offer its services through other Metering Coordinators and retailers operating in the market. If a consumer values the

services of that energy service company it may choose to switch to one of these alternative providers.

The incentive for the Metering Coordinator to behave inefficiently in relation to an energy service company is therefore conditioned by a competitive retail market and the presence of other Metering Coordinators in the market.

Risk that a Metering Coordinator may discriminate against third parties

An important characteristic of metering services is that they form an essential input into the delivery of energy and energy management services. Further, there are strong complementarities between timely and accurate metering services and:

- efficient retailing, including billing;
- provision of innovative tariff options; and
- provision of value added energy services.

Such complementarities between metering and the provision of energy and energy management services create incentives for retailers to integrate metering services into their businesses. Integration would give them direct control over the inputs they need to deliver energy services to their customers.

Where Metering Coordinators are owned by or closely affiliated with retailers, this may create an incentive for them to discriminate against third parties with whom they are competing in a downstream market. Such discrimination may take a number of forms, such as in the quality of the services provided and/or the prices charged for services.

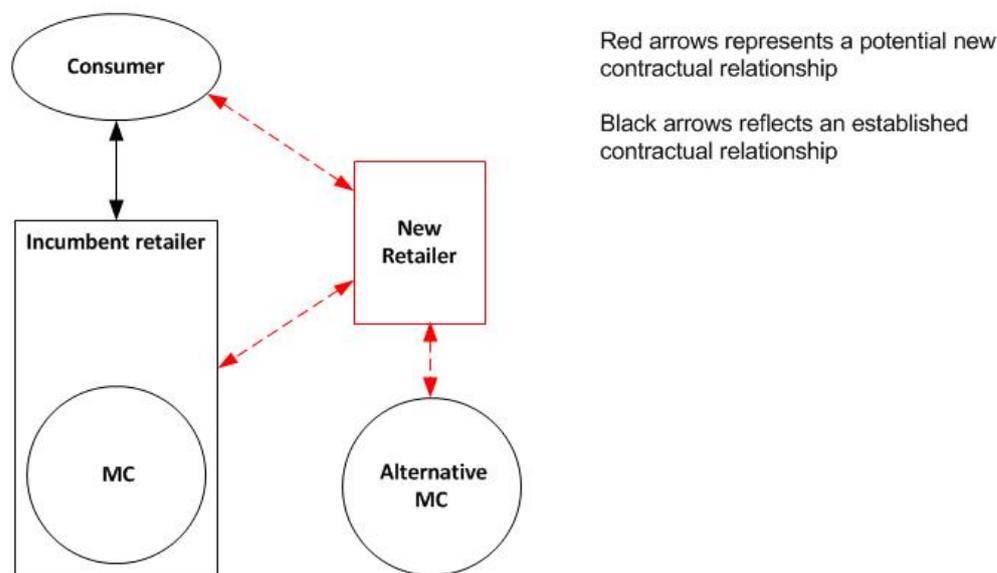
The competition issues that may arise in these circumstances are discussed below using two possible scenarios.

SCENARIO 4: Relationship between a retailer and a Retailer Metering Coordinator

This scenario addresses the situation where there is an incumbent Metering Coordinator, owned by a retailer, at one or more customer sites. A prospective new retailer is seeking to acquire a customer from the existing retailer, and is therefore seeking access to the services of the incumbent Metering Coordinator at these sites.

This scenario is illustrated in Figure E.4.

Figure E.4 Relationship between a retailer and a Retailer Metering Coordinator



New Retailer seeks access to Retailer MC services, but can appoint an alternative MC

Under this scenario the incumbent Metering Coordinator may have incentives to deny or frustrate access to its services by other retailers in order to hinder their ability to compete in the retail market. For example, the incumbent Metering Coordinator could:

- deny access completely or frustrate access by delaying negotiations or providing a poorer quality of access, which could increase the costs for the prospective new retailer in acquiring customers, as it would pay more than efficient costs for metering services; and/or
- deliberately charge the prospective new retailer a price for access to metering services that is above the level it would charge its own retailer. This could mean that the minimum price that an incumbent Metering Coordinator could be willing to accept for supplying metering services to a prospective new retailer would be higher than the minimum price acceptable to an alternative Metering Coordinator (ie above the full capital and installation costs of the next best alternative).

The effect of this behaviour is to raise the costs of supply for the prospective new retailer relative to the incumbent retailer, which may harm competition in the retail market by impacting the ability of retailers to make competitive offers.

The key characteristic of discriminatory conduct is that the incumbent Metering Coordinator chooses to forego short-term profits in the hope of securing higher returns in the long run for its affiliated retailer. Higher returns for the affiliated retailer arise

from the higher metering costs faced by its competitors. These higher metering costs would be factored into the prices competitors charge, which would make their retail offers less attractive to consumers.

What factors would constrain discriminatory behaviour in this scenario?

As in Scenario 1, the ability of the incumbent Metering Coordinator to discriminate against other retailers in this scenario will be constrained by the ability, or potential ability, for the prospective new retailer to appoint its own Metering Coordinator and bypass or strand the existing meter. The incentive to deny access will be diminished if the prospective new retailer can easily obtain low cost Metering Coordinator services elsewhere, because the pay-off from refusing to negotiate will be much reduced.

Further, retailers have a mutual incentive to agree to reciprocal arrangements. For example, if a prospective new retailer is also affiliated with a Metering Coordinator and has a substantial customer base, then that retailer may charge an incumbent retailer a correspondingly high price for access to its own meters and functionality. This creates incentives for a mutually beneficial bargain to be agreed between retailers for reciprocal supply of metering services to accommodate consumer switching.

The incentive for large retailers to negotiate mutually beneficial agreements with smaller retailers who are not affiliated with a Metering Coordinator or do not have an established customer base is likely to be less strong. Smaller second tier retailers are likely to possess less bargaining power, which could lead the Metering Coordinators of larger established retailers to price discriminate between different retailers depending on the perceived strength of countervailing bargaining power.

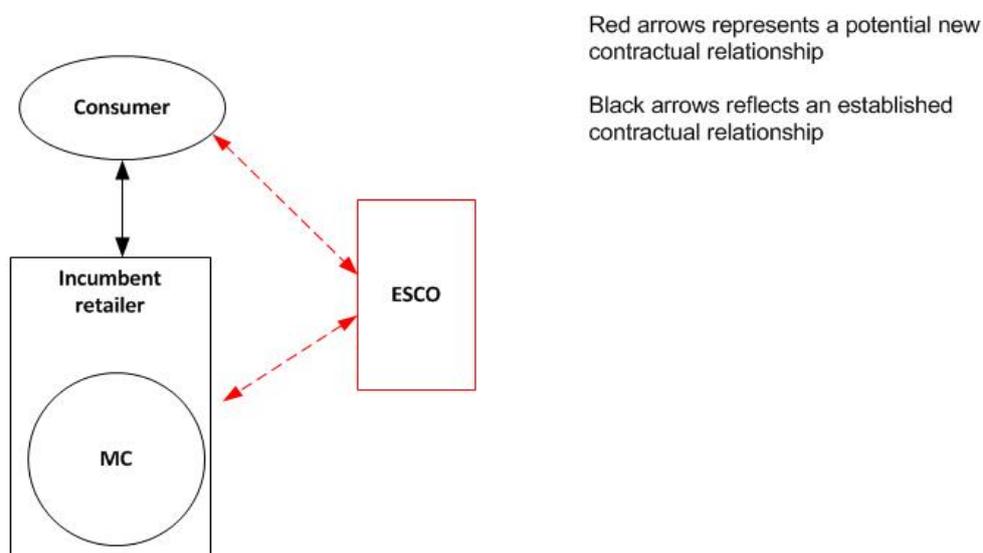
The Commission considers that the extent to which these dynamics will play out in the market will depend on the availability of low cost alternatives for retailers, such as the ability to lease rather than buy meters from the Metering Coordinator, and the emergence of independent Metering Coordinators. The prospects for such arrangements to emerge in Australia are good, as the Commission notes in its brief review of international arrangements in section E.4.2.

Finally, discriminatory behaviour that has the purpose of lessening competition may breach the Competition and Consumer Act (Cth) (CCA). This may provide a further constraint on the ability and incentive for a Metering Coordinator to engage in this type of conduct.

SCENARIO 5: Relationship between an energy service company and a Retailer Metering Coordinator

In this scenario an energy service company seeks access to services provided by a Retailer Metering Coordinator. The relevant relationships are set out in Figure E.5.

Figure E.5 Relationship between an energy service company and a Retailer Metering Coordinator



ESCO seeks access to Retailer MC services

In this scenario an energy service company seeks access to the services of a Metering Coordinator in order to provide an energy management service to a customer of the retailer affiliated with that Metering Coordinator. The Metering Coordinator may have an incentive to deny or frustrate access for use of its functionality and data because:

- managing a consumer's energy consumption, and in particular reducing it, may conflict with the retailer's core service of supplying energy to its customers. The Metering Coordinator may perceive that denying access would increase, or prevent a decrease in, the retailer's profits; or
- the retailer also wishes to offer such services to its customers.

This could then provide incentives for the Metering Coordinator to do one or more of the following:

- choose to deliberately charge the energy service company for access to metering services at a price well above costs, if it perceives this will advantage the parent retailer. This could mean that the minimum price that the Metering Coordinator could be willing to accept for supplying metering services to a new energy service company would be higher than the minimum price acceptable to an alternative Metering Coordinator;
- offer lower quality access to metering services by, for example, offering overly restrictive terms such that the energy service company is unable to access

metering services during certain times of the day, eg peak demand periods where demand management services are most attractive to consumers; and/or

- deny access completely or frustrate access by delaying negotiations.

What factors constrain discriminatory behaviour in this scenario?

Where there is a vertical relationship there will be a clear incentive for the Retailer Metering Coordinator to provide access in a way that enhances the competitiveness of its retailer owner or closely affiliated retailer in the retail market. If consumers value energy management services they will look for retailers that can provide those services. The retailer will therefore risk losing all the revenue from that consumer if it prevents the consumer accessing the energy service company's service. A lower return from the consumer may be better than losing that consumer altogether.

Alternative technologies that are currently available, and that may become more widely available in the future, may allow energy service companies to access granular consumption data and control load without requiring access to the meter. This would result in the Metering Coordinator not being a monopoly provider of that service. If a Retailer Metering Coordinator refuses to provide access to the meter, energy service companies will be more inclined to use these technologies to gain access to the services they need. This will reduce the number of revenue streams available to the Retailer Metering Coordinator, which in turn, may incentivise them to offer better access to energy service companies.

For example, devices that can sense current can be clipped onto outgoing wires from the circuit box. These sensors are Wi-Fi-enabled and allow for real-time monitoring of energy use at a level as granular as the wiring of the premises. Further, smart appliances are able to be remotely controlled via the internet. These options provide potential platforms for third party energy management that are not dependent on access to advanced metering services.⁵⁶⁰

Ultimately, consumers will face a choice between selecting a retailer that bundles the relevant energy management service and selecting a retailer that allows them to use an independent energy service company. Assuming the retail market is competitive, if a retailer chooses to 'tie' a service to its bundle, and its affiliated Metering Coordinator refuses access to a more efficient third party energy service company, that retailer risks losing customers if it is not competitive on price and service. Consequently, this should create incentives for any retailer to provide access to functionality it controls where this is efficient to do so.

⁵⁶⁰ An advanced meter would be required to create that pricing signal that makes energy management worthwhile from the consumer's perspective.

E.4.2 Current indicators and prospects for competition

The above section provided an analysis of competition concerns that could arise from the Metering Coordinator's control of the meter, as well as some factors that would constrain this behaviour in an effectively competitive market.

The Commission has sought to assess the available evidence for whether these factors are actually operating or are likely to operate in the new market. This has been informed by an extensive consultation process, discussions with potential market entrants and investigation of international arrangements.

A number of indicators give the Commission confidence that a market for metering services in Australia will be workably competitive and that barriers to entry will be relatively low.

Competitive markets for the provision of metering services have been working effectively in the United Kingdom and New Zealand. The most compelling evidence comes from New Zealand, where a competitive market in metering services was established in the late 1990s. Approximately 17 metering businesses have entered the market and are now competing to provide metering services to a range of different parties. Despite the fact that most metering businesses are either owned or affiliated with retailers, they provide services on a non-exclusive basis to other retailers and DNSPs.⁵⁶¹

Many retailers and/or metering businesses have also established arrangements with one another for reciprocal use of meters in order to avoid risk of meter stranding and the destructive competition that may arise from 'tit-for-tat' responses between retailers who are responding to one another's strong bargaining power. These reciprocal arrangements are typically 'leasing arrangements', where retailers lease or rent meters from other retailers (specifically their metering businesses) for a monthly or annual rental charge.⁵⁶²

There are also a number of independent meter leasing bodies operating in New Zealand, such as EDMI, which leases its meters on a non-exclusive basis to a range of different retailers. The availability of meter leasing arrangements may be particularly important for smaller, second tier retailers who may not otherwise provide a credible threat of a 'tit for tat response' to incumbent retailers.

Finally, there are early indications that metering businesses are already planning to enter the Australian market. Many of the metering businesses currently operating in New Zealand (eg Vector, EMDI and Metropolis) are seeking to establish themselves in Australia and have been active participants in this rule change process. Further, there appear to be a number of retailers in Australia that are in the process of establishing

⁵⁶¹ LECCG, 'Developments in the New Zealand market for Advanced Metering Infrastructure and related services', 3 July 2008.

⁵⁶² Ibid., p3.

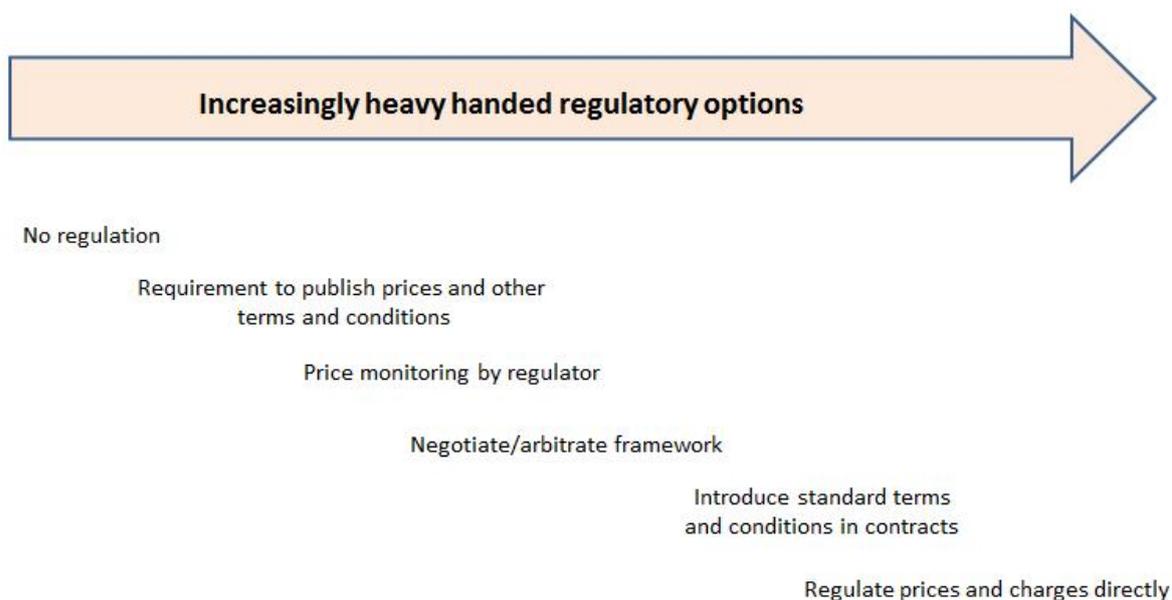
their own Metering Coordinator businesses as stand-alone subsidiaries and are likely to be motivated to seek customers beyond their retailer parent.

The Commission also notes that no second-tier retailers have expressed concerns to the Commission in submissions or in workshops about not being able to agree commercially acceptable terms with a Metering Coordinator.

E.4.3 Need for regulation

As part of assessing the costs and benefits of introducing access regulation, the Commission has considered the spectrum of regulatory options that are available to address the potential competition issues outlined above. This spectrum of options is summarised in Figure E.6 below.

Figure E.6 Spectrum of possible regulatory options



The Commission has not considered more intrusive forms of regulation, such as direct regulation of prices, terms and conditions. These forms of regulation would likely stifle incentives to invest and innovate in advanced metering services, ultimately undermining the evolution of contracting structures in the market.

Instead, the Commission considered a number of less intrusive regulatory options. These lighter forms of regulation are considered more appropriate where there is some degree of contestability or countervailing bargaining power in the provision of a good or service, but the market for supply of those services continues to be characterised by a substantial degree of bargaining power.⁵⁶³

⁵⁶³ See Section 4.4, Expert Panel on Energy Access Pricing, 'Report to the Ministerial Council on Energy', April 2006.

Relatively less intrusive forms of regulation may have one or more of the following features:⁵⁶⁴

- There is a reliance on commercial negotiation to deliver efficient outcomes, with availability of an arbitration mechanism as a backstop or ‘circuit breaker’ if negotiation fails. This is often referred to as an negotiate-arbitrate approach to regulation.
- The arbitration mechanism may also include pricing and other principles to guide negotiation and assist resolution of disputes.
- A requirement for a provider of services to publish prices, terms and conditions of access to those services.
- Price monitoring by a regulatory body such as the Australian Competition and Consumer Commission (ACCC) or the AER.

The benefits of these less intrusive forms of regulation are that they rely on markets to promote efficient outcomes for consumers, while leaving scope for regulatory intervention to deal with competition concerns as they arise in particular circumstances.

Box E.1 sets out a number of different contexts in which light-handed regulatory frameworks are applied.

Box E.1: Examples of different forms of access regulation

Different forms of regulatory approaches that may apply where a commercial arrangement cannot be reached are applied in a number of different contexts.

For example, Part IIIA of the CCA provides several pathways by which parties may gain access to services provided by monopoly infrastructure facilities. One such pathway is the ability of a party to apply to have a service provided by a particular facility “declared”. If a service is a declared service, an access seeker may initiate arbitration by the ACCC in the event that the access seeker and service provider are unable to reach commercial agreement on the terms of access to the declared service and an access dispute is notified to the ACCC.

When arbitrating disputes regarding declared services, the ACCC must take into account, amongst other matters, pricing and other principles set out in Part IIIA of the CCA.

Chapters 6 and 6A of the NER, which refer to the economic regulation of distribution network and transmission network services respectively, provide a right to arbitration for disputes concerning access to certain types of services characterised by a degree of contestability and countervailing power by users.

⁵⁶⁴ Expert Panel on Energy Access Pricing, ‘Report to the Ministerial Council on Energy’, April 2006, p17.

Chapter 6 and 6A also contain pricing principles used to facilitate negotiations.

Part 2 of the National Gas Law (NGL) provides for certain gas pipeline services to be classified as 'light regulation services'. This classification is determined by the National Competition Council on the basis of a range of factors, including whether the pipeline in question is characterised by degree of countervailing power from users and substitutability from other services and or pipelines. Pipelines classified as light regulation pipelines are subject to a negotiate/arbitrate framework and price monitoring by the AER. The AER performs the role of arbitrator and takes into account pricing and other principles in the NGL when making decisions on disputes.

How could lighter handed regulation apply in the context of metering services?

The Commission investigated whether to implement:

- a negotiate/arbitrate framework for metering services; and/or
- a form of price monitoring for metering services.

Negotiate/arbitrate framework

Fundamental to many lighter handed regulatory frameworks is a process for arbitration if commercial negotiations fail. The threat of arbitration in itself may encourage parties to reach commercial agreements. This requirement would need to be coupled with a requirement on Metering Coordinators to offer metering and related services.

An arbitration process may comprise the following steps, which will vary depending on the specifics of the framework:

- Metering Coordinators would be required to offer to provide metering services to any person seeking access to those services.
- If the negotiating parties are unable to agree to one or more aspects of the terms and conditions of access, either party may provide notice of dispute, either directly to a regulator (eg ACCC or AER), or to a dispute resolution advisor in the first instance, depending on the framework.
- The regulator, or dispute resolution advisor, reviews the notification and nominates itself or some other party as arbitrator, and nominates parties to the dispute.
- The arbitrator gathers information and informs parties to the dispute of the process for running the arbitration. It may convene meetings and ask for submissions to inform itself of the issues.
- In making a decision the arbitrator may take into account a range of pricing principles and other matters specified in the relevant regulatory framework.

An arbitration process such as this could be implemented to govern the competition concerns identified for access to the services provided by a Metering Coordinator. Consequently, if a DNSP, energy service company or retailer was unhappy with the prices or terms and conditions being offered by a Metering Coordinator, they could trigger the arbitration process by notifying the relevant party of a dispute.

An arbitration framework for metering services may also need to specify pricing principles to guide the arbitrator in its decision making. Such pricing principles could assist the arbitrator to balance the competing interests of those seeking access to the metering services and the Metering Coordinator as the provider of the service.

A good example for how such considerations are balanced in pricing principles are those used in the context of a dispute regarding the terms of access for a declared service under Part IIIA of the Competition and Consumer Act (CCA). These are set out in Box E.2 below.

Monitoring and information disclosure

A feature of some lighter handed regulatory frameworks is a requirement that service providers publish their prices and other terms and conditions for monitoring by the regulator. The rationale for this is that it facilitates transparency which, in turn, reduces incentives for the service providers to exercise market power.

For example, providers of light regulation services under the National Gas Rules (NGR) are subject to a price monitoring regime and must publish on their website:

- the prices on offer for light regulation services; and
- the other terms and conditions of access to those services.⁵⁶⁵

Monitoring relies primarily on the market to provide incentives to promote efficiency. There is usually an explicit threat of more intrusive regulation if efficient outcomes are not forthcoming. In the context of the light regulation of gas pipeline services, access seekers can apply to have the light regulation applying to a pipeline revoked. Upon receiving such an application, the National Competition Council will need to reassess, amongst other things, the level of competition and may decide to implement full access regulation if it deems competition has not been operating effectively.

Box E.2: Pricing principles under Part IIIA of the CCA

Under Part IIIA of the CCA, where a service has been declared, an access seeker has a right to seek arbitration by the ACCC where the access seeker and access provider are unable to reach commercial agreement.⁵⁶⁶

⁵⁶⁵ An exception to this requirement is set out in rule 36(2), which allows that if a limited access arrangement is in force and is accessible on the service provider's website, the terms and conditions of access (other than price) need not be separately published on the website.

⁵⁶⁶ Note that this only applies where aspects of access are not subject to an access undertaking.

In making a determination on an access dispute, the ACCC has to take into account, amongst other matters, the pricing principles in 44ZZCA of the CCA. These are:

- that regulated access prices should:
 - be set so as to generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services; and
 - include a return on investment commensurate with the regulatory and commercial risks involved; and
- that the access price structures should:
 - allow multipart pricing and price discrimination when it aids efficiency; and
 - not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher; and
- that access pricing regimes should provide incentives to reduce costs or otherwise improve productivity.

Costs of light-handed regulation

Negotiate/arbitrate frameworks and price monitoring have generally been used to regulate access to large infrastructure assets with significant natural monopoly characteristics including airports, telecommunications infrastructure and gas pipelines. There is little evidence to suggest that the market for metering services will have similar monopoly characteristics. This raises questions about whether this type of regulation is appropriate in the context of a market for metering services.

The Commission considers that while there are potential benefits of light-handed regulation as a tool for managing competition concerns in certain circumstances, there are also significant costs that need to be balanced against these benefits.

Negotiate / arbitrate model

One potential risk with implementing a negotiate/arbitrate framework for metering services is that it may discourage genuine commercial negotiation. A third party seeking access to metering services may consider it can always achieve a better outcome by raising a dispute and going to arbitration.

This is more than a theoretical possibility. In reviewing regulation of airport services, the Productivity Commission has pointed to experience in some sectors, such as telecommunications, where easy access to sector specific arbitration processes had

undermined genuine negotiations and led to excessive use of arbitration to determine the price of access to services.⁵⁶⁷ It further considered that “it would be virtually impossible to devise an [arbitration] mechanism that would retain strong incentives for all parties to negotiate rather than view arbitration as the default outcome.”⁵⁶⁸ For this reason the Productivity Commission recommended against introducing a sector specific negotiate/arbitrate framework for airport services.

Further, metering businesses commented at stakeholder workshops that the potential for arbitration over access to their services could act as disincentive to enter the market as a Metering Coordinator. In particular, small Metering Coordinators could face the costs of having to defend arbitration proceedings brought by large retailers and DNSPs. As smaller players, they are less likely to have the resources to participate effectively in such proceedings, which would also reduce their bargaining power at the negotiation stage. A negotiate/arbitrate framework could therefore introduce barriers to smaller Metering Coordinators entering the market.

A negotiate/arbitrate mechanism could also undermine the development of a market in metering services by introducing substantial uncertainty. Investors in advanced meters could face a risk that they may be required by a third party arbitrator to share this infrastructure, or the services it provides, at prices lower than those envisaged when the original business case for the investment was developed.

In addition, the arbitrator would have imperfect information regarding the actual costs incurred by a Metering Coordinator. Consequently it would have difficulty setting an efficient price. This creates a number of risks for potential Metering Coordinators that would be making significant, long term investments.

For example, service access regulation would require Metering Coordinators, at a minimum, to provide services to incoming retailers and energy service companies and potentially face arbitration to set the terms and conditions, including price, under which those services would be provided. There is therefore a risk that a Metering Coordinator may be required to provide services at a price that is lower than the level of charges that it had based its investment on.

This investment risk is particularly concerning given the relatively long life of the meters and associated investments. Metering Coordinators will need to invest significant capital on the expectation of certain returns over ten years or more. However, they may not have sufficient certainty regarding the level of returns if there is a risk of arbitration at any point over that ten year period.

This issue can be addressed to some extent in pricing principles to which an arbitrator must have regard, to increase certainty on how an arbitrator will determine prices. However, this does not address the significant risk that the arbitrator will not have sufficient information to be able to determine the efficient price.

⁵⁶⁷ Productivity Commission (2006) ‘Review of the Price Regulation of Airport Services, Inquiry Report’, No 40, 14 December, 2006, p90.

Arbitration may be a particular risk if the corresponding pricing principles limit, or are perceived to limit, cost recovery. While pricing principles could be included, investors may be concerned about their ability to fully recover their costs, including an appropriate return on investment. The Commission's position is therefore that the costs of introducing a negotiate/arbitrate framework for metering and related services are likely to exceed the benefits.

Monitoring and information disclosure

Price monitoring provides an alternative option for addressing competition issues. However, the Commission is concerned that a requirement to publish prices and/or monitor prices may not be practicable in a new market where prices are being competitively determined for the first time and service offerings are likely to evolve quickly.

Metering Coordinators will likely bundle or package energy and metering services in innovative ways depending on the needs of the consumer. This means that published prices may have little or no bearing on actual prices being negotiated for these services and it will be difficult to compare across different providers. Further, the cost of metering services is likely to depend on a range of factors such as:

- volume;
- risk appetite;
- location within the network; and
- the value different access seekers might place on those services.

This means it may be difficult for Metering Coordinators to publish standard prices, terms and conditions on their websites.

Consequently, published prices may not provide a credible basis for a regulatory body to impose effective discipline on a Metering Coordinator to discourage it from behaving in an anticompetitive fashion and could create an unnecessary regulatory burden for Metering Coordinators. The Commission notes that where price monitoring has been used in other sectors it has typically attracted mixed reviews on its effectiveness, including from the ACCC.⁵⁶⁹

The Commission therefore considers that the benefits of introducing price monitoring for metering services are likely to be outweighed by potentially significant administrative and regulatory burden. Further, price monitoring for metering services may introduce additional risks for potential investors in advanced meters, which could delay the development of the market.

⁵⁶⁸ Productivity Commission (2006) 'Review of the Price Regulation of Airport Services, Inquiry Report', No 40, 14 December, 2006, p91.

⁵⁶⁹ See for example, ACCC submission to the Productivity Commission's inquiry into the economic regulation of airport services, March 2011.

E.4.4 Draft decision

For the reasons set out above, the Commission considers that regulation of access to metering services is not appropriate at the commencement of the market.

However, the Commission recommends that the state of competition in the metering services market should be reviewed three years after the commencement of the new Chapter 7 of the NER, once the market has had time to develop.

F Arrangements for Victoria

Summary

The draft rule includes specific arrangements to enable a smooth transition from the existing arrangements put in place in Victoria under the AMI program to the national competitive framework. These are summarised below:

- At the commencement of the new Chapter 7 of the NER, the Victorian DNSPs will become the initial Metering Coordinator for the advanced meters they deployed under the AMI program and will continue in this role until another Metering Coordinator is appointed to the site or the services cease to be classified as a direct control service. .
- The derogation in rule 9.9C of the NER will be extended by six months so that it ends on the date the new Chapter 7 of the NER commences. This means that the Victorian DNSPs will no longer be able to provide metering services on an exclusive basis after that date, and other parties will be able to take on the Metering Coordinator role.
- If a new Metering Coordinator is appointed to replace the DNSP, an exit fee may be payable. Until 31 December 2020, the exit fee payable will be determined by the AER in accordance with the AMI Cost Recovery Order. After 2020, the AER will determine the level of any exit fee under the same arrangements as in other jurisdictions if the metering services continue to be classified as a direct control service.
- Victorian DNSPs will be able to continue to use the meters they deployed under the AMI program as network devices, if they choose to do so as a result of being unable to reach an agreement with a new Metering Coordinator.
- The national minimum services specification will take effect in Victoria when the new Chapter 7 of the NER commences.

The Commission is of the view that these arrangements will help to achieve the expected benefits of the AMI program, but in a way that enables new investment in metering services at an efficient cost.

The NERR does not currently apply in Victoria. Accordingly, the NERR amendments contained in the draft rule will not apply in Victoria, eg opt out rights for small customers in the event of a new meter deployment. The Victorian Government and Essential Services Commission should consider whether to make amendments to the Electricity Retail Code for consistency with the amendments to the NERR contained in the draft rule.

F.1 Introduction

This appendix provides an overview of the transitional arrangements for Victoria under the draft rule.

This appendix covers:

- an overview of the Victorian arrangements;
- the COAG Energy Council's rule change request with respect to transitional arrangements for Victoria;
- stakeholder views expressed in submissions to the consultation paper and in stakeholder workshops; and
- the Commission's analysis of the key issues and reasons for its draft rule.

F.2 Current arrangements

In 2006, the Victorian Government mandated a rollout of advanced meters (the AMI program). Through this mandate, the Victorian DNSPs were required to deploy advanced meters, in accordance with a prescribed minimum specification, to almost all Victorians consuming up to 160 MWh of electricity per annum. The program is now complete with approximately 2.8 million meters installed across the state.⁵⁷⁰

The Victorian Government's mandate was given effect through the following Orders in Council:

- the AMI Specifications Order, which sets out the minimum functionality and the associated service requirements that the AMI must satisfy;⁵⁷¹ and
- the AMI Cost Recovery Order, which, amongst other things:
 - required the Victorian DNSPs to replace existing meters with advanced meters by 31 December 2013;⁵⁷²
 - set out how a DNSP's fees and charges for the advanced metering infrastructure, associated services and systems are to be calculated to 31 December 2015; and
 - set out the regulatory framework in accordance with which the AER must determine:

⁵⁷⁰ State Government of Victoria, Smart Meters website, viewed 15 October 2014, <http://www.smartmeters.vic.gov.au/about-smart-meters/end-of-rollout>.

⁵⁷¹ This Order in Council was made on 12 November 2007.

⁵⁷² The original date was 31 December 2012.

- an exit fee to be paid by a retailer if it takes over the Responsible Person role from the DNSP; and
- a restoration fee to be paid by a retailer if the DNSP is required to take over the Responsible Person role.

In 2009, the AEMC made a jurisdictional derogation to vary the application of the NER in Victoria.⁵⁷³ The derogation made Victorian DNSPs exclusively responsible for providing AMI and related services⁵⁷⁴ to residential and small business consumers in Victoria. This was achieved through the derogation requiring meters that satisfy the AMI Specification Order to be designated as type 5 or 6 metering installations, rather than type 4 metering installations, even though they can be remotely read.⁵⁷⁵ In effect, this classification means that DNSPs, rather than retailers, are the Responsible Person for these metering installations and retailers are prevented from providing this service.

This derogation was due to expire on 31 December 2013. However, in mid-2013 the Victorian Government made a rule change request for a new derogation to preserve the DNSPs' exclusivity for a further three years, or until the national arrangements for competition in metering and related services were implemented.⁵⁷⁶ In November 2013, the Commission agreed to the proposed derogation and set the expiry date for this derogation to the earlier of:

- 31 December 2016; or
- the commencement in Victoria of:
 - a framework for competition in metering and related services for residential and small business customers under the NER; and
 - regulatory arrangements that provide for an orderly transfer of the regulation of relevant metering installations under rule 9.9C of the NER to the regulation of metering installations under the NER.⁵⁷⁷

In reaching this decision, the Commission noted that the derogation would be in the long term interests of consumers because:

- in the absence of the derogation, specific arrangements would have to be established for the period between the original derogation expiry (31 December 2013) and the start of a national framework for competition;

⁵⁷³ AEMC, Victorian Jurisdictional Derogation, Advanced Metering Infrastructure Roll Out, Rule Determination, 29 January 2009.

⁵⁷⁴ For example, remote connection, disconnection and energisation and direct load control services.

⁵⁷⁵ The exclusivity provided for under the derogation is metering installation type specific and applies to customers consuming 160 MWh pa or less.

⁵⁷⁶ Minister for Energy and Resources (Victoria), AMI Rule Change Request (Jurisdictional Derogation - Victoria), 18 June 2013.

⁵⁷⁷ AEMC, Victorian jurisdictional derogation, Advanced Metering Infrastructure, rule determination, 28 November 2013, p44-47.

- the costs of doing this were likely to outweigh the benefits, and may have affected the development of a national framework; and
- the benefits of allowing retailers to provide small customer metering services in Victoria were likely to be low until a national framework for competition in metering and related services is established.⁵⁷⁸

The derogation provisions are set out in rule 9.9C of the NER and provide for a derogation from what is prescribed in current clauses 7.2.2, 7.2.3, 7.11.1(d) and 7.3A(a) of the NER in Victoria.

The derogation only relates to metering classification and the designation of the Responsible Person role, not to the economic regulation of the charges, including exit fees, payable for metering services as prescribed in the AMI Cost Recovery Order. The application of this aspect of the Order in Council is instead given effect through clause 11.17.6 of the NER, which provides that while metering services remain regulated under the AMI Order in Council they will not be subject to regulation under a distribution determination. The charges and fees for these services must instead be determined in accordance with the provisions set out in the AMI Cost Recovery Order.

With the exception of exit fee and restoration fee provisions, the cost recovery provisions in the AMI Cost Recovery Order are due to expire on 31 December 2015. From 1 January 2016, the charges levied by Victorian DNSPs for AMI meters and services will be subject to Chapter 6 of the NER. This coincides with the commencement of the next regulatory control period for the Victorian DNSPs. The exit fee and restoration fee provisions in the Order in Council will continue to operate through to 31 December 2020.⁵⁷⁹

Victoria has currently not adopted the National Energy Customer Framework. Accordingly, the NERR does not apply in Victoria. The Electricity Retail Code applies instead of the NERR. In 2014, the Essential Services Commission made amendments to the Electricity Retail Code to increase the extent of harmonisation between it and the NERR.

F.3 Rule proponent's view

The COAG Energy Council's rule change request outlined the following transitional arrangements for Victoria:

- DNSPs would be the Metering Coordinator for the advanced meters they have deployed, and may continue in this role to the exclusion of other parties for a defined period (the exclusivity period). The exclusivity period may be established by the Victorian Government through a jurisdictional instrument.

⁵⁷⁸ AEMC, Victorian jurisdictional derogation, Advanced Metering Infrastructure, rule determination, 28 November 2013, pii.

⁵⁷⁹ This has been given effect through clauses 11.17.6(b) and (c) of the NER

- DNSPs may continue to deploy advanced meters in accordance with the Victorian mandate until the national framework applies.
- Upon expiry of the exclusivity period, the regulated exit fee would apply, to allow a retailer or consumer to subsequently replace a meter installed under mandate.
- The Victorian Government may decide, through a jurisdictional instrument, that the existing advanced metering specification in Victoria will continue to apply.⁵⁸⁰

F.4 Stakeholder views

Responses to this aspect of the COAG Energy Council’s rule change proposal focused on:

- the proposed exclusivity arrangements;
- the exit fees to be paid in Victoria;
- the ability of DNSPs to continue to access the advanced metering enabled services and functions they currently have access to; and
- the minimum functionality specification to apply in Victoria.

An overview of the views expressed by stakeholders on these issues is provided below.

F.4.1 Exclusivity arrangements

Stakeholders broadly agreed that, as a transitional measure, the Victorian DNSPs should assume the role of initial Metering Coordinator for the meters they have deployed.⁵⁸¹ Mixed views were expressed about whether the DNSPs should be able to continue in this role to the exclusion of other parties once the new rules commence. For example:

- The Victorian DNSPs and the ENA believed an exclusivity period is required and should be maintained until the national framework for competition in metering is in place and transitional arrangements have been implemented in Victoria. They also noted that an exclusivity period would provide the Victorian Government with the flexibility to determine the timing of the transition, communicate this to consumers and ensure that the benefits of the mandated rollout can be catered for under the national framework.⁵⁸²

⁵⁸⁰ COAG Energy Council, rule change request, October 2013, p33-34.

⁵⁸¹ Victorian DNSPs, submission on consultation paper, p24; ENA, submission on consultation paper, p33; Origin, submission on consultation paper, p9; Simply Energy, submission on consultation paper, p10; Vector, submission on consultation paper, p20.

⁵⁸² Victorian DNSPs, submission on consultation paper, p24; ENA, submission on consultation paper, p33.

- The Consumer Action Law Centre also supported the adoption of an exclusivity period and suggested it be maintained until the consumer-related benefits of the rollout are realised and consumers have more confidence to participate in the market.⁵⁸³
- Vector noted that while it does not object to an exclusivity period for a specified time, the arrangements “should be phased out as soon as possible” .⁵⁸⁴
- The AER, AGL, EnergyAustralia, Origin, Simply Energy, ERAA, Metropolis and EDMI opposed any extension beyond the existing derogation.⁵⁸⁵

Stakeholders that supported an exclusivity period were of the view that the Victorian Government should be responsible for determining the length of the exclusivity period.⁵⁸⁶ AGL, on the other hand, expressed some concerns about the Victorian Government’s commitment to end the exclusivity period.⁵⁸⁷

During the stakeholder workshops a number of stakeholders noted that an extension to the exclusivity period was not required because the level of the exit fee in Victoria was likely to achieve the same purpose. Given the likely size of an exit fee under the AMI cost recovery order, stakeholders expected little, if any, competition for the Metering Coordinator role before 2021.

F.4.2 Exit fees in Victoria

The Victorian DNSPs and the ENA were the only parties that commented on regulated exit fees in Victoria.

The Victorian DNSPs submitted that there are “different drivers” that need to be considered when determining the exit fee for advanced meters, and that these should be reflected in any criteria that are included in the rules to guide the AER’s assessment of exit fees. According to the Victorian DNSPs:

“...the primary objective of exit fees should be to protect the significant sunk investments that Victorian distribution businesses have already made in AMI meters. Given the mandated nature of the rollout program, Victorian DNSPs should not be exposed to any technology or market risk.

583 CALC, submission on consultation paper, p3.

584 Vector, submission on consultation paper, p21.

585 AER, submission on consultation paper, p4-5; AGL, submission on consultation paper, p11; EnergyAustralia, submission on consultation paper, p6; Origin Energy, submission on consultation paper, p9-10; Simply Energy, submission on consultation paper, p10; ERAA, submission on consultation paper, p2; Metropolis, submission on consultation paper, p10; EDMI, submission on consultation paper, p15.

586 Victorian DNSPs, submission on consultation paper, p24; ENA, submission on consultation paper, p33; Vector, submission on consultation paper, p21.

587 AGL, submission on consultation paper, p11.

Moreover, exit fees should promote competition that improves overall economic efficiency. Costs are likely to be imposed on DNSPs, and hence on all customers, when customers change Metering Coordinators. These costs should be reflected in any exit fee, so that customers that choose to not churn Metering Coordinators are no worse off as a result of another customer's decision to churn.”⁵⁸⁸

Elaborating further on its suggestion that consumers should face the full costs of their decision to change Metering Coordinators, the Victorian DNSPs stated that:

“...in order for competition to promote outcomes that are consistent with the NEO, any additional economic cost imposed on other participants in the electricity industry as a result of a customer’s decision to change Metering Coordinators should be signalled to the market at the time at which a potential new entrant is seeking to enter that market (ie through the exit fee). Metering Coordinators would then only enter into the market if the net benefits to the two counterparties to the transaction exceeded the cost to the broader industry.”⁵⁸⁹

The views expressed by the Victorian DNSPs on exit fees in Victoria were echoed by the ENA, who stated that a customer that decides to switch should “face the full and true cost of the decision including any lost benefits imposed on other network users”. The ENA added that the exit fee in Victoria should include the cost to the DNSPs of obtaining services they can currently access from their own advanced meters, ie any charges that DNSPs may be required to pay a new Metering Coordinator to access network-related metering services.⁵⁹⁰

F.4.3 Access to advanced metering enabled services and functions

Concerns were raised by the ENA and the Victorian DNSPs about the potential for Metering Coordinators to exercise market power when negotiating access to the advanced metering enabled services and functions they currently access. These stakeholders suggested this issue be addressed by:

- implementing some form of light-handed regulation to ensure that access to data and services is provided at an efficient cost;

588 Victorian DNSPs, submission on consultation paper, p3. Some of the additional costs referred to in this context include costs that a DNSP incurs in accessing the AMI enabled services and functions it currently has access to (ie costs in excess of the incremental costs distribution networks would otherwise have incurred if they retained the meters); costs that a DNSP incurs in dealing with issues like data from multiple Metering Coordinators, managing meter churn, having to adopt less efficient processes for resolving outages; and costs that a DNSP incurs as a result of its inability to negotiate fair and reasonable terms of access to network related services with Metering Coordinators.

589 Victorian DNSPs, submission on consultation paper, p13-14.

590 ENA, submission on consultation paper, p27-28.

- allowing the Victorian DNSPs to retain their advanced meters and to use these as a network device if they are unable to reach an agreement with the new Metering Coordinator; and
- including the incremental costs of acquiring services and functions in the exit fee.⁵⁹¹

The Victorian DNSPs also noted that if the current AMI minimum functionality specification as set out in the AMI Specifications Order ceases to apply, they will need to negotiate and pay for the network-related services that they can currently access through the meters rolled out under the AMI program.

F.4.4 Minimum functionality specification

The Victorian Government and the Victorian DNSPs expressed concern about the potential for the national minimum services specification to be lower than what is currently required by the AMI Specifications Order. These submitters were concerned that all of the services enabled by meters that meet the Victorian specification would not be available in meters that meet the national minimum services specification. The Victorian DNSPs suggested that unless the national specification is of an equal or higher functionality, the new and replacement policy in Victoria should provide for the use of the existing Victorian minimum functionality specification.⁵⁹²

F.5 Commission's analysis

In its assessment of the proposed transitional arrangements in Victoria, the Commission was conscious that Victoria is in a very different position to other jurisdictions because advanced meters have been installed in approximately 98 per cent of Victorian households and small businesses.

With the technology already in place to enable small customers to make more informed decisions about their consumption and product choice, and for industry to offer more innovative products and achieve a range of efficiencies, the focus in Victoria is now on delivering the expected benefits of the AMI program.

This means that attention needs to be paid to whether the draft rule will:

- allow the expected benefits of the AMI program to be achieved; and
- enable new investment in metering and related services where it is efficient.

⁵⁹¹ Victorian DNSPs, submission on consultation paper, p19-22; ENA, submission on consultation paper, p1,7-8.

⁵⁹² Victorian DNSPs, submission on consultation paper, p23.

In assessing the proposed transitional arrangements for Victoria the Commission has carefully considered the following:

- how competition for Metering Coordinator services is likely to evolve in Victoria;
- the role exit fees will play in providing appropriate signals to the market to invest in new meters and discouraging inefficient meter replacement in Victoria;
- whether an extension to the current exclusivity arrangements set out in rule 9.9C of the NER is required;
- how the concerns raised by the Victorian DNSPs about market power should be addressed;
- the minimum specification that should apply in Victoria when the new national framework comes into effect;
- issues arising from the fact that the NERR does not currently apply in Victoria.

The Commission's views on each of these questions are set out below along with its draft decisions on the transitional arrangements that will need to be put in place in Victoria to deal with these specific issues.

F.5.1 How is competition for the provision of Metering Coordinator services likely to evolve?

Based on the feedback provided by stakeholders it would appear that competition in the small customer segment of the Metering Coordinator market is likely to take some time to develop in Victoria.

The reasons for this are two-fold:

- First, the exit fees that will be payable at existing sites under the exit fee provisions in the Order in Council are likely to be relatively high during the initial years of the lives of the metering assets. New Metering Coordinators are therefore unlikely to enter this segment of the market until the exit fee falls to a level where it is efficient to replace the meter, or if there is a meter failure.⁵⁹³
- Second, the payment of an exit fee does not mean that ownership of the meter will automatically be transferred from the DNSP to the Metering Coordinator. It is unlikely therefore that new Metering Coordinators will enter this segment of the market to take over the operation of the existing meters, particularly given

⁵⁹³ If a meter fails then the DNSP (in its role as the initial Metering Coordinator) will be required to inform the relevant retailer. The retailer will then have to appoint a Metering Coordinator and it will be up to the new Metering Coordinator to replace the meter.

the interest the Victorian DNSPs have shown in retaining their meters as a bypass option (see below).⁵⁹⁴

Competition in the Victorian Metering Coordinator market is therefore likely to initially focus on large customers, greenfield sites for small customers including new estates, and meter failures at existing sites. Over time competition can be expected to become more prevalent at existing sites because, as the stock of existing advanced meters ages, the exit fee will fall and replacement of the existing meters will become a more realistic and cost efficient option. In the meantime, the DNSPs are likely to remain the Metering Coordinator for existing meters.

While the slower development of competition in Victoria may be viewed negatively by some, in the Commission's view it is more consistent with the NEO than the alternative of setting the exit fee at an artificially low level to encourage a greater degree of competition, because:

- Setting the exit fee at such a level will result in inefficient meter replacement, the cost of which will ultimately be borne by consumers.
- The expected benefits of competition in metering arise as a result of the greater range of services that advanced meters facilitate for consumers.⁵⁹⁵ In Victoria, advanced meters are already in place, and so the benefits for consumers can still be delivered if the DNSPs, in their role as the initial Metering Coordinators:
 - provide retailers and other parties access to AMI services, such as re-energisation and de-energisation services; and
 - work with retailers to offer more innovative tariff products.

F.5.2 What role will the exit fee play in Victoria and how will it be determined?

In its current form, the AMI Cost Recovery Order provides for the payment of an exit fee by a retailer to a DNSP when the retailer takes over the role of Responsible Person and where the metering installation complies with the AMI Specification Order. The AMI Cost Recovery Order also sets out principles that the AER (previously the

⁵⁹⁴ Note that neither the AMI Cost Recovery Order nor the COAG Energy Council appear to contemplate a situation in which a new Metering Coordinator (or responsible person in the case of the AMI Cost Recovery Order) takes over the operation of the meters that have been rolled out as part of the AMI program. Rather, they both seem to assume that the Metering Coordinator (responsible person) will only change if the meter is replaced.

⁵⁹⁵ For example, more dynamic and innovative products that promote demand side participation and consumer choice and other efficiencies.

Essential Services Commission)⁵⁹⁶ must apply when determining the exit fee through to the end of 2020.⁵⁹⁷ These principles are reproduced below:

“The Commission must determine an exit fee payable to each distributor as referred to in clause 7.1 in such a way that the exit fee enables the distributor to recover in a lump sum which is payable upon the change in responsible person referred to in clause 7.1:

- (a) the reasonable and efficient costs of removing the metering installation for which the distributor was the responsible person; and
- (b) the unavoidable costs (fixed and variable) that a prudent distributor has incurred or would incur as a result of the metering installation for which it was the responsible person being removed prior to the expiry of the life of that metering installation (which must be assumed to be as set out in clause 4.1(g)),⁵⁹⁸ including:
 - (i) the written down value of the meter (assuming that depreciation is calculated on a straight line basis);
 - (ii) the proportion referable to that metering installation of the written down value of commissioned telecommunications and information technology systems; and
 - (iii) a reasonable rate of return on the written down values determined under paragraphs (i) and (ii), calculated using the applicable WACC.”

The Commission is aware that the exit fee principles set out in the AMI Cost Recovery Order differ from the principles the AER is considering using in other jurisdictions.⁵⁹⁹ However, in the Commission’s view a distinction can be drawn between the exit fee to be paid in Victoria and other jurisdictions because advanced meters are already in place and these meters already have a high degree of functionality.

⁵⁹⁶ The AMI Order initially provided for the Essential Services Commission to set the metering charges, but this regulatory function was later transferred to the AER. Any references in the AMI Order to the ‘Commission’ should therefore be treated as references to the AER.

⁵⁹⁷ While some provisions in the AMI Cost Recovery Order in Council are due to expire on 31 December 2015, clauses 11.17.6(b) and (c) of the NER require the AER to apply the same exit fee and restoration principles until 31 December 2020.

⁵⁹⁸ This clause of the AMI Cost Recovery Order sets out the life of the asset to be used in the calculation of depreciation allowances, which is 15 years for the meters and measurement transformers and 7 years for the telecommunications and IT systems.

⁵⁹⁹ For example in NSW, where the AER proposes to allow DNSPs to recover residual capital costs (ie the capital costs the customer would have paid through annual charges had they remained a regulated metering customer) through distribution use of system charges, rather than through an exit fee. See AER, Draft decision on Ausgrid distribution determination - Attachment 16 - Alternative control services, November 2014, p29-49.

As the Commission noted in its decision to extend the Victorian derogation, it would be:

“...particularly concerned at the possibility of replacement of AMI meters if a retailer elects to be responsible for a small customer metering site, given that these meters have a high degree of functionality and assets are near the beginning of their lives. It is likely to be efficient to replace such meters only if the additional benefits, through additional functionality for example, exceeded the cost of two meters – the existing one and the new one.⁶⁰⁰”

The most direct and allocatively efficient way to discourage the inefficient replacement of these meters is to require retailers that are considering replacing a meter to pay an exit fee that reflects the unrecovered costs of the meter and associated infrastructure, which is what the AMI Cost Recovery Order requires. Therefore, the Commission does not see any reason to alter the application of the exit fee provisions in the AMI Cost Recovery Order by amending clause 11.17.6 of the NER.

The ENA and Victorian DNSPs suggested that in addition to the unrecovered costs of the meters and associated infrastructure, the exit fee should include:

- (a) any additional costs that the DNSP will incur in accessing services and functions from the Metering Coordinator;
- (b) any costs or loss of efficiencies that the DNSP incurs as a result of its inability to negotiate fair and reasonable terms of access to network-related services; and
- (c) any administrative or operational costs that the DNSP will incur under the new competitive framework, such as managing data from multiple Metering Coordinators.

For the reasons set out below, the Commission does not consider it necessary or appropriate to include any additional principles in the NER to supplement the exit fee provisions in the AMI Cost Recovery Order.

The Victorian DNSPs will, as noted in Appendix A1, have the option to continue to use their meters as network devices, eg if they are unable to reach agreement with the Metering Coordinator at a site. There is therefore no need to make any additional provision for the costs set out in (a) and (b).

⁶⁰⁰ AEMC, Rule Determination - National Electricity Amendment (Victorian Jurisdictional Derogation - Advanced Metering Infrastructure) Rule 2013, 28 November 2013, p. 31.

The Commission recognises that the introduction of the new competitive framework is likely to impose some administrative and operational costs on a range of parties across the supply chain. However, it expects that for consumers these costs will be more than offset by the benefits of:

- competition for the provision of metering and related services, which should drive down the cost of metering services; and
- the introduction of more dynamic and innovative products and services that promote demand side participation, consumer choice and allow market benefits to be captured across the supply chain.

Importantly, these benefits will not just accrue to those consumers that switch to a metering service which is not classified and price regulated by the AER. Rather, improvements in network, generation and other operational efficiencies are likely to flow through to other consumers in the form of lower prices and service quality improvements. It is therefore unnecessary to make any provision in the NER to include the types of costs set out in (c) in the exit fee so that consumers who are considering switching face an appropriate price signal.

To the extent that DNSPs incur efficient additional administrative and operational costs under the new framework, the businesses can seek to recover these costs through the existing AER processes.

The regulated exit fee for AMI meters in Victoria will continue to be determined by the AER having regard to the principles in section 7 of the AMI Cost Recovery Order until the end of 2020.

Post 2020, the manner in which the exit fee is determined will be the same as in other NEM jurisdictions and will depend on whether the AER classifies metering services as:

- a direct control service, in which case the AER will have to determine the exit fee (if any) having regard to, amongst other matters, the NEO and the revenue and pricing principles;⁶⁰¹ or
- a negotiated or unregulated service, in which case the AER will have no role in approving the exit fee.

In order for the exit fee provisions in the AMI Cost Recovery Order to be applied under the new national framework, the Commission recommends that the Victorian Government make minor consequential amendments to the order, including:

- Clause 7.1 will need to be amended to recognise that parties other than retailers may take on the Metering Coordinator role.
- The reference to 'Responsible Person' in clauses 7.1 and 7.2 will need to be replaced with the term 'Metering Coordinator'.

⁶⁰¹ See Appendix D.2.

- Clause 7.2(a) should be amended so that it is clear that the costs of removing the meter will not be payable if the DNSP decides to leave its meter in place.⁶⁰²

F.5.3 Is an extension to the exclusivity period required?

During the consultation process, concerns were raised by a number of stakeholders about the potential for the expected benefits of the AMI program not to be realised under the new national framework.

To address this concern, a number of stakeholders suggested that:

- the Victorian DNSPs' exclusivity over the provision of metering and related services to small customers be extended beyond the dates set out in rule 9.9C of the NER; and
- the Victorian Government be accorded responsibility for determining the length of the exclusivity period.

The issue of how long the Victorian DNSPs should remain exclusively responsible for metering and related services was considered at length by the Commission when assessing the Victorian Government's proposed derogation for AMI. The Commission concluded that the commencement of the national framework for competition in metering and related services in Victoria would provide an appropriate trigger for the exclusivity arrangements and other aspects of the derogation to expire.⁶⁰³

As part of this rule change process, the Commission has given further thought to whether an extension of the exclusivity period is required to ensure that the expected benefits of the AMI program can be realised. However, as the preceding discussion on exit fees and the evolution of competition in Victoria highlights, the Victorian DNSPs are likely to remain responsible for the advanced meters they have deployed for some time, irrespective of whether or not the exclusivity period is extended.

In addition, as discussed in Appendix A1, DNSPs will be permitted to retain AMI meters as network devices, if they choose to do so. There does not therefore appear to be any value in extending the exclusivity period beyond the commencement of the new Chapter 7 of the NER.

An extension to the exclusivity arrangements beyond the commencement of the new Chapter 7 of the NER is also likely to act as an impediment to competition in other segments of the market where effective competition could reasonably be expected to

⁶⁰² Note that this change is only required for consistency with the draft rule's provisions that allow Victorian DNSPs to leave their existing meters in place and use them as network devices, eg if they are unable to reach agreement with a new Metering Coordinator.

⁶⁰³ AEMC, Rule determination – National Electricity Amendment (Victorian Jurisdictional Derogation – Advanced Metering Infrastructure) Rule 2013, 28 November 2013, p45.

evolve, such as at greenfield sites or at existing sites for maintenance replacements or faults.⁶⁰⁴

As the new Chapter 7 of the NER will commence 1 July 2017, there is a six month gap between the expiry of the current Victorian derogation and the commencement of the new arrangements under the final rule.

The draft rule addresses this issue by extending the current derogation until 1 July 2017. For the reasons discussed above, the Commission has decided that it is not appropriate to extend the exclusivity period beyond the commencement of the new Chapter 7 of the NER.

F.5.4 How will market power concerns be addressed?

Concerns have been raised by the Victorian DNSPs and the ENA in relation to the potential for retailer-owned or third party Metering Coordinators to exercise market power when negotiating the terms and conditions of access to services and functions that are likely to be sought by DNSPs.

The potential for the exercise of market power by Metering Coordinators and the factors that might act to mitigate these concerns are discussed in Appendix E. Although the Commission considers that there are likely to be sufficient mitigating factors, it also recognises that if Metering Coordinators do behave in this manner then it will adversely affect consumers. The draft rule therefore allows the Victorian DNSPs to continue to use the meters they installed as part of the AMI program as a network device if they choose to do so, for example if they are unable to reach an agreement with Metering Coordinators to access equivalent services.

Apart from providing the Victorian DNSPs with a bypass option, the availability of this option will allow the expected benefits of the AMI program to be realised even if the Metering Coordinator decides to install its own meter before the AMI meter reaches the end of its useful life.

The draft rule also provides that DNSPs may install new network devices, which will provide DNSPs with a bypass option in relation to customers that do not currently have an AMI meter, eg greenfield sites.

F.5.5 What minimum specification should apply in Victoria?

The minimum functionality specification for advanced meters supplied to small customers in Victoria is currently given effect through:

- the AMI Specifications Order, which sets out the minimum specification; and

⁶⁰⁴ Refer Appendix C.

- the AMI Cost Recover Order, which requires DNSPs to use their best endeavours to comply with the AMI Specification Order when installing new meters, or replacing existing meters.⁶⁰⁵

Some stakeholders expressed a concern about potential differences between the minimum services specification under the draft rule and the existing Victorian specification. The Commission notes that the Victorian specification was developed for a mandated rollout of advanced meters and specifies functional requirements rather than services.

In its advice to the COAG Energy Council on the minimum functionality of advanced meters, AEMO noted that the minimum services and requirements for advanced meters under a competitive deployment might be different to those required for a regulated rollout. AEMO expressed the view that, in order to promote and encourage development and innovation under a competitive deployment of advanced meters, the requirements should be set at a level that minimises barriers to market entry.⁶⁰⁶

Under the draft rule, the minimum services specification will take effect in Victoria when the new Chapter 7 of the NER commences. All new metering installations installed at small customers' connection points after that date will be installed under the new competitive framework, not a regulated rollout. The Commission is of the view that the minimum services specification is more appropriate than the current Victorian specification for meters that are installed under a competitive framework. The value of maintaining a separate specification in Victoria is also likely to be outweighed by the competitive benefits and economies of scale that could be achieved through the adoption of a national specification.

F.5.6 NERR issues

The NERR does not currently apply in Victoria. Retail market issues are instead regulated by the Essential Services Commission (Victoria) under the Electricity Retail Code.

Accordingly, the NERR amendments contained in the draft rule will not apply in Victoria. In particular, the opt out rights for small customers in the event of a new meter deployment and the amended NERR provisions on disconnections and reconnections will not apply in Victoria unless it adopts the NERR at a later date.

The Victorian Government and Essential Services Commission should consider whether to make amendments to the Electricity Retail Code for consistency with the amendments to the NERR contained in the draft rule.

A number of provisions in the NERR amendments contained in the draft rule only apply to "small customers". In jurisdictions such as Victoria that have not currently

⁶⁰⁵ See clauses 14.1(a), 14.3(b)-(e) and 14AA.4 of the AMI Cost Recovery Order.

⁶⁰⁶ AEMO, Minimum functionality of advanced meters, Advice to COAG Energy Council, November 2014, p4.

adopted the NECF, the draft rule adopts the same load size threshold between large and small customers as applied under other jurisdictional electricity legislation.⁶⁰⁷

⁶⁰⁷ Under the NECF, a "small customer" is any residential customer, or any business customer who consumes energy at business premises below the "upper consumption threshold". The standard upper consumption threshold under NECF is 100MWh per year, but some jurisdictions have adopted different thresholds. In Victoria, the equivalent threshold is currently 40 MWh per year for certain other purposes.

G Other requirements under the NEL and NERL

This Appendix sets out the relevant legal requirements under the National Electricity Law (NEL) and National Energy Retail Law (NERL) for the AEMC in making this draft rule determination.

G.1 Commission's considerations

In assessing the rule change request the Commission considered:

- the Commission's powers under the NEL and the NERL to make the rule;
- the rule change request;
- the fact that there is no relevant Ministerial Council on Energy (MCE) statement of policy principles;⁶⁰⁸
- the AEMC's Power of Choice review final report to the COAG Energy Council;
- submissions received during first round of consultation on the rule change request;
- comments made by stakeholders in stakeholder workshops held as part of the consultation undertaken for the rule change request;
- interactions with the other related projects discussed in section 1.4 of this draft determination;
- AEMO's advice on the minimum services specification; and
- the Commission's analysis as to the ways in which the draft rule will or is likely to, contribute to the NEO and the NERO.

Revenue and pricing principles

In applying the rule making test, the Commission has taken into account the revenue and pricing principles as required under section 88B of the NEL as described below.

Section 7A(2) of the NEL states that a network service provider should be provided with a reasonable opportunity to recover at least the efficient costs it incurs in providing network services and in complying with a regulatory obligation or requirement or making a regulatory payment.

Under the draft rule, the Financially Responsible Market Participant or, if applicable, a large customer at a connection point, may appoint a party other than the distribution network business to be the Metering Coordinator for that connection point (for further

⁶⁰⁸ Under section 33 of the NEL and section 14 of the NERL the AEMC must have regard to any relevant MCE statement of policy principles in making a rule.

details see Appendix A1). The revenue and pricing principles were taken into account in the Commission's consideration of arrangements for distribution network businesses to recover residual costs for existing meters when another party takes on the Metering Coordinator role.

No changes to the existing regulatory framework are proposed in this regard because the Commission considers that the AER is best placed to determine arrangements for cost recovery in accordance with the existing regulatory framework. This is discussed further in Appendix D2.

G.2 Commission's power to make the rule

The Commission is satisfied that the draft rule falls within the subject matter about which the Commission may make rules.

The draft electricity rule falls within section 34 of the NEL as it relates to:

- regulating the operation of the national electricity market;⁶⁰⁹
- regulating the operation of the national electricity system for the purposes of the safety, security and reliability of that system;⁶¹⁰
- regulating the activities of persons (including Registered participants) participating in the national electricity market or involved in the operation of the national electricity system;⁶¹¹
- regulating the provision of connection services to retail customers;⁶¹² and
- facilitating and supporting the provision of services to retail customers.⁶¹³

The draft retail rule falls within section 237 of the NERL as it relates to:

- regulating the provision of energy services to customers, including customer retail services and customer connection services;⁶¹⁴ and
- regulating the activities of persons involved in the sale and supply of energy to customers.⁶¹⁵

609 Section 34(1)(a)(i) of the NEL.

610 Section 34(1)(a)(ii) of the NEL.

611 Section 34(1)(a)(iii) of the NEL.

612 Section 34(1)(a)(iv) of the NEL.

613 Section 34(1)(aa) of the NEL.

614 Section 237(1)(a)(i) of the NERL.

615 Section 237(1)(a)(ii) of the NERL.

G.3 Civil penalty provisions

The provisions of the NER that are classified as civil penalty provisions are listed in the National Electricity (South Australia) Regulations and the provisions of the NERR that are classified as civil penalty provisions are listed in the National Energy Retail Regulations. While the Commission cannot create new civil penalty provisions, it may recommend to the COAG Energy Council that new or existing provisions of the NER and NERR be classified as civil penalty provisions.

Where the draft rule amends an existing clause that is currently a civil penalty provision, the Commission has considered whether the civil penalty should be retained. Where the draft rule either amends an existing clause that is not currently a civil penalty provision or introduces a new clause, the Commission has considered whether that clause should be subject to a civil penalty.

In considering whether a civil penalty should apply, the Commission has taken the following general approach:

- Where an existing clause is currently a civil penalty provision and the clause has not been amended substantially, the civil penalty should continue to apply.
- Where an amended clause or a new clause introduces a new obligation that is key to the continued operation of the NEM or relates to key consumer protections, the provision should attract a civil penalty.

The clauses of the NER that the Commission recommends should attract a civil penalty are set out in Table G.1. The clauses of the NERR that the Commission recommends should attract a civil penalty are set out in Table G.2.

Table G.1 Civil penalty provisions in chapter 7 of the NER

New clause reference	Old clause reference	Recommendation
<i>Amended clauses that we recommend should continue to attract a civil penalty</i>		
7.3.2(a)	7.2.5(a)	Retain
7.3.2(b)	7.2.5(b)	Retain
7.3.2(d)	7.2.5(c)	Retain
7.3.2(e)	7.2.5(d)	Retain
7.6.3(b)	7.2.3(c)	Retain
7.6.4(a)	7.2.3(e)	Retain and clarify that the civil penalty applies to the FRMP in relation to its obligation to appoint the LNSP as Metering Coordinator

New clause reference	Old clause reference	Recommendation
7.8.1(a)	7.3.1A(a)	Retain and clarify that the civil penalty applies to the Metering Coordinator
7.8.1(c)	7.4.1(a)	Retain
7.8.2(a)(1)-(11)	7.3.1(a)(1)-(13)	Retain
7.8.2(d)	7.3.1(e)	Retain
7.8.2(e)	7.3.1(f)	Retain
7.8.7(a)	7.3.2(a)	Retain
7.8.8(c)	7.3.4(d)	Retain and clarify that the civil penalty applies to the Metering Coordinator
7.8.11(a)	7.8.3(a)	Retain and clarify that the civil penalty applies to the Metering Coordinator
7.8.11(b)	7.8.3(b)	Retain and clarify that the civil penalty applies to the Metering Coordinator
7.8.11(c)	7.8.3(c)	Retain and clarify that the civil penalty applies to the Metering Coordinator
7.8.13(b)	7.2.4(b)	Retain
7.9.1(a)	7.6.1(a)	Retain and clarify that the civil penalty applies to a person who carries out testing under the clause
7.9.1(e)	7.6.1(e)	Retain
7.9.2(a)	7.6.2(a)	Retain
7.9.3(e1)	7.6.3(d)	Retain and clarify that the civil penalty applies to the Metering Coordinator in respect of providing AEMO with access to carry out random audits but not in respect of AEMO's obligation to carry out periodic random audits
7.10.1(a)	7.11.2(a)	Retain
7.10.5	7.12(a)	Retain
7.10.6(a)	7.11.1(b)	Retain and clarify that the civil penalty applies to the Metering Coordinator
7.10.6(d)	7.11.1(d)	Retain and clarify that the civil penalty applies to the Metering Coordinator
7.11.3(a)-(c)	7.8.4	Retain and clarify that the civil penalty applies to the Metering Coordinator
7.12.2(b)	7.5.2(b)	Retain

New clause reference	Old clause reference	Recommendation
7.15.2(a)	7.8.1(a)	Retain
7.15.3(a)	7.8.2(a)	Retain
7.15.3(b)	7.8.2(b)	Retain
7.15.3(c)	7.8.2(c)	Retain
7.15.3(d)	7.8.2(d)	Retain
7.15.3(e)	7.8.2(e)	Retain
7.15.5(b)	7.7(b)	Retain
7.16.2(c)	7.2.8(d)	Retain
<i>Amended clauses that we recommend should now attract a civil penalty</i>		
7.2.1(a)	7.1.2(a)	This clause should be classified as a civil penalty provision due to the key obligation imposed on the FRMP to ensure a Metering Coordinator has been appointed with respect to a connection point.
7.3.2(g)	7.2.5(g)	This clause imposes obligations on the Metering Coordinator that are key to the operation of the market, and so we recommend classifying this clause as a civil penalty provision.
<i>New clauses that we recommend should attract a civil penalty</i>		
7.3.2(f)	n/a	This clause imposes an obligation on the Metering Coordinator to ensure energy data is retrieved from a small customer metering installation via remote acquisition. This is key for the efficient operation of the NEM and so we recommend classifying it as a civil penalty provision.
7.3.2(h)	n/a	This clause imposes obligations on the Metering Coordinator that provide key consumer protections and so we recommend classifying it as a civil penalty provision.
7.7.1(a)	n/a	This clause imposes an obligation on the FRMP to ensure a new Metering Coordinator has been appointed where a Metering Coordinator default event occurs or the contract appointing the Metering Coordinator is terminated. This is key for the continued operation of the NEM and so we recommend classifying it as a civil penalty provision.

New clause reference	Old clause reference	Recommendation
7.8.3(a)	n/a	This clause imposes an obligation on the Metering Coordinator to ensure that any new or replacement metering installation in respect of the connection points of a small customer is a type 4 metering installation that meets the minimum services specification. This is key for the efficient operation of the NEM and so we recommend classifying it as a civil penalty provision.
7.8.3(b)	n/a	This clause imposes an obligation on the Metering Provider to ensure that a metering installation at a new connection point is a type 4 metering installation that meets the minimum services specification. This is key for the efficient operation of the NEM and so we recommend classifying it as a civil penalty provision.
7.8.6(b)	n/a	This clause imposes an obligation on the Metering Coordinator and the LNSP to act in certain ways in relation to the right of the Local Network Service Provider to install a network device at or adjacent to a metering installation for the purposes of monitoring or operating its network. This is key for the safe and reliable operation of the national electricity system and so we recommend classifying it as a civil penalty provision.
7.15.4	n/a	This clause imposes obligations on the Metering Coordinator and Metering Provider in relation to security controls for small customer metering installations. This is a key consumer protection and so we recommend classifying it as a civil penalty provision.

For completeness, the draft NER omits the following (old) clauses that are currently classified as civil penalty provisions from the NER and therefore the Commission will recommend that the relevant Regulations are amended to remove references to these provisions:

- 7.2.3(h)
- 7.4.2(c)
- 7.4.2(ca)
- 7.13(b).

Table G.2 Civil penalty provisions in the NERR

New clause reference	Old clause reference	Recommendation
<i>Amended clauses that we recommend should continue to attract a civil penalty</i>		
19(2)	19(2)	Retain
56	56	Retain
121(1)	121(1)	Retain
125(2)	125(2)	Retain
135(1)	135(1)	Retain
<i>New clauses that we recommend should attract a civil penalty</i>		
59A	n/a	Classify as a civil penalty provision to encourage compliance with opt out requirements.
106A	n/a	Classify as a civil penalty provision, consistent with classification of rule 106

G.4 Conduct provisions

The provisions of the NER that are classified as conduct provisions are listed in the National Electricity (South Australia) Regulations. Currently no provisions of the NERR are classified as conduct. While the Commission cannot create new conduct provisions, it may recommend to the COAG Energy Council that new or existing provisions of the NER and NERR be classified as conduct provisions.

The Commission is still assessing the need for conduct provisions to apply to the draft rule and will set out any recommendations in its final determination.

In considering whether to recommend that a provision be classified as a conduct provision, the Commission will consider the following guiding principle:

- A provision of the draft rule should, *as a starting point*, be classified as a conduct provision where the breach of that provision:
 - will have or be likely to have a detrimental effect on another identifiable person (such as a Registered Participant); and
 - the purpose of the provision is to confer a right or benefit on, or prevent harm to, the person who is or is likely to be affected by the breach.

For example, it may be appropriate to recommend that a provision that requires a person to prevent harm to another Registered Participant’s equipment be designated as a conduct provision.

The Commission is seeking stakeholder views on those provisions where it may be appropriate for the Commission to recommend classification as a conduct provision.

G.5 Declared network functions

Under section 91(8) of the NEL, the Commission may only make a rule that has effect with respect to an adoptive jurisdiction if it is satisfied that the rule is compatible with the proper performance of the AEMO's declared network functions.

The Commission considers that the draft rule is compatible with AEMO's declared network functions as it has no impact on these functions.

H Summary of further issues raised in submissions and organisations represented in stakeholder consultation process

H.1 Summary of further issues raised in submissions

Where relevant, stakeholder comments have been addressed throughout the draft determination. Table H.1 summarises issues raised by stakeholders that were not explicitly addressed in the final determination and the Commission's response to these comments.

Table H.1 Summary of further issues raised in submissions

Stakeholder	Issue	AEMC response
<i>General comments</i>		
Alinta Energy	The consumer should have the option of owning the meter after paying an exit fee. (p3)	The purpose of an exit fee is to help compensate a DNSP for costs that may be unrecovered as a result of the consumer moving to an unregulated metering service. Under the draft rule, the AER will determine how DNSPs can recover residual costs, which may include through an exit fee. For small customers, the retailer would be responsible for paying the regulated exit fee, if any, when it appoints a competitive Metering Coordinator to the connection point. The retailer may choose to pass some, all or none of this cost on the consumer. Importantly, payment of the exit fee does not give rise to a transfer of ownership of the existing meter. Any transfer of ownership would be a commercial arrangement between the DNSP and the new Metering Coordinator. Consequently, the draft rule does not contemplate the transfer of ownership to the new Metering Coordinator or other party, including the consumer. Exit fees are discussed further in Appendix D2.
ATA and other consumer groups	The AEMC should make a more preferable rule that is in keeping with the recommendations made in the Power of Choice review. (p3)	The AEMC may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the NEO and the NERO as outlined in the NEL and NERL. The AEMC has made a draft rule that we consider is most likely to contribute to the achievement of the NEO and the NERO.

CALC	Important that consumer empowerment is included in priorities for rule change. The following principles should be met: (1) take account of consumer behaviour and biases rather than just pure economic theory, (2) information provision should be clear, balanced and simply communicated, (3) terms, conditions and fees must be regulated so that there are no surprises for consumers, (4) product standardisation where appropriate. (p2)	The AEMC has had regard to these issues in the context of its assessment of the NEO and the NERO.
CUAC	The AEMC should give due regard to the needs of low income and vulnerable consumers so they are able to participate and benefit from competition. (p3)	The focus of this rule change is on supporting consumer needs and preferences with regard to how they use electricity. Chapter 3 outlines the Commission's views on the benefits of the draft rule for consumers, including for low income and vulnerable consumers.
ENA	The role of the Metering Coordinator should be clear on whether voltage transformers and current transformers are managed by the consumer or the Metering Coordinator. The responsibility for testing and ongoing management of transformers needs to be made clear. (p36)	Under the draft rule, the obligations for testing that currently lie with the Responsible Person would transfer to the Metering Coordinator. Any current transformers and voltage transformers that are not being tested correctly would be addressed by the existing AER and AEMO arrangements.

ENA	Need to consider the relationship that consumers have with DNSPs. (p23)	The AEMC acknowledges that consumers have an important relationship with DNSPs, including for services such as load control. Under the draft rule, consumers will continue to have a relationship with their DNSP with regard to supply, and any direct involvement for load control and other network services.
EnerNOC	Retailers should not be allowed to bundle retail and metering services. (p4)	The success of a market for metering services partly depends on the framework being simple and easy for consumers to understand and engage with. Itemising metering charges on a consumer's retail bill may be confusing for small customers and is likely to be of little value while they are unable to engage their own Metering Coordinator. This is discussed further in Appendix B2. A bundled service allows consumers to make one decision based on an assessment of costs and the products and services being offered.
ERAA	Existing load management services should not be retained as standard control services. All access to metering services should be by commercial negotiation, regardless of whether the party seeking access is a monopoly or contestable provider. (p3)	While the Commission recognises that load control services can be provided by other parties, classification decisions are the remit of the AER.
Ergon Energy	Regarding the proposal that the DNSP, as the initial Metering Coordinator must not increase its charges to the retailer for providing metering services. Wants clarification that this would not preclude a DNSP from increasing charges in accordance with prices approved as part of annual pricing proposals. (p4)	The draft rule does not prevent a DNSP, as the initial Metering Coordinator for meters for which it was previously the Responsible Person, from increasing metering charges in accordance with prices approved as part of a DNSP's annual pricing proposal.
Ergon Energy	The benefits of introducing the Metering Coordinator role may be	The draft rule will support the competitive provision of metering services to consumers. The AEMC is of the view that the long term benefits to consumers of the draft rule are likely to

	negated by the cost to industry (system and process changes, additional transactions, administrative overheads). The changes are likely to increase costs to consumers. (p4,14)	outweigh any administrative costs incurred by industry to update their systems to accommodate the changes. The AEMC recognises the potential to reduce implementation costs if other reforms are implemented at the same time. This is discussed further in Chapter 5.
ERM Power	Does not support the proposal to require Metering Coordinator to inform retailer only when a change in meter results in a material change to customer services as Metering Coordinator may not be in a position to know. A retailer should be informed of every meter replacement which occurs. (p13)	Under the draft rule, retailers would engage a Metering Coordinator at a connection point on a commercial basis. Any information flows not addressed by requirements in the NER and NERR could form part of the contract between those two parties.
Calvin Capital	The Metering Coordinator needs access to data about the meter owner, and notification of changes to meter assets, e.g. through AEMO. (p1,2)	
NSW DNSPs	There is an inconsistency between clause 7.7 of the NER (retailers only provide data) and clause 86 of the NERR (DNSPs must provide data). DNSPs have an important relationship with consumers and should have the ability to provide information to them. (p11)	A rule change made in November 2014 allows consumers to access information about their energy consumption from their local DNSP. Further information is available at: http://www.aemc.gov.au/Rule-Changes/Custom-er-access-to-information-about-their-energy
PIAC	Consumers should be represented on the Information Exchange Committee and Retail Market Executive Committee. (p2)	Membership of the IEC is determined by rule 7.2A.2 of the NER. Membership of the RMEC is determined by AEMO. The make-up of the IEC and RMEC are beyond the scope of this rule change request.

SA Power Networks	Concerned about situation where a metering installation owned by a third party metering provider fails, and the customer loses supply as a result. The LNSP may be required to replace metering equipment in order to meet its supply restoration obligations, and would need to recover the associated cost. (p6)	Under the draft rule, the Metering Provider at a connection point must ensure that the metering installation is provided, installed and maintained in accordance with the rules and any relevant procedures. If the Metering Provider at a connection point is not the DNSP and the meter fails, that Metering Provider would be responsible for repairing or replacing the meter. Any liability for loss of supply would lie with that party, not the DNSP.
Vector	The Metering Provider role should be expanded to include responsibility for the provision, installation and maintenance of remote, two-way communication to the metering installation. (p6)	Under the draft rule, the Metering Coordinator is responsible for appointing a Metering Provider to provide, install and maintain a metering installation. All new meters installed for small customers after the commencement of the rule will be required to meet the minimum services specification. The services included in the minimum services specification necessitate the installation of a meter with a communications interface. Metering Providers therefore have responsibility, under the rules, for the provision of a meter that meets these requirements. The role of the Metering Provider is discussed in Appendix A2.
Vector	DNSPs should provide open access to legacy metering installations and access data (meter types, location, access requirements, etc) to facilitate market entry and smart meter deployment. (p18)	If an existing meter meets the minimum services specification, the obligations in the draft rule regarding access to those services would apply.
<i>Comments on the assessment framework</i>		
ATA	The assessment criteria should consider: <ul style="list-style-type: none"> equity, especially by geographic location for remote and regional consumers; and 	The AEMC may only make a rule if it is satisfied that the rule will, or is likely to contribute to, the NEO and the NERO as outlined in the NEL and NERL. Both the NEO and the NERO are centred on the long term interests of all consumers. The Commission is of the view that the draft rule will have benefits for all consumers, as outlined in Chapter 3. As discussed in Appendix C1, AEMO may grant an exemption to the requirement to meet the minimum services specification where there is no existing telecommunications network to enable

	<ul style="list-style-type: none"> a commitment to reduce GHG emissions, as metering may be an enabler to reaching the 5% by 2020 target. (p4). 	remote access to the meter, eg in remote and regional areas.
EWON	Consumers should not pay higher charges for smart meters. (p1)	The draft rule does not regulate the prices that parties can charge for the provision of metering and related services. However, the nature of the model encourages parties to compete to provide metering services, which we expect to lead to a low cost deployment of advanced meters.
Victorian DNSPs	It is unclear how the magnitude of the required changes to systems, processes and rules is consistent with proposed assessment criteria regarding administration and transaction costs. (p9)	The Commission is of the view that the benefits of the draft rule to consumers, market participants and other parties, and to the operation of the electricity market as a whole, outweigh the administrative costs involved to implement the changes. Implementation issues are discussed in Chapter 5.
<i>Appointing the Metering Coordinator</i>		
Alinta Energy	The AEMC should consider the impact of the rule change on standing and deemed arrangements with respect to 'move ins'. The default position should mandate that the Metering Coordinator is the retailer until consumer elects otherwise. (p3)	This issue is no longer relevant as the draft rule does not allow small customers to appoint their own Metering Coordinator.
Ergon Energy	There may be merit in a national Metering Coordinator function to ensure cost efficiency and standard access and cost arrangements. (p7)	The draft rule is based on the premise that competition, as opposed to monopoly provision of metering services, will result in the best price and service outcomes for consumers. Requiring that only one party provide the Metering Coordinator function to all retailers likely stifle innovation and would mean there are no competitive pressure to reduce costs or improve service outcomes.
Metropolis	Existing Metering Providers should be automatically accredited as a	The Metering Coordinator and Metering Provider roles are separately defined in the draft rule. The Commission considers it would not be appropriate to accredit existing Metering Providers as

	Metering Coordinator. Existing Responsible Persons should be given a 6-12 month transitional period to become accredited or make arrangements with accredited Metering Coordinators. (p4)	Metering Coordinators because of the differences in the responsibilities and capabilities required of each role. This is discussed further in Appendix A1.
Metropolis	Metering Coordinators should obtain the consumer's explicit informed consent to appoint itself to a connection point. Suggests a similar MSATS process to current process for retailer appointment. (p5)	Under the draft rule, the retailer will be responsible for appointing a Metering Coordinator to a small customer's connection point. Small customers will not be able to engage a Metering Coordinator directly. The model terms for standard retail contracts are amended in the draft rule to reflect this. This arrangement will facilitate simplicity for consumers because they will only need to deal with one party, ie their retailer. This is discussed in Appendix A3.
NSW DNSPs	Concerned that Metering Coordinators will cherry pick profitable sites to the detriment of less profitable sites (eg remote areas). (p6)	Under the draft rule, the retailer is responsible for appointing a Metering Coordinator at the connection points of each of its customers. Metering Coordinators will compete to provide their services to retailers. Once appointed by a retailer, they will be obliged to carry out their functions in accordance with the rules and any other contractual arrangements established with the retailer. It is possible that Metering Coordinators will not compete in all areas. If this is the case, the incumbent Metering Coordinator will continue to carry out this role.
<i>Consumer protections</i>		
AER	Existing NER/NERR and Australian Consumer Law arrangements appear sufficient to protect consumers, but a dispute resolution framework may be needed given that existing energy ombudsmen schemes appear not to apply to Metering Coordinators. (p1)	Under the draft rule, small customers are not able to engage a Metering Coordinator directly. Instead, retailers will engage a Metering Coordinator on their behalf. This approach means that small customers will continue to be covered by existing consumer protection provisions and jurisdictional ombudsman schemes that apply to retailers This is discussed in Appendix B1.
EWON	It is important that the Metering Coordinator is bound by NECF	

	arrangements where there is consumer interaction. Further, the Metering Coordinator, where it has a relationship with consumers, should be required to join and be bound by the jurisdictional ombudsman in the same way that DNSPs are. (p2)	
Alinta Energy	Need to consider privacy implications related to the collection, use and disclosure of information. (p2)	The draft rule provides that only certain parties are permitted to request access to metering data. There are also new obligations to protect meters from unauthorised access. This will ensure that the privacy of a consumer's energy data is maintained. Parties accessing this information will also be subject to compliance with any applicable privacy legislation. This is discussed further in Appendix B3.
CALC	Consumer privacy and data security concerns need to be addressed from the outset. (p2)	
CUAC	Consumers need adequate protection through the regulatory framework and access to dispute resolution. Third party consumer protections need to be addressed at the outset, prior to giving third parties access to metering data and metering service provision. (p2)	
Ergon Energy	Need to consider privacy issues if the Metering Coordinator role is created. Additional consumer protections would be required. Metering Coordinators must be held liable for promises made to consumers. (p6, p9)	

Origin Energy	All relevant consumer protections and privacy protections should apply equally to direct and indirect customer relationships with Metering Coordinators. (p6)	
ATA	Given it appears unlikely that the NEM will have a common meter protocol, lack of interoperability presents consumer protection risks that are unacceptable without regulation of arrangement between Metering Coordinators and Metering Data Providers. (p4)	The AEMC is preparing advice to the COAG Energy Council on implementing a shared market protocol. AEMO has also been asked to develop a proposed shared market protocol. These pieces of work are discussed in Chapter 1. Together, this work will inform the development of a rule change request for implementing a shared market protocol. The Commission expects the rule change and the subsequent development of the shared market protocol to be undertaken in parallel with the implementation of this metering rule change. The Commission's expectation is that the shared market protocol could set out a method of communication for all commonly available advanced services. While a shared market protocol does not preclude parties from agreeing to alternative methods of communication, feedback from stakeholders suggests that all parties have an interest in meter interoperability.
<i>Third party providers</i>		
Alinta Energy	It is important that the relationships between consumers and energy service providers are seamless and consistent and don't require further investment from the consumer when they change their product/service preferences. (p3)	The ability for consumers to enter into a contract with a third party energy service provider raises a broader question about whether these parties should be regulated. This question is being considered by the COAG Energy Council (see Chapter 1). Consequently, the draft rule does not seek to address this issue.
ATA	Need a specific policy to define the relationship between consumers and third parties. But, it is appropriate to allow market to take form before finalising arrangements under NECF. Until then, a code of conduct may be an appropriate measure. (p4-5)	

ATA	At 3 year review of competition, the AEMC should also review the effectiveness of consumer protections with regard to marketing, services and other matters relating to third parties. (p5)	
CALC	The COAG Energy Council's work on third parties should be done in line with principles outlined and in conjunction with rule change. (p2)	
CUAC	Consumer protection framework for third parties needs to be in place before expiration of the Victorian derogation. (p2)	
PIAC	NECF needs to be updated. It is outdated with respect to demand management technology. Update needs to define relationships of third parties with consumers, retailers, DNSPs. (p1)	
<i>DNSPs reading meters remotely and installing communications modules to do so</i>		
ENA	The current rules prevent DNSPs from remotely reading meters. DNSPs should be able to provide smart meters or install communications interfaces to remotely read meters. All consumers should fund DNSPs enabling remote communications, as the data is used for standard	The draft rule allows a Metering Coordinator to make a type 5 or 6 metering installation capable of remote acquisition where it determines that operational difficulties reasonably require it. This provision would allow a DNSP, as the initial Metering Coordinator for meters for which it was previously the Responsible Person, to install a communications interface for example at sites where access is difficult or on a remote rural property. Alternatively, if it is not the Metering Coordinator at that connection point, the DNSP could choose to help fund the installation of an advanced meter or communications interface at a type 5 or 6 metering installation in exchange for access to services. This is discussed in Appendix D4.

	control services. (p23, 28)	
Ergon Energy	Clauses 7.11.1 and 7.3.4 of the NER prevent DNSPs from installing communications-enabled metering to support network alternatives. The NER should be amended to allow DNSPs to do this where it is the best commercial solution and in best interests of consumers. DNSPs should not have to do this as a ring-fenced entity because it creates unnecessary costs. (p5)	
<i>Implementation</i>		
Alinta Energy	Changes must consider both implementation and ongoing costs and responsibilities of market participants, and the effect on current systems and procedures. (p1)	The Commission recognises that industry participants will need to make changes to their systems and processes to meet the requirements of the new rules, procedures and guidelines. Implementation is discussed further in Chapter 5.
Alinta Energy	Need to consider community and communication education programs to explain market changes. (p3)	The Commission agrees that communication and education is vital to support confidence in the market and consumer engagement. Governments, retailers, distribution network businesses, energy service companies and consumer groups all have a role to play in communicating the changes and their implications to consumers. A commencement date of 1 July 2017 gives these parties time to communicate the changes to consumers so that they can engage effectively when the rules commence.
CALC	A slow and managed transition will be needed so that consumers can develop confidence in the benefits of new meters. (p3)	
CUAC	An extensive consumer information and education campaign by retailers, governments and DNSPs	

	is needed. (p2)	
EWON	Consumer acceptance and understanding is crucial to the realisation of the benefits of smart meters. Governments and retailers have a key role in promoting consumer acceptance and understanding. (p1)	
Energex	The transitional period should align with the regulatory control period to ensure certainty of funding for DNSPs. (p8)	The draft rule proposes a start date of 1 July 2017. This date takes into account the time that Market Participants, including DNSPs, will need to make the necessary changes to comply with the new rule when it commences. DNSPs should have sufficient time to incorporate funding to support the rule changes in their regulatory proposals. Consequently, no transitional period will apply once the rules commence.

H.2 Organisations represented in stakeholder consultation process

Table H.2 lists the organisations represented in the stakeholder consultation process to date, including at AEMC workshops, submissions on the consultation paper and submissions on the draft implementation plan.

Table H.2 Organisations represented in stakeholder consultation process

	Organisation
1	1circle
2	ActewAGL
3	AEMO
4	AER
5	AGL Energy
6	Alinta Energy
7	Alphalink
8	Alternative Technology Association
9	AMS International Technologies
10	Arup Consulting
11	Ausgrid
12	AusNet Services
13	Calvin Capital
14	CitiPower and Powercor
15	Consumer Action Law Centre
16	Consumer Utilities Advocacy Centre
17	Couch & Associates
18	Department of Economic Development, Jobs, Transport and Resources (Victoria)
19	Department of Energy and Water Supply (Queensland)
20	Department of Industry (Commonwealth)
21	Department of State Development (South Australia)
22	Department of Trade and Investment (NSW)
23	Department of State Growth (Tasmania)

	Organisation
24	E3 International
25	EDMI
26	Embertec
27	Energy Networks Association
28	Endeavour Energy
29	Energeia
30	Energex
31	EnergyAustralia
32	Energy Tailors
33	EnerNOC
34	Energy Retailers Association of Australia
35	Ergon Energy
36	Ergon Energy Retail
37	Ericsson
38	ERM Power
39	Ernst and Young
40	Energy Supply Association of Australia
41	Essential Energy
42	eutility
43	Energy and Water Ombudsman NSW
44	Gentrack
45	Horizon Power
46	IBM
47	Information Exchange Committee
48	Itron
49	Jemena
50	Landis+Gyr
51	Legal Energy, Lawyers and Consultants

	Organisation
52	Lend Lease
53	Lumo Energy
54	Macquarie Bank
55	Medusa Capital
56	Metering Dynamics (Energex)
57	Metrix
58	Metropolis Metering Services
59	Momentum Energy
60	Networks NSW
61	Oakley Greenwood
62	Origin Energy
63	Public Interest Advocacy Centre
64	Red Energy
65	Rheem
66	SA Power Networks
67	SATEC
68	Secure Australasia
69	Seed Advisory
70	Select Solutions (AusNet Services)
71	Silver Spring Networks
72	Simply Energy
73	Smart Grid Australia
74	South Australian Council of Social Service
75	Standards Australia
76	Synergies Economic Consulting
77	TasNetworks
78	Telstra
79	Thinking About Energy

	Organisation
80	TransGrid
81	United Energy and Multinet Gas
82	Uniting Communities
83	University of Sydney
84	Vector

Abbreviations

ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AMI	Advanced Metering Infrastructure
B2B	Business to business
CCA	Competition and Consumer Act
COAG	Council of Australian Governments
Commission	See AEMC
DNSP	Distribution Network Service Provider
DSP	Demand side participation
IEC	Information Exchange Committee
LNSP	Local Network Service Provider
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
NGL	National Gas Law

NGR	National Gas Rules
NMI	National Metering Identifier
ROLR	Retailer of Last Resort
TNSP	Transmission Network Service Provider