



Australian Energy Market Commission

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 November 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 final determination sets out significant changes to the National Electricity Rules (NER) and National Energy Retail Rules (NERR) in relation to the provision of metering services.

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

The final 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 final 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.

The new arrangements will commence on 1 December 2017. Before then, a range of parties will need to undertake a number of steps in preparation. This includes the update or preparation of a number of procedures by the Australian Energy Market Operator (AEMO) and the Information Exchange Committee (IEC), the development of a ring-fencing guideline by the Australian Energy Regulator (AER) and amendments to standard contracts by retailers and distributors. Governments and jurisdictional safety regulators also have an important role to play in supporting the new arrangements by reviewing existing relevant jurisdictional frameworks so that necessary changes to technical and safety arrangements can be made to reflect the amended rules. The AEMC has been working with many of these parties to explain the new arrangements and the part that they play in delivering this important reform.

Why is there a need to change the existing 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 final 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 existing NER allow and potentially encourage the continued installation of accumulation meters. The NER and 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 existing NER and NERR provisions that were identified in the rule change request include:

- The existing NER limits who can be the "Responsible Person" and therefore have overall responsibility for the provision of metering services. Only the local

network service provider 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 DNSP, 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 bundled into distribution use of system charges. At the time of the rule change request there was uncertainty around how a DNSP would recover residual costs where it provides metering services that are subject to economic regulation by the AER and a meter is replaced by a retailer. This created 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 existing NER do not contain minimum requirements regarding the services that advanced meters must be capable of providing.
- Existing requirements relating to the parties that may access the services enabled by advanced meters are not sufficiently detailed. This raises potential risks of unauthorised access to the services enabled by advanced meters, such as remote disconnection or load control services.
- Retailers, DNSPs and energy service companies also lack certainty over the regulatory framework for accessing services from advanced meters, which creates investment uncertainty.

Overview of the final 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 final 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 final rule are summarised below:

- The final 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;

¹ In Victoria, only DNSPs can perform this role.

- allowing any person to become a Metering Coordinator, subject to meeting the registration requirements, other than at transmission connection points² and in relation to type 7 metering installations.³
 - permitting a large customer and Non-Market and exempt Generators⁴ to appoint their own Metering Coordinator at distribution connection points; and
 - requiring a retailer to appoint the Metering Coordinator, except where another party 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 DNSPs to continue to get the benefit of network devices installed at customers’ premises that allow them to monitor, operate or control their networks for the purpose of providing network services, provided there is sufficient space to house both the metering installation and the network device.
 - It permits a retailer to arrange for a Metering Coordinator to remotely disconnect or reconnect a small customer’s premises in specified circumstances.
 - It permits a retailer to arrange for a supply interruption at its customers' premises for the purposes of installing, maintaining, repairing or replacing an electricity meter.

² Under the final rule, only the local network service provider or the Financially Responsible Market Participant at a transmission connection point can be appointed as the Metering Coordinator at that transmission connection point. This reflects the existing arrangements.

³ A type 7 metering installation does not involve a physical metering installation. Instead, there is a reconciliation between the DNSP 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.

⁴ Where there is a retail customer at the connection point of a Non-Market or exempt Generator, only the Financially Responsible Market Participant or the large customer is permitted to appoint the Metering Coordinator.

- It allows a retailer to arrange the de-energisation of a premises if the customer fails to give safe and unhindered access to the premises for the retailer to carry out its responsibilities with regard to metering, subject to certain requirements.
- It makes changes to the model terms and conditions of standard retail contracts and deemed standard connection contracts to reflect the changes to the roles and responsibilities of parties providing metering services under the final rule.

The following sections outline the key features of the new competitive framework in further detail.⁵

Retailer responsibility to appoint a Metering Coordinator

The existing roles and responsibilities of the Responsible Person will be performed by the Metering Coordinator under the final 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 an eligible party has appointed its own Metering Coordinator (as discussed in the next section). 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.⁶

Under the existing arrangements only retailers and DNSPs can be the Responsible Person for small customer metering installations. Under the final rule, any party that meets the applicable registration requirements will be able to perform the Metering Coordinator role.⁷ Establishing a framework to facilitate increased competition for the provision of metering services for small customers is a key feature of the final rule, and is expected to increase innovation and the choice of electricity products and services available to consumers.

As a transitional measure, the relevant DNSP will become the initial Metering Coordinator for connection points where it is the Responsible Person for existing accumulation and manually read interval meters. DNSPs will continue in this role until

⁵ This summary only provides an overview of the final determination and final rule. Stakeholders should review the more detailed description of the final determination and final rule that is set out in the appendices. Stakeholders should also closely review the final rule. In particular, retailers, DNSPs, TNSPs, Metering Providers and Metering Data Providers should review the final rule to understand how their rights and obligations will change under the final rule.

⁶ Except where the Metering Coordinator is a TNSP, in which case AEMO is responsible for the collection of metering data with respect to the metering installation, the processing of that data, the delivery of the processed data to the metering database and the provision of metering data.

⁷ The final rule prohibits a Market Customer from being a Metering Coordinator, Metering Provider or Metering Data Provider, except in limited circumstances.

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 sale and supply of energy including 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.

The final rule allows large customers and Non-Market and exempt Generators⁸ to appoint their own Metering Coordinator if they wish to do so. These parties 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 final 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 final 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.

⁸ Except where there is a retail customer at the connection point of the Non-Market or exempt Generator.

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;⁹ 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 final rule also permits a Metering Coordinator to install a meter that is capable of providing the services listed above but is not connected to a telecommunications network where a customer has communicated its refusal to have a remotely read meter installed. The final rule sets out how a customer may communicate a refusal, notification requirements, and a requirement for the Metering Coordinator to maintain a written record of refusals.

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 available are capable of providing a number of services in addition to those specified in the minimum services specification, 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

⁹ 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 events that have been recorded in the meter log, including information on alarms.

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.

Remote disconnection and reconnection services

The final 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 final 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.

Retailer planned interruptions

The final rule permits retailers to arrange for an interruption to their customers' supply of electricity without the involvement of the DNSP (termed a 'retailer planned interruption') for the purposes of installing, maintaining, repairing or replacing an electricity meter.¹⁰ The retailer will be required to notify customers of the planned interruption, consistent with existing obligations on DNSPs. Retailers will also be required to notify DNSPs of any planned interruptions. The Commission considers that this approach will reduce potential confusion for consumers by requiring that the party initiating the interruption complies with the relevant notification requirements under the NERR.

Retailers are given a new ability, which mirrors an existing right for DNSPs, to arrange the de-energisation of a premises if the customer fails to give safe and unhindered access to the premises for the retailer to carry out its responsibilities with regard to metering. This right has been incorporated into the model terms and conditions for standard retail contracts to reflect that, under the final rule, retailers will be responsible for arranging the provision of metering and related services at a small customer's connection point.

Safety issues

Several provisions of the final rule will provide that obligations must be performed in accordance with relevant jurisdictional electricity legislation. The final rule does not include detailed requirements related to general electrical safety issues such as the safety of metering devices, the safe installation of meters or the safe use of new

¹⁰ Note that a retailer planned interruption refers to a temporary curtailment of supply for the purposes of installing, maintaining, repairing or replacing an electricity meter. It does not include disconnection for non-payment or other for other reasons specified under Part 6 of the NERR.

advanced metering services, for example remote de-energisation and re-energisation services. The regulation of electrical safety matters falls within the remit of jurisdictional departments or jurisdictional safety regulators in each state and territory.

The Commission recognises the importance of these changes being introduced in a safe manner. For this reason the AEMC has met with and written to jurisdictional safety regulators on a number of occasions throughout the rule change process to discuss areas where the new rules may have implications for jurisdictional safety arrangements. These areas include:

- Metering Coordinators (who may be independent of DNSPs) will be responsible for ensuring that electricity metering installations are installed and maintained in accordance with the rules and relevant jurisdictional and AEMO procedures.
- Retailers will be permitted to arrange a “planned interruption” for the installation, repair or maintenance of a metering installation, which will allow the Metering Provider to temporarily interrupt the customer’s electricity supply. Currently, DNSPs arrange a supply interruption of this nature.
- Electricity retailers and DNSPs will be able to arrange remote disconnection and reconnection services with a Metering Coordinator in certain circumstances provided for in the rules. Currently, all disconnections and reconnections are performed by DNSPs, and remote disconnections and reconnections are only currently available in Victoria.

Based on discussions with jurisdictional safety regulators, the Commission understands that they have already commenced or are about to commence work to review the relevant safety regulations, rules and practices so that necessary changes to safety arrangements can be made to reflect the AEMC’s amended rules, prior to their commencement on 1 December 2017.

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 final rule), the final rule requires the retailer to allow a small customer to opt out of having their meter replaced as a part of that deployment.¹¹ 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 their meter replaced as part of that deployment.

¹¹ This final 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 Energy Retail Code for consistency with the amendments to the NERR contained in the final 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.

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 there is no meter at the site (e.g. a new connection), 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.¹² 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;
- the incremental costs of installing an advanced meter that meets the minimum services specification are relatively low compared with a new accumulation meter;¹³
- in the case where there is no meter at the site, a meter is required to enable the supply of energy to the customer's site to be measured; 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 opt-out will also not apply where there is a prepayment meter at a small customer connection point and a customer at the premises subsequently requires life support equipment. In these circumstances, the retailer is obliged under the National Energy Retail Law (NERL) to make immediate arrangements for the removal of the prepayment meter and the installation of a standard meter at no cost to the small customer. Under the final rule a standard meter will be one that meets the minimum services specification. It is not appropriate to provide such a customer with an opt out due to delays in replacing the meter potentially being life threatening.

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. Jurisdictions also have the power under the National Energy Retail Law to require retailers to offer particular standing offer tariff structures, e.g. a flat tariff, to small customer with an interval meter.¹⁴

¹² These scenarios are discussed in further detail in Appendix C2.

¹³ 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.

¹⁴ Section 22 of the National Energy Retail Law.

Arrangements for accessing energy and metering data

The Metering Data Provider currently has a role in providing metering data to people that are authorised to access or receive it. The final rule strengthens the delineation between regulatory obligations and discretionary services with respect to metering data services. A number of amendments have been made in the final rule to clarify various parties' rights to receive metering data and to access metering data in the metering data services database. Parties that require metering data for the purpose of meeting their statutory requirements will continue to receive metering data an obligation on the Metering Data Provider to provide metering data to certain parties. Metering data may also be provided in connection with services contained in the minimum services specification to parties that are listed as access parties, or if the relevant customer consents to the provision of that data, as a discretionary service under a commercial arrangement.

Options for DNSPs to monitor and operate their networks

DNSPs will have additional options in specific circumstances to manage their networks using their existing meters. The final rule allows DNSPs to alter existing manually read meters to make them capable of being remotely read under certain circumstances, without the classification of the meter changing. This will potentially allow them to meet their obligations to provide a safe, secure and reliable network more efficiently and, where there are operational difficulties in manually reading a meter, provide more accurate, frequent and less costly meter reads.

Access to Metering Coordinator services

While the Metering Coordinator at a small customer connection point 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.¹⁵ Subject to certain 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 (and subject to the arrangements between the Metering Coordinator and the person who appoints them).¹⁶

Advanced meters can provide or enable 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.

¹⁵ 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.

¹⁶ 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.

DNSPs may negotiate with the retailer and Metering Coordinator for the deployment of advanced meters and seek to recover the costs of doing so through the existing regulatory process. New meter deployments are subject to the opt-out requirements referred to above.

The final 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, provided there is sufficient space to house both the metering installation and the network device in the metering facility.¹⁷ However, certain restrictions apply to how DNSPs may use such devices. Specifically, a DNSP must not use a network device to provide services to retail customers or to any other third party.¹⁸ However, a DNSP may use a network device to reconnect or disconnect a metering installation via remote acquisition as permitted under energy laws, and provide services to a customer which are incidental to services reasonably required by the DNSP to meet its obligations to provide a safe, reliable and secure network.

The Metering Coordinator must not remove, damage or render inoperable a network device, except with the DNSP's consent or where there is insufficient space to house both the metering installation and the network device.¹⁹ In this instance the Metering Coordinator may remove the network device, subject to retaining certain evidence of the lack of space and complying with notification requirements. 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.

Ring-fencing arrangements

The final 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.

¹⁷ A DNSP may not install a network device if the installation or maintenance of the network device: (1) adversely impacts on the operation of the metering installation, including its compliance with the Rules and procedures authorised under the Rules; (2) damages the metering installation; or (3) prevents the metering installation being maintained or removed, as required, by or on behalf of the Metering Coordinator.

¹⁸ This restriction only applies to network devices. It does not prevent a DNSP from setting up an appropriately ring-fenced Metering Coordinator, Metering Provider or Metering Data Provider business to provide other services via a metering installation.

¹⁹ Under the final rule, this concept of sufficient space is captured by providing an exception to the prohibition on a Metering Coordinator removing a network device if, in the Metering Coordinator's reasonable opinion, the metering installation cannot be installed in the metering facility in a manner that allows it to: (1) operate effectively and in compliance with the Rules and procedures authorised under the Rules; and (2) be maintained or removed, as required, by or on behalf of the Metering Coordinator, without removing or adversely impact the network device.

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 role, or providing other energy services. 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.

Expected outcomes of the rule change

The final 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 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 distribution network pricing rule change final determination²⁰ 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; and

²⁰ See <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>.

- 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.

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 final 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, 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 existing 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, for example 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, subject to any space limitations.
- The national minimum services specification will take effect in Victoria when the new Chapter 7 of the NER commences.

Implementation

The final rule contains a commencement date of 1 December 2017 for the new Chapter 7 of the NER and amendments to the NERR.²¹ 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 September 2016;
- the AER to develop, consult on and publish a distribution ring-fencing guideline by 1 December 2016;
- AEMO to publish information on the process for applying for registration as a Metering Coordinator by 1 March 2016; and
- retailers and DNSPs to publish amended standard contracts by 1 December 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 final determination.

Consultation

Due to the significance of this rule change for many parties, the Commission has undertaken extensive consultation throughout this rule change process. In addition to a consultation paper and a draft determination, the Commission held six stakeholder workshops and published an information sheet setting out the proposed implementation timetable prior to the draft determination being published and held a public forum and an operational workshop following the draft determination. The Commission also published an additional consultation paper on seven specific issues on which stakeholder input was sought due to potential material drafting changes to the draft rule.

The Commission received over 100 written submissions throughout this rule change process. AEMC staff also met with individual stakeholders on numerous occasions, including retailers, DNSPs, governments, consumer groups, metering businesses and energy services companies. The Commission appreciates the level and sustained nature of stakeholders' engagement throughout this process.

²¹ Some other provisions of the final rule will commence earlier, including, for example, changes to Chapter 2 of the NER, some definitions and transitional provisions under the NERR requiring retailers and distributors to make the requisite changes to their standard contracts by December 2017. See the final rule for more details.

Key policy changes from the draft rule to the final rule

This section sets out at a high level the key policy changes that were made between the draft determination and this final determination. In addition to these, a large number of other changes have been made to address technical, operational and drafting issues raised in submissions, as well as some minor changes to better implement the Commission's policy intent. The final rule also reflects a number of minor editorial changes to clarify existing rules. These minor editorial changes do not reflect a change in policy intent, and many of them were proposed by stakeholders in submissions.

The key policy changes were all consulted on in the additional consultation paper and are:

- *Supply interruptions for the purpose of installing or maintaining a meter*: the final rule permits retailers to arrange a planned supply interruption for their customers where required to install, maintain, repair or replace metering equipment. Consistent with existing provisions for DNSPs relating to planned supply interruptions, the final rule also introduces an ability for a retailer to arrange the de-energisation of a premises if the customer fails to give safe and unhindered access to the premises for the retailer to carry out its responsibilities with regard to metering. Under the draft rule only DNSPs could arrange supply interruptions. This change will reduce confusion for customers as it will be the party effecting the interruption that is required to provide notification of the interruption.
- *Customer consent for the provision of network-related services*: the final rule permits a Metering Coordinator to provide access to services provided via a small customer's metering installation to a DNSP without the consent of the customer where such access is reasonably required by the DNSP to enable it to meet its obligations to provide a safe, reliable and secure network. Under the draft rule, Metering Coordinators could only provide access to services provided via a small customer's metering installation if the small customer had given prior consent for services, other than those services in the minimum services specification. This change recognises that requiring customer consent to be obtained before DNSPs can access network-related metering services may present a barrier to the delivery of services that benefit customers and the network as a whole.
- *Network devices*: the final rule:
 - Permits DNSPs to use network devices, except to provide services to customers or other third parties. Despite this, the DNSP may provide services to a customer where the services are incidental to the provision of network services that are reasonably required to enable the DNSP to meet its obligations to provide a safe, reliable and secure network. The draft rule restricted the use of a network device to where it was used in connection with the operation or monitoring of the DNSP's network. The approach in the final rule balances providing DNSPs with bargaining power for access to network-related services by way of a metering installation, while

limiting the use of network devices so as not to provide any party with a competitive advantage in the provision of certain services.

- Permits DNSPs to use network devices to disconnect or reconnect a metering installation via remote access. The draft rule prevented network devices from being used for this purpose. This change provides additional bargaining power for DNSPs when negotiating for access to network-related services by way of a metering installation.
 - Permits a Metering Coordinator to remove a network device where there is insufficient space to accommodate both the metering installation and the network device,²² subject to requirements to retain evidence of the lack of space and notification requirements. This change recognises that there may be instances where it is not physically possible to accommodate both a metering installation and a network device in a metering facility, in which case the metering installation must have priority because a functional, accurate meter is essential for the operation of the NEM.
- *Alterations to manually read metering installations to make them capable of remote acquisition:* The final rule permits DNSPs to alter a manually read meter to make it capable of being remotely read without changing the classification of the meter where the alteration is reasonably required to enable the DNSP to meet its obligations to provide a safe, reliable and secure network. This broadens the circumstances under which a DNSP can alter a metering installation compared to the draft rule. This change recognises that there may be instances where it is more efficient for a DNSP to alter an existing meter than install a new meter or network device.
 - *Metering Coordinator obligations where a customer refuses to have an advanced meter installed:* The final rule permits a Metering Coordinator to arrange for the installation of a meter that is not connected to the telecommunications network where a customer refuses to have a meter that meets the minimum services specification installed. Under the draft rule, a Metering Coordinator could have been in breach of the rules if it did not install a meter that meets the minimum services specification at a small customer's premises. This change recognises that there may be instances where customers refuse to have an advanced meter installed and that, based on discussions with stakeholders, many customers' concerns about advanced meters can be addressed by not connecting the metering installation to a telecommunications network.
 - *Application of the framework to transmission connection points:* The final rule excludes transmission connection points from the competitive framework and instead retains the existing provisions in the NER that only permit either a DNSP or a Financially Responsible Market Participant to be the Metering Coordinator. The draft rule permitted any party to be the Metering Coordinator at a transmission connection point, subject to meeting the registration requirements.

²² See footnote 19 for an explanation of how "insufficient space" should be interpreted.

This change recognises the specialised nature of the metering required at these connection points and the cost and complexity of permitting third parties to take on this role.

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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 was 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 considered that the proposed arrangements would make it easier for large customers to manage their own metering requirements.²³

The rule change request was submitted in response to recommendations made by the AEMC in its Power of Choice review.²⁴

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 recognised 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 reconnection and disconnection; and
- grid management technologies such as outage and supply quality detection.²⁵

²³ COAG Energy Council, rule change request, October 2013, p4.

²⁴ See <http://www.aemc.gov.au/Markets-Reviews-Advice/Power-of-Choice-Stage-3-DSP-Review>.

²⁵ COAG Energy Council, rule change request, October 2013, p4.

1.2.1 Existing arrangements

Box 1.1 Metering installation types and terminology

A range of different types of metering installations are available and defined in the existing NER. This box summarises the different types of metering installations and the terminology used to describe them in the existing NER and this final 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 existing NER 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 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 Local Network Service Provider (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, because of they allow for remote meter reading, are 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 existing 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.²⁶ 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 who is responsible for arranging the installation, provision and maintenance of the metering installation, and the collection, processing and delivery of metering data.²⁷ 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)²⁸ 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.²⁹

For small customers with 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 classified as 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 classified as small customers under the NERL.

Accordingly, metering services for retail customers are the responsibility of either the customer's retailer or LNSP³⁰, depending on the metering installation type, under the existing arrangements.

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

²⁶ Existing clause 7.1.2 of the NER.

²⁷ Existing clause 7.2.1 of the NER.

²⁸ Throughout this document we generally refer to "LNSPs" when referring to an obligation under the NER that applies to LNSPs. Otherwise we refer to DNSPs, including for obligations that relate to the NERR.

²⁹ Existing clause 7.2.3(c) of the NER.

³⁰ As either the Responsible Person or must appoint the Responsible Person.

services are price regulated³¹ 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 is not subject to economic regulation under the NER.

Services provided in respect of manually read interval meters and accumulation meters (types 5 and 6 meters referred to above) have to date generally been classified by the AER as a standard control service. This 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. However in its recent or upcoming distribution regulatory determinations the AER has, or has indicated its intention to, classify services provided in respect of manually read interval meters and accumulation meters as alternative control services. This means that charges for these services are already, or will soon be, unbundled from the distribution use of system charges. This is discussed further in Appendix D1.

Table 1.1 General overview of metering installation types under the existing 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 (for retail customers this is their retailer), 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 ³²	Local Network Service Provider

³¹ Price regulated means that the AER determines the price paid for, or the revenue recovered by, the DNSP in respect of the service.

³² 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 under existing clause 7.2.3(a)(2) of the NER.

Metering installation type	Description	When used	Responsible Person
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 classified as large customers under section 5(b) of the NERL. The National Energy Retail Regulations sets this upper consumption threshold at 100 MWh per annum³³, which has been adopted by the ACT³⁴, Queensland³⁵ and NSW³⁶. Varying thresholds have 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 existing arrangements

The COAG Energy Council considers that the existing arrangements for metering in the National Electricity Rules (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 1.2.³⁷ While the existing 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, under the existing arrangements 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

³³ Section 7(2) National Energy Retail Regulations.

³⁴ Section 7(2) National Energy Retail Regulations.

³⁵ Clause 30O Electricity Regulation 2006 (Qld).

³⁶ Section 4(1)(a) National Energy Retail Law (Adoption) Regulations (NSW) 2013.

³⁷ COAG Energy Council, rule change request, October 2013, p5.

provider of these services and, subject to the AER regulatory determination process, receiving regulated revenues³⁸ 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 existing 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.³⁹ The COAG Energy Council is of the view that this arrangement is a disincentive for installing advanced meters.

The framework for negotiating exit fees is uncertain

Under the existing 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 existing requirement in the rules for retailers and LNSPs 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 case to invest in advanced metering. These issues were explored in the

³⁸ The AER has currently determined these services to be direct control services and are therefore price regulated.

³⁹ This residual amount for the old metering installation would be paid by all customers.

AEMC's advice to the COAG Energy Council on a framework for open access and common communication standards for advanced meters, published in April 2014.⁴⁰

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 proposing to addressing some consumer protection issues through parallel amendments to the NERR to be made by the South Australian Minister under amendments to the NERL made in 2013.⁴¹ 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 2013.⁴²

1.3 Solution proposed in the rule change request

In its rule change request, the COAG Energy Council proposed 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;

⁴⁰ <http://www.aemc.gov.au/Markets-Reviews-Advice/Framework-for-open-access-and-communication-standards>

⁴¹ Statutes Amendment (Smart Meters) Act 2013 (SA).

⁴² As above.

- 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;⁴³
- 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 existing 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.

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.⁴⁴

⁴³ "Regulated meters" refer to metering services that are classified as direct control services by the AER and which are therefore subject to price regulated.

⁴⁴ <http://www.aemc.gov.au/Rule-Changes/Expanding-competition-in-metering-and-related-serv>

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.⁴⁵ 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.⁴⁶

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.⁴⁷ 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.

⁴⁵ <http://www.scer.gov.au/workstreams/energy-market-reform>

⁴⁶ <http://www.scer.gov.au/files/2014/02/Demand-Side-Participation-Update-table.pdf>

⁴⁷ 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>

The review found that the existing 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.⁴⁸The COAG Energy Council's rule change request was 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 ⁴⁹	Final determination published 6 November 2014
	Distribution network pricing arrangements ⁵⁰	Final determination published 27 November 2014
	Improving demand side participation information provided to AEMO by Registered Participants ⁵¹	Final determination published 26 March 2015.
	Reform of the demand management and embedded generation connection incentive scheme ⁵²	Final determination published 20 August 2015.
	Embedded networks ⁵³	Draft determination published 10 September 2015.
	Multiple trading relationships ⁵⁴	Draft determination published 19 November 2015.
	Demand response mechanism ⁵⁵	Consultation paper published 5 November 2015.

⁴⁸ AEMC, Power of Choice review, final report, AEMC, 30 November 2012, Sydney, p69.

⁴⁹ <http://www.aemc.gov.au/Rule-Changes/Customer-access-to-information-about-their-energy>

⁵⁰ <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>

⁵¹ <http://www.aemc.gov.au/Rule-Changes/Improving-Demand-Side-Participation-information-pr>

⁵² <http://www.aemc.gov.au/Rule-Changes/Demand-Management-Embedded-Generation-Connection-I>

⁵³ <http://www.aemc.gov.au/Rule-Changes/Embedded-Networks>

⁵⁴ <http://www.aemc.gov.au/Rule-Changes/Multiple-Trading-Relationships>

⁵⁵ <http://www.aemc.gov.au/Rule-Changes/Demand-Response-Mechanism>

Mechanism	Reform	Status
Reviews and advice	Electricity customer switching ⁵⁶	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 ⁵⁷	Final advice provided to COAG Energy Council March 2014.
	Implementation advice on a shared market protocol ⁵⁸	Final advice provided to COAG Energy Council on 8 October 2015. Advice is being considered by COAG Energy Council.

1.4.2 Related reforms

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

In developing the final determination and final rule we 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 they raise broader issues. We 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.⁵⁹

⁵⁶ <http://www.aemc.gov.au/Markets-Reviews-Advice/Review-of-Electricity-Customer-Switching>

⁵⁷ <http://www.aemc.gov.au/Markets-Reviews-Advice/Framework-for-open-access-and-communication-standards>

⁵⁸ <http://www.aemc.gov.au/Markets-Reviews-Advice/Implementation-advice-on-the-Shared-Market-Protocol>

⁵⁹ <http://www.scer.gov.au/workstreams/energy-market-reform/demand-side-participation/smart-meters/consumer-protections>

New products and services in the NEM

In December 2014, the COAG Energy Council's Energy Working Group published a consultation paper seeking public comment on the regulatory implications of new products and services in the electricity market.⁶⁰ The paper recognised that a range of parties could offer products and services to consumers to help them manage their electricity consumption and costs, particularly where advanced meters are installed. However, not all of these parties are regulated under the National Electricity Customer Framework (NECF).

Submissions to the consultation paper closed on 20 March 2015. Thirty-three submissions were received, which were used to inform a discussion paper that was presented to Ministers at their 23 July 2015 COAG Energy Council meeting. At this meeting, it was agreed that officials would undertake further work to investigate whether the scope of existing energy consumer protections needs to be expanded in light of consumers having a greater range of electricity supply options. Officials were also tasked with considering the appropriate consumer protection framework for off-grid installations.⁶¹ Officials are due to report on their investigations at the December 2015 COAG Energy Council meeting.⁶²

Some of the issues in scope of this work have 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.

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.⁶³ 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 a standard for the communications sent between market participants and service providers regarding the services that will be offered by advanced meters.

⁶⁰ <https://scer.govspace.gov.au/workstreams/energy-market-reform/demand-side-participation/new-products-and-services-in-the-electricity-market>

⁶¹ <https://scer.govspace.gov.au/files/2015/08/Energy-Council-Communique-23-July-2015-FINAL.pdf>

⁶² <https://scer.govspace.gov.au/files/2015/07/Council-Implementation-Plan-July-20151.pdf>

⁶³ <http://www.aemc.gov.au/Markets-Reviews-Advice/Framework-for-open-access-and-communication-standards>

As there were interdependencies with the competition in metering rule change, the AEMC also recommended that it would provide supplementary advice on the establishment, maintenance and governance of the shared market protocol at a later date. These could then be determined through an additional rule change request once the final determination on competition in metering and related services had been made.

To inform the development of a rule change request, the COAG Energy Council asked AEMO to develop a proposed shared market protocol, in consultation with interested parties.⁶⁴ AEMO submitted its advice to the COAG Energy Council in two parts on 11 March 2015 and 14 May 2015.

The AEMC's supplementary advice on implementing a shared market protocol was provided to the COAG Energy Council on 8 October 2015. The advice recommended that a shared market protocol be implemented by updating the B2B arrangements in the NER to provide for the different types of services that will be available through advanced meters and the wider range of parties that will be interested in those services. The advice included a draft rule change request and proposed rule, for consideration by the COAG Energy Council.⁶⁵

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.

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.⁶⁶ ERM Power considered 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. It proposed that this ambiguity be rectified by introducing new transitional roles for prospective participants and by clarifying the timing of participant rights and obligations at a connection point.

The AEMC published a directions paper on 10 September 2015, outlining its proposed position with respect to the meter replacement rule change request. The Commission's proposed policy position was that the NER be amended to:

- clarify that an incoming retailer cannot require a metering installation to be changed at a connection point until the retail transfer is complete;
- provide that during the retail transfer period an incoming retailer can nominate parties such as the Meter Provider and Meter Data Provider to undertake certain

⁶⁴ <https://scer.govspace.gov.au/files/2014/12/Terms-of-Ref-MFS-Market-Protocol-June-2014.pdf>

⁶⁵ <http://www.aemc.gov.au/Markets-Reviews-Advice/Implementation-advice-on-the-Shared-Market-Protoco>

⁶⁶ 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>.

roles at a connection point on and from the day the retail transfer is completed;
and

- clarify that commercial arrangements can be entered into between incoming and incumbent parties at a connection point, so the incumbent parties can replace the meter on behalf of the incoming parties during the retail transfer period or that the date of the transfer and the meter replacement can be aligned.

The AEMC will publish a draft determination in relation to this rule change request by 17 December 2015.

The interaction between the two rule changes and how best to coordinate implementation of the potential resulting changes has been considered in this rule change.

Review of electricity customer switching

In April 2014, the AEMC published a review of electricity customer switching arrangements.⁶⁷ 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 final 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 existing 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.

⁶⁷ <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.⁶⁸ 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.

The Commission is of the view that by making this information more accessible, 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 final 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.⁶⁹ 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.

⁶⁸ <http://www.aemc.gov.au/Rule-Changes/Customer-access-to-information-about-their-energy>

⁶⁹ <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.⁷⁰

On 26 March 2015, the Commission published a notice under section 99 of the NEL and section 256 of the NERL advising that it had made a draft determination and draft rule in relation to the proposed rule change and invited submissions on the proposed changes.

On 2 July 2015, the Commission gave notice under section 107 of the NEL to extend the time for making a final determination on the rule change request to 26 November 2015. The extension was sought to enable the Commission to consider the large number of operational and legal drafting issues that were raised in submissions to the draft determination and draft rules.⁷¹

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.⁷² Issues raised by stakeholders in their submissions have been addressed throughout this final rule determination.

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

⁷⁰ 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>

⁷¹ Further information about the reasons for seeking this extension is available here: <http://www.aemc.gov.au/getattachment/f60295b0-b05e-4c74-83c6-1b1d671c0169/Information-sheet-extension-of-time-for-final-rule.aspx>

⁷² <http://www.aemc.gov.au/Rule-Changes/Expanding-competition-in-metering-and-related-serv>

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 • Registration, accreditation and compliance obligations 	26 June 2014	Sydney
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.

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

Prior to publishing the draft determination, the Commission published an information sheet and asked for submissions on a proposed implementation timeframe for this rule change, as well as associated work by AEMO and the AER to implement the rule change. The Commission received 15 submissions in response.

1.7 Consultation on the draft determination

On 26 March 2015, the Commission published a draft determination and draft rule in relation to the rule proposed. A public forum was held on 30 April 2015 to facilitate discussion on the draft rule determination. Submissions on the draft rule determination closed on 21 May 2015. A total of 47 submissions were received, including a number of supplementary submissions.

In submissions, stakeholders expressed mixed levels of support for the draft rule.

Generally, retailers, metering service providers and the AER supported the draft rule and in particular a market led approach to the installation of advanced meters.⁷³ These stakeholders considered that a market led approach will drive innovative products and services at a lower cost to the benefit of consumers.

In particular, the Energy Retailers Association of Australia considered that the expansion of competition in the retail energy market to include metering and related services would enable consumers to:

- have access to more diverse and innovative energy products;
- gain greater understanding and management of their energy use and
- save on their energy bills through responding to available information about their energy consumption.⁷⁴

Consumer representative groups and energy ombudsmen broadly supported the intent of the draft rule.⁷⁵ The South Australian Council of Social Services particularly welcomed "the provisions made in the draft determination for access to meters by authorised parties only and opt out arrangements."⁷⁶ However, the Queensland Council of Social Services and the NSW Energy and Water Ombudsman expressed

⁷³ Submission on the draft rule determination: AER, p.1; AGL, p.1; EnergyAustralia, p.1; ERM Power Limited, p.1; ERAA, p.1; Lumo and Red Energy, p.2; Momentum, p.1; Simply Energy, p.2; Active Stream, p.1; Landis+Gyr, p.1; Vector, p.1; and Wattwatchers, p.1.

⁷⁴ ERAA, submission on the draft rule determination, p.1.

⁷⁵ Energy & Water Ombudsman NSW, submission on the draft rule determination, p.1; Queensland Council of Social Service, submission on the draft rule determination, p.1; and South Australian Council of Social Service, submission on the draft rule determination, p.1.

⁷⁶ South Australian Council of Social Service, submission on the draft rule determination, p.1.

some concern that the draft rule would force consumers onto a time varying tariff, regardless of whether this would be in their interest.⁷⁷

Distribution businesses expressed support for the intent of the draft rule, and in particular the intent that a new framework "provide a basis for willing commercial negotiation between participants to support the use of meters by multiple parties."⁷⁸ However, distribution businesses considered that the draft rule was inadequately defined to conclude that the rule change would meet the NEO and NERO.⁷⁹ Therefore, distribution businesses considered that a range of changes that should be made to the draft rule to promote the long-term interests of consumers.⁸⁰

The ENA identified its five main concerns with the draft rule as:⁸¹

1. the ability of the networks to meet their statutory and regulatory obligations under the NERL;⁸²
2. the minimum services specification;⁸³
3. the ability of networks to access network services from Metering Coordinators;⁸⁴
4. utilisation of network devices;⁸⁵ and
5. scheduling for finalisation and implementation of the final rule.⁸⁶

In addition, the Victorian DNSPs expressed concern that the draft rule would undermine the current and future benefits of the mandated AMI roll-out by only requiring that a Metering Coordinator install a meter that meets a minimum specification that is lower than that of the AMI meters.⁸⁷

⁷⁷ Energy & Water Ombudsman NSW, submission on the draft rule determination, p.3; Queensland Council of Social Service, submission on the draft rule determination, p.6. This issue is considered further in Chapter 3 and in Appendix C2.

⁷⁸ Quote: ENA, submission on the draft rule determination, p.10. See also SA Power Networks, submission on the draft rule determination, p.1.

⁷⁹ Ibid.

⁸⁰ Victorian DNSPs, submission on the draft rule determination, p.7.

⁸¹ ENA, submission on the draft rule determination, p.10.

⁸² See Appendices A3 and A4.

⁸³ See Appendix C1.

⁸⁴ See Appendix E.

⁸⁵ See Appendix D4.

⁸⁶ See Chapter 5.

⁸⁷ Victorian DNSPs, submission on the draft rule determination, p.12. This issue is considered further in Appendix F.

1.8 Further consultation

The Commission held a further operational workshop with stakeholders on 16 July 2015 to discuss a number of the operational issues raised in submissions to the draft rule determination. Specifically, this workshop covered the following topics:

- roles and responsibilities of the retailer, Metering Coordinator, Metering Provider and Metering Data Provider;
- naming of metering types;
- new connections;
- supply interruptions; and
- network devices.

In assessing the issues and proposals raised in submissions to the draft rule determination and at the operational workshop, the Commission identified several issues that required further feedback from stakeholders. An additional consultation paper was published by the AEMC on 17 September 2015. The purpose of this paper was to seek stakeholder feedback on a number of potential material drafting changes to the draft rule, including:

- arrangements for accessing energy and metering data;
- supply interruptions for the purpose of installing or maintaining a meter;
- customer consent for provision of network-related metering services;
- network devices;
- alterations to type 5 and 6 metering installations to make them capable of remote acquisition;
- Metering Coordinator obligations where a customer refuses to have a metering installation that meets the minimum services specification installed; and
- application of the framework to transmission connection points.

Submissions on the additional consultation paper closed on 1 October 2015. A total of 19 submissions were received.

Submissions on the draft rule determination and on the additional consultation paper, in addition to the agenda and presentations from the public forum and operational workshop, are available from the AEMC's website.

The Commission would like to thank all those that have participated in the consultation process for their contributions. In particular, the Commission is grateful for the input that AEMO and the AER provided throughout this rule change process.

2 The final rule determination

2.1 Commission's final determination

In accordance with section 102 of the NEL and section 259 of the NERL, the Commission has made this final rule determination in relation to the rule proposed by the COAG Energy Council.

The *National Electricity Amendment (Expanding competition in metering and related services) Rule 2015 No. 12* (made under section 103 of the NEL) and the *National Energy Retail Amendment (Expanding competition in metering and related services) Rule 2015 No. 1* (made under section 261 of the NERL) are published with this final rule determination.

The Commission has determined to make a more preferable rule.⁸⁸ The Commission's more preferable final rule contains many elements of the COAG Energy Council's rule change request. Aspects of the final 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 final rule determination are set out in Chapters 3 to 5 and Appendices A to G.

A final rule⁸⁹ is attached to and published with this final rule determination. Its key features are summarised below and described in more detail in Chapter 4 and the appendices.

Key features of the final rule:

- The final 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, other than at transmission connection points;⁹⁰

⁸⁸ 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.

⁸⁹ A final rule has been made under both the NEL and the NERL.

⁹⁰ Under the final rule, only the LNSP or the Financially Responsible Market Participant at a transmission connection point can be appointed as the Metering Coordinator at that transmission connection point. This reflects the existing arrangements.

- permitting a large customer and Non-Market and exempt Generators⁹¹ to appoint their own Metering Coordinator at distribution connection points; and
 - requiring a retailer to appoint the Metering Coordinator, except where another party 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 allow them to monitor, operate or control their networks for the purpose of providing network services, provided there is sufficient space to house both the metering installation and the network device.
 - It permits a retailer to arrange for a Metering Coordinator to remotely disconnect or reconnect a small customer's premises in specified circumstances.
 - It permits a retailer to arrange for a supply interruption at its customers' premises for the purposes of installing, maintaining, repairing or replacing an electricity meter.
 - It allows retailer to arrange the de-energisation of a premises if the customer fails to give safe and unhindered access to the premises for the retailer to carry out its responsibilities with regard to metering, subject to certain requirements.
 - It makes changes to the model terms and conditions of standard retail contracts and deemed standard connection contracts to reflect the changes to the roles and responsibilities of parties providing metering services under the final rule.

⁹¹ Where there is a retail customer at the connection point of a Non-Market or exempt Generator, only the Financially Responsible Market Participant or the large customer is permitted to appoint the Metering Coordinator.

2.2 Rule making test

2.2.1 Assessment of the final 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 final 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.⁹² The Commission is satisfied that the final rule will, or is likely to, contribute to the achievement of the NEO for the reasons set out below.⁹³

Efficient investment in metering services

The final 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 final rule supports the development of a NEM-wide market for the provision of advanced metering services.⁹⁴ This framework has the potential to reduce regulatory costs and complexity for businesses operating across jurisdictional boundaries. Under

⁹² 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.

⁹³ 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.

⁹⁴ 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 final rule will not apply in Victoria, which has currently not adopted the NECF.

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 final 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 final 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 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 final rule provides for a smooth transition from the existing rules to the new framework. The final 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 final 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 final determination on the distribution network pricing arrangements rule change in November 2014 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;⁹⁵
- 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.

2.2.2 Assessment of the final 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

⁹⁵ See <http://www.aemc.gov.au/Rule-Changes/Distribution-Network-Pricing-Arrangements>.

test have been met.⁹⁶ 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 final rule will, or is likely to, contribute to the achievement of the NERO for the reasons set out in section 2.2.1.⁹⁷

Consumer protections test

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

- the NERR;
- 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, South Australia and Tasmania) and, where relevant, of jurisdictions not yet participating in the NECF (Victoria).⁹⁸

The classes of consumer protections that are relevant to the final rule 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;
- the circumstances in which a retailer may arrange the disconnection of supply to a small customer's premises, including if the customer fails to give safe and unhindered access to the premises for the retailer to carry out its responsibilities with regard to metering;
- interruption of the supply of electricity to a customer's premises for the purposes of installing, maintaining, repairing or replacing metering equipment;
- minimum standard terms and conditions for retail contracts and connection contracts, given that these will be amended to more clearly reflect the role of the retailer and distributor with respect to metering services;

⁹⁶ That is, the legal tests outlined in section 236(1) and 236(2)(b) of the NERL.

⁹⁷ 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.

⁹⁸ Relevant Victorian energy laws include the *Electricity Industry Act 2000* (Vic) and the Electricity Retail Code. We also considered relevant electrical safety legislation and regulations in NECF and non-NECF jurisdictions.

- 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 final 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 enhances consumer protections, such as for customers who require life support equipment. The key issues related to consumer protections are discussed in detail in Appendix A3.

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.

While the Commission's final 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 final 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 final 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 final rule requires that all new and replacement metering installations at small customer connection points meet the minimum services specification (subject to two exceptions). The application of the minimum services specification to all new and replacement 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.⁹⁹
- The final 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.¹⁰⁰ The Commission considers that the COAG Energy Council's concerns will be addressed by alternative means in the final rule, including transitional

⁹⁹ COAG Energy Council, rule change request, October 2013, p15.

¹⁰⁰ COAG Energy Council, rule change request, October 2013, p17.

arrangements under which the LNSP will be appointed as the Initial Metering Coordinator for existing type 5 and 6 metering installations.¹⁰¹ 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 in the final 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.¹⁰²
- The final 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.¹⁰³

The final 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 and energy service companies, 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 final rule, and why the final rule is expected to better contribute to the achievement of the NEO and the NERO than the rule proposed by the COAG Energy Council.

¹⁰¹ 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 service specification installed at their premises.

¹⁰² Clause 7.6.2 of the NER final rule.

¹⁰³ The NER final rule extends the expiry of the current Victorian derogation until 1 December 2017 so that it coincides with the commencement of the new framework. Under the NER final rule, Victorian DNSPs will be appointed as the initial Metering Coordinator for their existing Victorian AMI meters on 1 December 2017.

2.3 Assessment framework

This section sets out the analytical framework that the Commission has used to assess the rule change request. Where relevant, the appendices provide further detail on the framework that the Commission has used to examine specific issues.

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 final 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 final 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 final 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 final rule sets out a framework that is as simple and practicable as possible, and without excessive regulation that might impose unnecessary complexity, risks or costs for consumers.
- *System integrity*: Whether the final 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 final rule supports the development of competition for the provision of metering services. In particular, the Commission has considered 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 competition may not emerge as quickly;

- encourage parties to negotiate 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; 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 final 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 final 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 final rule is expected to provide a regulatory framework that is transparent and predictable for consumers and Market Participants. 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 final 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 final 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 final 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 final 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 final 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 existing 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 existing practice is to transfer the consumer only after an actual read of electricity consumption has been recorded; and
- 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 existing NER provisions allow for, and potentially encourage, the continued installation of accumulation meters and therefore do 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 final rule

Technological innovation has meant that meters can do 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 relating to 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. 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. Like a mobile phone or a pay TV box, meters are the physical infrastructure that enables consumers to use a service that they value.

The final rule establishes a framework to facilitate a market-led deployment of advanced meters. This approach is based on experience 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.¹⁰⁴ A small customer will have an advanced meter installed:

- when they request an advanced meter or to enable the provision of a product or service the customer has agreed to acquire from a retailer or other person 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 or authorised the deployment under a market retail contract;
- where the existing metering installation is faulty or needs to be replaced under a maintenance replacement (as defined in the final rule);
- where a new premises has a metering installation installed; or
- when required by law.¹⁰⁵

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.

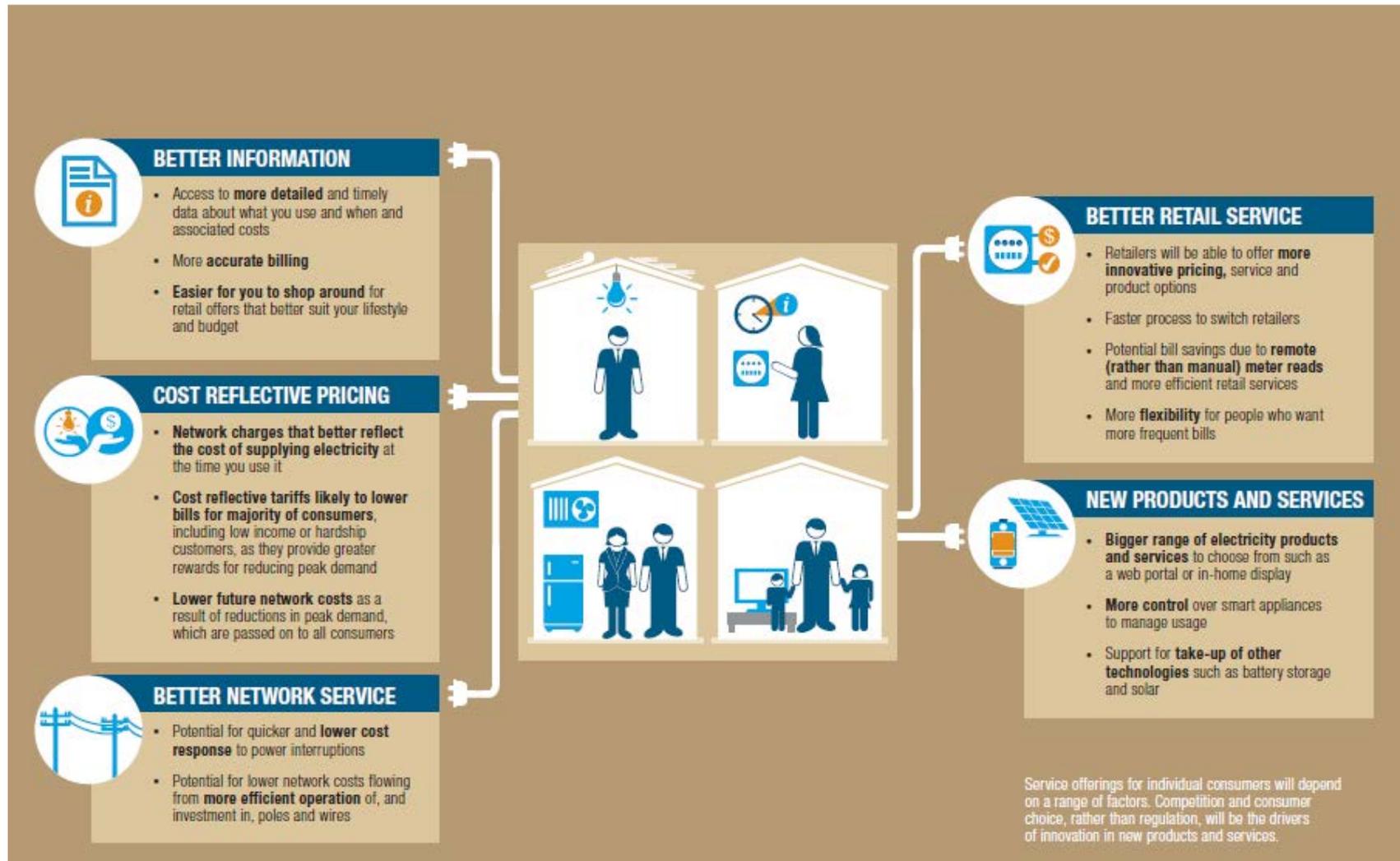
¹⁰⁴ This requirement is subject to two exemptions. Where a small customer prevents or refuses the installation of a metering installation that meets the minimum services specification, the final rule enables a Metering Coordinator to install a type 4A meter. A type 4A metering installation is a meter that is capable of providing the services set out in the minimum services specification, but is not connected to a telecommunications network that enables remote access to the metering installation. See Appendix C1 of the final rule determination for further explanation of type 4A metering installations. The rule also permits AEMO to exempt a Metering Coordinator from installing a metering installation that meets the minimum specifications where there is no existing telecommunications network that enables remote access. In this instance, the Metering Coordinator must install a type 4A meter.

¹⁰⁵ The opt out arrangements noted above do not apply where a retailer is required to replace a small customer's meter under section 59(2) of the NERL. This section applies where a small customer with a prepayment meter notifies the retailer that a person at the premises requires life support equipment. In those circumstances, the retailer must make immediate arrangements for the removal of the prepayment meter and the installation of a standard meter at no cost to the consumer.

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

CONSUMER BENEFITS

The final 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. Retailers, governments and consumer groups all have a role to play in raising customer awareness and understanding of the opportunities made available by advanced metering.¹⁰⁶ 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 and network businesses wish to take up those new products and services.

The final 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,¹⁰⁷ so there will be a gradual increase in the number of advanced meters over time. Under the final rule, whether a small customer with a working metering installation 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. Retailers may also deploy advanced meters to reduce their costs, for example by arranging for meters to be read remotely instead of manually. For this reason retailers are unlikely to simply target high value customers.¹⁰⁸

If a retailer does wish to replace a small customer's working metering installation then under the final 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 or the replacement is required by law.¹⁰⁹ The retailer must also advise the customer of any upfront charges. The retailer will also need to make sure that they can perform their contract with the customer by making sure they have negotiated the necessary services with the Metering Coordinator.

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

¹⁰⁶ A number of stakeholders noted the importance of informing and educating customers about advanced meters. See the following submissions to the draft determination: Consumer Action Law Centre (p4), the Electrical Trades Union (p5), Ethnic Communities Council of NSW (pp3-4), and the Queensland Council of Social Services (p8).

¹⁰⁷ Except as discussed in footnote 104.

¹⁰⁸ The Electricity and Water Ombudsman of NSW was concerned that disadvantaged and vulnerable consumers, who can benefit from advanced meters, may take some time to get them if retailers initially target high value customers (submission on draft determination, p.4).

¹⁰⁹ See Appendix C2 for further detail about these arrangements. In response to concerns raised by the Ethnic Communities Council of NSW, the written notice advising a customer of their ability to opt out must include the contact details of interpreter services in community languages.

with Metering Coordinators to offer additional services over and above the services in the minimum services specification.

The outcomes of the final 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 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 final rule is intended to complement a rule change made by the AEMC in November 2014 regarding a consumer's access to information about their energy consumption.¹¹⁰ 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

¹¹⁰ See section 1.4.2 above.

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.¹¹¹

Consumers will also be billed more accurately. Because advanced meters can be read remotely via a communications network, consumers will be less likely to be billed on an estimate of their electricity consumption.¹¹² In addition, the more granular information provided by advanced meters should enable 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 does not, in most cases, 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 completed by the AEMC in 2014 addresses this issue by requiring DNSPs to set prices that better reflect the efficient cost of providing network services to individual consumers.¹¹³ 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.¹¹⁴

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

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

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

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

114 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>.

existing 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.¹¹⁵

A recent report by the Consumer Utilities Advocacy Centre (CUAC) concluded that "by more closely aligning the charges for electricity consumption with the costs of electricity consumption, the fairness and efficiency of the electricity distribution system can be improved."¹¹⁶

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 unavailable to most residential and small business consumers outside of Victoria.

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

In submissions to the draft rule determination, some consumer groups expressed concerns that following the installation of an advanced meter, small customers would be forced onto a cost reflective price.¹¹⁷ To address this, it was proposed that the rules should require retailers to offer small customers with an option to be supplied under a flat tariff.¹¹⁸

The Commission does not consider that a requirement on retailers to make available a flat retail tariff to small customers is necessary. The competitive retail market provides incentives on retailers to make available flat retail offers among their different retail offers for consumers, if consumers demand it. The competitive retail market will continue to provide consumers with the opportunity to select a retail offer that best suits their preferences. Some consumers may choose to be supplied under a market retail offer with a time varying price structure, which offers them with the opportunity to save money by shifting some of their consumption from high priced to low priced periods. Other consumers may prefer a flat retail price structure.

¹¹⁵ Simshauser, P., Downer, D., *On the inequity of flat-rate electricity tariffs*, AGL Applied Economic and Policy Research, Working Paper No. 41, June 2014.

¹¹⁶ CUAC, *Cost reflective pricing: Engaging with network tariff reform in Victoria*, Consumer Utilities Advocacy Centre Ltd., Melbourne, June 2015, p.1.

¹¹⁷ See, for example: QCOSS, submission on the draft rule determination, p.4.

¹¹⁸ See, for example, EWON, submission on the draft rule determination, p.4.

Further, the Commission notes that under section 22(1a) of the NERL, a jurisdiction may require a retailer to make available a standing offer with a prescribed tariff structure, which could include a flat tariff structure.

3.2.3 New products and services

The Commission's final 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.

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, during 2015 AGL offered Victorian residential customers with an advanced meter free electricity on Saturdays. Customers on this deal who shifted some of their consumption to Saturdays could have reduced their electricity costs. 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.¹¹⁹

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.¹²⁰ 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'.

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.

¹¹⁹ Arup, Smart Grid Smart City: Shaping Australia's energy future, National cost benefit assessment, July 2014, p194.

¹²⁰ Ibid.

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 at 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 final 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 final 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".¹²¹

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, or to DNSPs for certain network services. Further details regarding these regulatory arrangements are set out in Appendices C1 and D4.

The final 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 final rule requires retailers to provide their small customers with prior written notice of a proposed replacement of the customer's working 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

¹²¹ An access party is a party listed in column 3 of table S7.5.1.1 of the NER in the final rule.

replacement.¹²² Further details regarding these requirements are set out in Appendix C2.¹²³

The final 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 final rule requires both retailers and DNSPs to share information regarding life support registers and to notify each other of disconnections and reconnections and whether these disconnections or reconnections were manual or remote . 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.

A report on the Victorian Government's AMI program released by the Victorian Auditor-General in September 2015 outlined that there is a risk that only 80 per cent of the expected benefits of the AMI program will be realised. The Auditor-General identified that, among the risks to the realisation of the benefits of the AMI program, was the introduction of national arrangements for competition in metering. It was considered that the new national arrangements could lead to advanced meters installed under the AMI program being replaced by other, competitively provided advanced meters, at increased cost to those consumers.¹²⁴

122 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.

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

124 Victorian Auditor-General's Report, *Realising the Benefits of Smart Meters*, p.9.

The Commission considers that the final 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 means 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. As a result, the Commission expects that the majority of residential and small business consumers will continue to have their metering arrangements managed by their DNSP until the market develops to such a point that other parties see value in taking on this responsibility.¹²⁵

The final 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 installation 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 likely to reduce costs for Victorian consumers.

3.5 Expected outcomes for large customers

The final 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 final 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.

¹²⁵ The specific transitional arrangements for Victoria are discussed in chapter 4 and Appendix F.

3.6 Expected outcomes for consumers in jurisdictions without effective retail competition

In its submission to the draft determination, the Tasmanian Department of State Growth and TasNetworks stated that the benefits of the draft rule were uncertain in a jurisdiction such as Tasmania that does not have effective retail competition, and that there is a risk that the costs of implementing the draft rule in Tasmania could outweigh the benefits.¹²⁶ The Department of State Growth submitted that the implementation of the final rule should be delayed in Tasmania for a period of time.

In its submission to the draft determination, QCOSS recommended that the AEMC explain how the draft rule would work in areas such as regional Queensland where there is not effective retail competition.¹²⁷

The new competitive metering framework in the final rule is likely to deliver benefits for consumers in all states and territories in the NEM. However, the Commission acknowledges that some of the potential consumer benefits discussed in this chapter are more likely to be delivered in jurisdictions where there is effective retail electricity competition.

Where there is competition between retailers for customers, retailers are likely to use the capabilities of advanced meters to provide consumers with new products and services, more flexible pricing offers, better information and better retail service, as discussed above.

Where retail competition is not as strong, retailers may be less likely to offer some of these benefits to consumers. However, even in those jurisdictions that do not currently have effective retail competition, the new metering framework in the final rule is likely to deliver many of the above benefits to consumers, for example through the competitive provision of metering services, avoiding the costs of manual meter reading, implementation of cost reflective network prices, better network services and the ability of third party energy service companies to offer new products and services to consumers.

The AEMC conducts an annual review of retail electricity competition. The 2015 retail competition review found that retail electricity competition is currently effective in Victoria, New South Wales, South Australia and South East Queensland. That review

¹²⁶ Department of State Growth, submission on the draft rule determination, pp3-4. TasNetworks, submission on the draft rule determination, p2. Based on subsequent discussions with the Department of State Growth and other Tasmanian stakeholders, we understand that the concerns regarding implementation costs primarily relate to potential IT and telecommunications costs. All new and replacement meters for small consumers in Tasmania are currently "smart ready" advanced meters that would meet the minimum services specification except that they are manually read as accumulation meters.

¹²⁷ QCOSS, submission on the draft rule determination, p5.

found that effective competition is yet to emerge in Tasmania, the Australian Capital Territory and the Ergon network area in regional Queensland.¹²⁸

If a Minister in a jurisdiction that does not currently have effective retail electricity competition considers that the specific circumstances of that jurisdiction mean that the costs of the final rule could exceed the benefits for a period of time, specific jurisdictional issues of that nature would best be addressed by the Minister requesting a jurisdictional derogation from specific aspects of the final rule for a limited period of time. Any such jurisdictional derogation request would be considered by the AEMC through a separate rule change consultation process during 2016.

¹²⁸ <http://www.aemc.gov.au/getattachment/56a8c56f-0aeb-48cc-9097-9f2b5e645428/Final-Report.aspx>.

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 final rule removes certain 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 framework for competitive metering services 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 final rule are provided in Appendices A to G of this final determination. These appendices also explain how the final rule differs from the draft rule, and sets out the Commission's responses to submissions received throughout this rule change process.

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 final rule;
- section 4.3 describes a retailer's responsibility for appointing a Metering Coordinator and the circumstances in which consumers and other parties 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 respective registration and accreditation requirements;
- section 4.5 discusses areas where the NER and NERR have been amended under the final 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 arrangements to enable a smooth transition from the existing arrangements put in place in Victoria under the AMI program to the national framework for competition in metering services;
- section 4.10 notes the other changes to the NER and NERR made under the final rule.

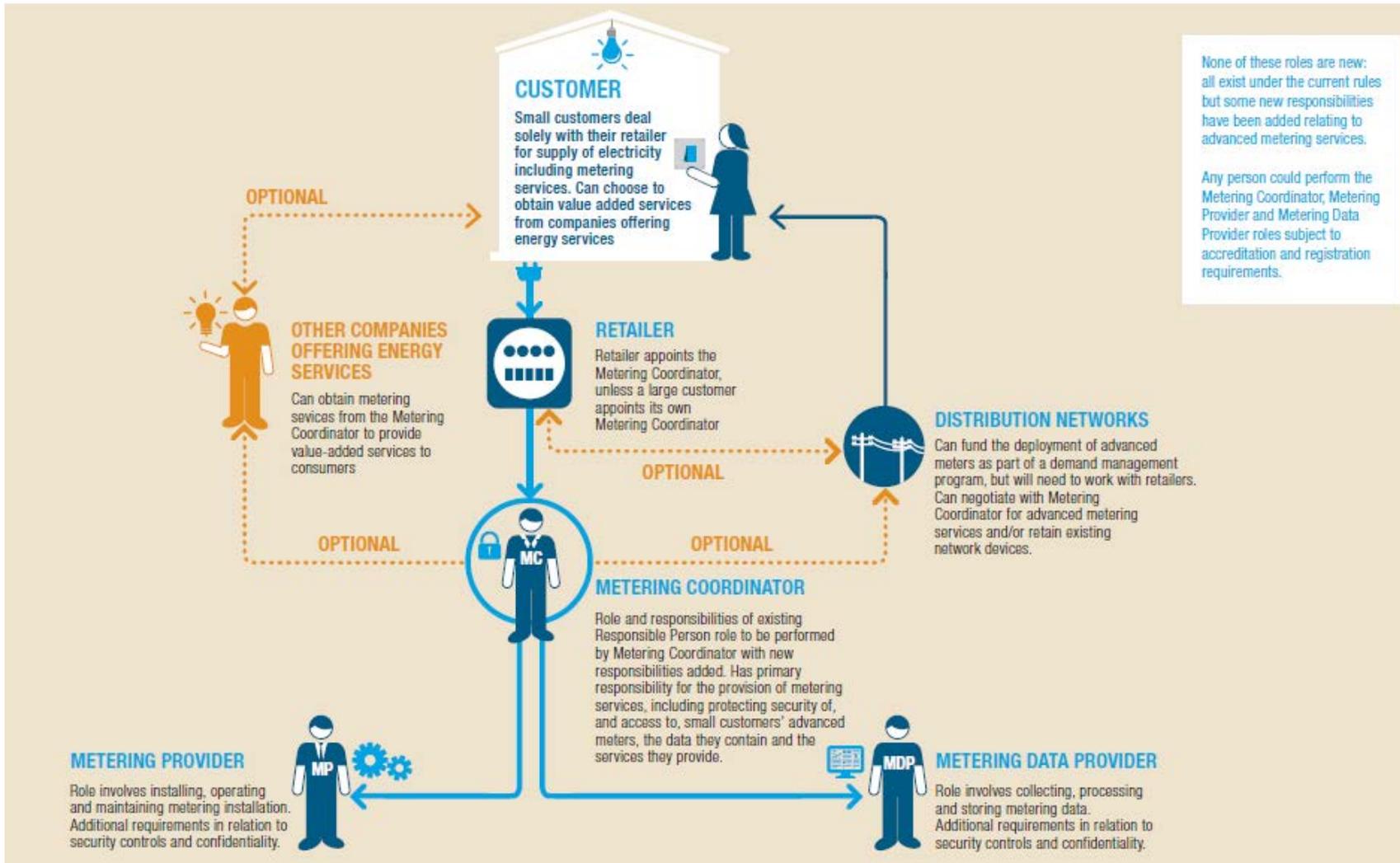
4.2 Overview of roles of the main parties involved in the provision of metering services under the final rule

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 final rule the Metering Coordinator will perform the role currently performed by the Responsible Person and certain existing exclusivity arrangements for metering services 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 at distribution connection points in the NEM. The role of the Metering Coordinator at transmission connection points, and the provision of metering services at such connection points, are addressed separately in section 4.3.1 below.

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 final 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 under the new framework 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 under the final rule. Barriers to entry are anticipated to be low and the Commission is aware that a number of retailers, DNSPs 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 final 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 at small customer connection points, the final rule does not mandate that advanced meters be installed. The Commission considers that this approach will avoid 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 final 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 customer¹²⁹ chooses to appoint its own Metering Coordinator. While a retailer may choose to establish a Metering Coordinator business, it may also procure these services from a third party Metering Coordinator.¹³⁰

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

In Victoria, 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 metering 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 in the NEM. 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 final rule.

¹²⁹ The final rule also permits Non-Market and exempt Generators to appoint their own Metering Coordinator in certain circumstances, although the Financially Responsible Market Participant continues to have overall responsibility for ensuring that a Metering Coordinator has been appointed at the relevant connection point. Where there is a retail customer at the connection point of a Non-Market or exempt Generator, only the Financially Responsible Market Participant or the large customer is permitted to appoint the Metering Coordinator. This is discussed in Appendix B1.

¹³⁰ 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.

Each of these roles has separate registration and accreditation requirements to reflect the differences in these parties' responsibilities and requisite capabilities. 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 customer connection points, it may also provide services to other parties on a commercial basis at such connection points.¹³¹ This may include DNSPs and energy service companies.

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 such services will be subject to commercial negotiations between the Metering Coordinator and the parties seeking those services.

Metering Providers and Metering Data Providers are also able to provide advanced services to other parties on a commercial basis, subject to the terms of their contract with the Metering Coordinator and applicable technical requirements under AEMO procedures.

4.3 Responsibilities for appointing a Metering Coordinator

4.3.1 Appointment of Metering Coordinators

Under the final 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, Non-Market Generator or exempt Generator has appointed its own Metering Coordinator. Where one of these entities appoints a Metering Coordinator, the Financially Responsible Market Participant still retains overall responsibility for ensuring a Metering Coordinator has been appointed at a connection point.

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.¹³² 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

¹³¹ Subject to certain restrictions under the NER and the Metering Coordinator's contract with the retailer.

¹³² Except where a large customer appoints its own Metering Coordinator.

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, it will need to establish a separate legal entity (eg a subsidiary) to perform the role. The final rule provides that a Market Customer may not be registered as Metering Coordinator, subject to limited exceptions (see Appendix A3).
- 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 under the final rule, for example in relation to restrictions on the parties that can request access to certain services), and charge those parties for those services.

Transitional arrangements

Under the final rule, the LNSP¹³³ 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 there is a new appointment of a Metering Coordinator at the site or the services cease to be classified by the AER as a direct control service.

These transitional arrangements also 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 there is a new appointment of Metering Coordinator at the site or the relevant services cease to be classified by the AER as a direct control service.

¹³³ Throughout this document we generally refer to "LNSPs" when referring to an obligation under the NER that applies to LNSPs. Otherwise we refer to DNSPs, including for obligations under the NERR.

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

- at least three months prior to the commencement of the new Chapter 7 of the NER under the final rule, 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 1 December 2017 on the LNSP's standard terms and conditions.

The final rule also sets out certain requirements for the terms and conditions on which the LNSP will be appointed as the initial 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 the initial 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, as is the case with the Responsible Person role under the existing NER, the Metering Coordinator role at transmission connections points will be exclusively performed by the LNSP and the Financially Responsible Market Participant (see Appendix A1). The Commission considers that the cost and complexity of permitting parties other than the LNSP or the Financially Responsible Market Participant to provide Metering Coordinator services at transmission connection points is likely to outweigh the benefits because:

- the technology required for metering installations at transmission connection points is highly specialised and often integrated into a substation with other TNSP assets that are used to operate the transmission network; and
- there are relatively few transmission connection points and, given the specialised nature of the metering required at these connection points, the market for metering services would likely be small.

Further, the primary purpose of this rule change is to promote competition in metering services in the small customer market.

As is the case with the Responsible Person role under the existing NER, the final rule also requires that the Financially Responsible Market Participant must appoint the Metering Coordinator and that the Financially Responsible Market Participant may

request that the LNSP offer to act as the Metering Coordinator at a transmission connection point.¹³⁴

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

Consequential amendments have been made to the existing NER provisions on joint metering installations to reflect the introduction of the Metering Coordinator role. Most notably, some aspects of the provision are no longer required.¹³⁵

Type 7 metering installations

LNSPs currently act as the Responsible Person for type 7 metering installations on an exclusive basis.¹³⁶ The final rule requires the LNSP to perform 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 installations where there is no evidence of significant potential for competition in this space.

4.3.2 Consumer and generator appointment of a Metering Coordinator

The Commission has also considered whether consumers, Non-Market Generators and exempt Generators 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. For Non-Market and exempt Generators, allowing them to appoint their own Metering Coordinator will provide them with the opportunity to negotiate their own bespoke arrangements.

However, providing these parties 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 and, in the case of retail customers, appropriate protections.

Under the final rule:

- large customers will be able to appoint their own Metering Coordinator;

¹³⁴ Clause 7.6.3 of the NER in the final rule.

¹³⁵ Clause 7.8.13 of the NER in the final rule.

¹³⁶ 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.

- Non-Market and exempt Generators connected to the distribution network will be able to appoint their own Metering Coordinator, other than where there is a retail customer at the same connection point; and
- small customers will not have the option of appointing their own Metering Coordinator.

Small customers

Small customers will not have the option of appointing their own Metering Coordinator under the final 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. 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.¹³⁷

Large customers

The final 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 determined that contractual relationships between a large customer and its Metering Coordinator 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 what would likely be required 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 final rule introduces default arrangements under which:

- the large customer's retailer must appoint a new Metering Coordinator if:

¹³⁷ Terms of reference for this review would be agreed with the COAG Energy Council closer to the scheduled date for the review.

- a "Metering Coordinator default event" occurs;¹³⁸ 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.

Non-Market and exempt Generators

The final rule provides Non-Market Generators¹³⁹ and exempt Generators¹⁴⁰ with the ability to appoint their own Metering Coordinator where their generating system is connected to the distribution network.¹⁴¹ Unlike Market Generators, these types of generators are not the Financially Responsible Market Participant at a connection point. Like large customers, these parties are likely to benefit from being able to negotiate bespoke metering arrangements and would be in a position to negotiate with a Metering Coordinator for metering services for terms and conditions that suit them.

The consumer protection concerns that apply to small customers appointing their own Metering Coordinator do not apply to Non-Market Generators and exempt Generators, other than in situations where the exempt Generator is located at the same connection point as a small customer, such as a roof top solar generation unit that is automatically exempt from registration. Consequently, the Commission considers that the benefits to these parties of being able to appoint their own Metering Coordinator outweigh the regulatory and administrative costs involved. However, where a Non-Market or exempt Generator shares the same connection point with a retail customer, only the retailer or the large customer is permitted under the final rule to appoint the Metering Coordinator.

As above, there is a risk that a Metering Coordinator appointed by a Non-Market or exempt Generator may cease to provide metering services and a replacement Metering

¹³⁸ See the new Chapter 10 definition of "Metering Coordinator default event" in the final rule. This definition includes circumstances where the Metering Coordinator ceases to be able to provide services at the relevant connection point, eg where the Metering Coordinator ceasing to be registered by AEMO.

¹³⁹ A Non-Market Generator is a generator with generating units from which the entire electricity output is purchased by a local retailer or customer at its connection point.

¹⁴⁰ A standing exemption applies for generating systems with a capacity of less than 5MW. For generating units of systems of more than 5 MW but less than 30 MW, a person must apply to AEMO for an exemption from the requirement to register as a Generator. The generating unit or system must export less than 20 GWh annually and all sent out generation must be purchased entirely by a Local Retailer or by a customer located at the same connection point.

¹⁴¹ Clause 7.6.2(a)(2) of the NER final rule.

Coordinator will need to be appointed to protect the continued provision of billing and settlements data to the market. Consequently the same default arrangements as set out above also apply in certain circumstances where a Non-Market or exempt Generator has appointed the Metering Coordinator at a connection point.

4.4 Roles and responsibilities for the provision of metering services

The final rule differentiates between two types of services provided by Metering Coordinators:

- those associated with the regulatory obligations of Metering Coordinators, which the Metering Coordinator must perform under the NER pursuant to its appointment by the retailer, large customer or Non-Market or exempt Generator; and
- services which the Metering Coordinator may offer on terms commercially agreed with the party requesting the service (“discretionary services”).

Similarly, the Metering Provider and Metering Data Provider must perform their regulatory obligations pursuant to the terms of their respective appointments by the Metering Coordinator, and may provide discretionary services to third parties, such as those set out in the minimum services specification, on terms commercially agreed with the party requesting the service.

This approach aims to provide clarity that services provided by the Metering Coordinator, Metering Provider and the Metering Data Provider to meet their regulatory obligations are provided on terms and conditions (including as to price) agreed with the party appointing them (e.g. in the case of a Metering Data Provider, on terms and conditions agreed with the Metering Coordinator).¹⁴² The price and payment of discretionary services provided by the Metering Coordinator, Metering Provider and Metering Data Provider will be subject to terms commercially agreed with the party requesting the relevant service.

This section provides an overview of the responsibilities of Metering Coordinators, Metering Providers and Metering Data Providers.

4.4.1 Responsibilities of the Metering Coordinator, Metering Provider and Metering Data Provider

The Metering Coordinator will take on 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.

¹⁴² Because the regulatory obligations are defined in the NER the appointing party and the Metering Coordinator, Metering Data Provider or Metering Provider (as relevant) will not need to commercially agree the nature of those services.

However, as is the case with the Responsible Person role under the current NER provisions, the Metering Coordinator retains overall responsibility for metering services.

For example, the Metering Coordinator must appoint a Metering Provider for the provision, installation and maintenance of each metering installation.¹⁴³ However, the Metering Coordinator remains responsible for ensuring that the metering installation is installed and maintained in accordance with the NER and relevant procedures.¹⁴⁴

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 final rule clarifies the obligations on a Metering Data Provider to provide authorised parties with metering data and access to metering data and NMI Standing Data in the metering data services database if required by AEMO procedures.¹⁴⁵ The final rule also maintains AEMO's existing responsibility for the collection, processing and delivery of metering data at transmission connection points, with requisite changes to the NER to make the nature of such responsibilities clearer under the new framework.¹⁴⁶

The Metering Provider and Metering Data Provider have certain additional obligations under the new framework as discussed in Appendix A2.

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 Participants¹⁴⁷ as part of its role in maintaining market integrity and security. Certain rights and obligations apply to all Registered Participants under the NER.¹⁴⁸ In addition to these general rights and obligations, each category of Registered Participant has certain requirements that are specific to their role.

¹⁴³ Clause 7.3.2(a)(1) of the NER final rule.

¹⁴⁴ See clause 7.3.2(e)(1) of the NER final rule.

¹⁴⁵ Clause 7.10.2 of the NER final rule.

¹⁴⁶ Clause 7.5.1 of the NER final rule.

¹⁴⁷ 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.

¹⁴⁸ See Appendix A1 for a list of these general rights and responsibilities.

Under the final rule, Metering Coordinators constitute a new category of Registered Participant.¹⁴⁹

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 final rule, to be eligible for registration as a Metering Coordinator, a person must:

- not be a Market Customer,¹⁵⁰ except where:
 - the Metering Coordinator is appointed in respect of a transmission connection point; or
 - the Metering Coordinator is a Generator that is appointed as the Metering Coordinator in respect of the connection points that connect its generating units to the distribution network;
- 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, where appointed at small customer metering installations;
- 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, except where:
 - the Metering Coordinator is the LNSP in its role as the initial Metering Coordinator under the transitional arrangements;¹⁵¹ or

¹⁴⁹ Under the final 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(d) of the NER in the final rule.

¹⁵⁰ As discussed above, if a retailer wishes to perform the Metering Coordinator role, it will need to establish a separate legal entity (eg a subsidiary) to perform the role.

¹⁵¹ This exception does not apply where, immediately before the date of commencement of the new Chapter 7, the Metering Coordinator is the Responsible Person for metering installations that would fall within the definition of a small customer metering installation. See clause 11.86.7(g)(1) of the NER final rule.

- the Metering Coordinator is a generator that is appointed as the Metering Coordinator in respect of the connection points that connect its generating units to the distribution network;
- have insurance as considered appropriate by AEMO; and
- pay the prescribed fee.

Other than the exceptions noted above and where a TNSP is acting as Metering Coordinator for transmission network connection points within its transmission network, the Commission does not consider that exemptions to the registration criteria should be available for Metering Coordinators. In respect of TNSPs registering as Metering Coordinators at transmission connection points, AEMO may grant an exemption from one or more registration criteria in certain circumstances as discussed in Appendix A1.

Registration and 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 final 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 final 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.

The final rule also introduces a prohibition on Market Customers being registered as Metering Providers or Metering Data Providers at any connection point. This expands existing arrangements that prohibit Market Customers from being registered as Metering Providers or Metering Data Providers at a connection point in respect of which the metering data relates to its own use of energy. This prohibition has been extended to all connection points for consistency with the prohibition on Market Customers being registered as Metering Coordinators and to address similar concerns

that if a retailer is also a Metering Provider or Metering Data Provider at a connection point and the customer at that connection point changes retailers (but the Metering Provider or Metering Data Provider does not change), the former retailer may have continued access to the customer's energy and metering data. The prohibition does not apply where the relevant entity is a Network Service Provider as the same competition concerns do not apply.

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 de-energisation and re-energisation services;
- retailer planned interruptions; and
- access to energy and metering data.

4.5.1 Managing access by authorised parties

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

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

- access to energy data held in a small customer metering installation is only given to a person and for a purpose that is permitted under the NER; and
- access to services provided by a small customer 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 that is permitted under the NER; or

- to a person and for a purpose to which the small customer has given its prior consent or a Local Network Service Provider, but only to the extent that, in the Metering Coordinator's reasonable opinion, such access is reasonably required by the Local Network Service Provider to enable it to meet its obligations to provide a safe, reliable and secure network.¹⁵²

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 final 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 final 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 installation will be affected by the emergency condition; and
- where a metering installation supplies services to an LNSP from a metering installation that is affected by an emergency condition, which services the Metering Coordinator must prioritise at the request of the LNSP.

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 de-energisation and re-energisation services

Metering Coordinators that deploy advanced meters to small customers will have the ability to de-energise and re-energise customers remotely. This ability holds a number of benefits, particularly for retailers and consumers. Remotely de-energising and re-energising 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 final rule gives both retailers and DNSPs the ability (subject to negotiating access to the service with the Metering Coordinator) to

¹⁵² See clauses 7.15.4(a) and (b) of the NER final rule.

arrange remote de-energisation and re-energisation services directly with the Metering Coordinator in certain circumstances. However, the Commission is cognisant of the potential safety risks associated with remote de-energisation and re-energisation and in allowing multiple parties to arrange these services with the Metering Coordinator.

The final rule requires retailers and DNSPs to share information regarding life support customers 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 de-energising and re-energising customers.

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

4.5.4 Retailer planned interruptions

The final rule permits retailers to arrange for an interruption to their customers' supply of electricity without the involvement of the DNSP (termed a 'retailer planned interruption').¹⁵³ The retailer may arrange such an interruption only in circumstances where the interruption:¹⁵⁴

- is for the purposes of installing, maintaining, repairing or replacing an electricity meter; and
- does not involve interrupting supply of electricity to a customer that is not the customer of the retailer arranging the interruption.

The retailer will be required to notify affected customers of the retailer planned interruption at least four business days before the date of the interruption. The final rule permits retailers to combine the notice of the retailer planned interruption with the second notice required for a new meter deployment.¹⁵⁵ Retailers will also be required to notify DNSPs at least four business days before the date of any retailer planned interruptions, including details of the NMI and address of the premises affected by the interruption.¹⁵⁶

The final rule requires DNSPs to effect an interruption where the installation, maintenance, repair or replacement of metering equipment is to be undertaken by the Metering Coordinator and a retailer planned interruption cannot be undertaken. The final rule requires Metering Coordinators and DNSPs to assist and cooperate with each other in these circumstances.

¹⁵³ A retailer planned interruption refers to a temporary curtailment of supply for the purposes of installing, maintaining, repairing or replacing an electricity meter. It does not include de-energisation for non-payment or other for other reasons specified under Part 6 of the NERR.

¹⁵⁴ Rule 59B of the NERR final rule.

¹⁵⁵ Rule 59C of the NERR final rule.

¹⁵⁶ Rule 99A of the NERR final rule.

This approach will reduce potential confusion for consumers by requiring that the party initiating the interruption complies with the relevant notification requirements under the NERR.

These arrangements are discussed in more detail in Appendix A3.

4.5.5 Accessing energy and metering data

The NER currently contains restrictions on who can access energy data and access or receive metering data. The access to data provisions have been revised between the existing Chapter 7 of the NER and the final rule to be appropriate for a market led deployment of advanced meters and a competitive market for metering services.

The final rule sets out the parties who may access or receive certain kinds of data including energy data, metering data, settlements ready data, NMI Standing Data and data from the metering register for a metering installation. The list of parties who may access or receive metering data has been updated to, among other things, recognise the new role of the Metering Coordinator.

Consistent with the approach to clearly delineate provisions which give rise to regulatory obligations and provisions which relate to discretionary services that are provided under commercial arrangements, the final rule includes a clear obligation on the Metering Data Provider to provide certain parties with metering data as required by and in accordance with AEMO's procedures. This provision provides parties, such as LNSPs, clarity that they will continue to receive metering data which they require to meet their statutory obligations in accordance with AEMO procedures (including for billing and settlement).

The final rule also includes a clear obligation on the Metering Data Provider to provide certain parties with access to the metering data services database, but only if required to by procedures issued by AEMO under Chapter 7 of the NER. The Commission is of the view that there may be limited circumstances where access to metering data in the metering data services database should be provided to certain parties and that the final rule should provide for this.

Parties that are authorised to access metering data services in the minimum services specification as a discretionary service, which includes the FRMP, the LNSP and parties with a small customer's prior consent, may do so subject to commercially agreed terms with the party providing the service. Allowing third parties to access metering data in respect of a small customer metering installation with the small customer's prior consent will help consumers access the products and services enabled by advanced meters. These arrangements will assist in facilitating the provision of services by energy service companies that allow consumers to better understand their electricity use, and to adjust their electricity use, if they choose to, in order to lower costs.

Similarly, the final rule also provides that a large customer or its authorised representative may receive data from a large customer's metering installation.

A new obligation on AEMO has been introduced in the final rule. Under the final rule, AEMO must enable certain parties to access or receive data held in the metering database. AEMO will continue to have discretion to determine the appropriate means of enabling parties to access or receive data from the metering database, for example by providing direct access to the metering database or by way of providing a set of standard reports generated in MSATS.

4.5.6 Options for DNSPs to monitor and operate their networks

Advanced meters provide additional opportunities for DNSPs to monitor and operate their networks more efficiently. The new arrangements allow DNSPs to negotiate with a Metering Coordinator for access to network-related services and functions, such as voltage information. They also provide a framework within which a DNSP can help facilitate the installation of advanced meters where they see benefits from being able to access network services via an advanced meter.

The final rule also provides DNSPs with an option, in certain circumstances, to manage their networks using their existing meters where those meters are able to be upgraded to enable remote reading. These meters are known as "smart ready" meters. The final rule allows DNSPs in their role as initial Metering Coordinator to alter manually read meters to make them capable of being remotely read without the metering installation becoming classified as a type 4 or type 4A metering installation under two circumstances:

- Where there are operational difficulties associated with manually reading the meter, for example because it is on a remote property. LNSPs are already able to alter such meters for this reason under the existing rule. However, the final rule clarifies the meaning of "operational difficulties". Permitting Metering Coordinators to alter meters to be capable of remote acquisition in this circumstance is likely to enable more accurate, more frequent and less costly meter reads.
- Where the alteration of the meter to make it capable of remote acquisition is reasonably required to enable the LNSP to meet its obligations to provide a safe, reliable and secure network. While there may be other ways in which LNSPs can manage their networks, such as placing devices on pole tops, utilising existing infrastructure in this way may provide a more cost effective approach that could ultimately provide cost savings for consumers.

The Commission is of the view that under both of these scenarios a DNSP would only be able to alter a small proportion of its meters. Consequently, the Commission does not consider that permitting such alterations is likely to impact competition in the market for metering services.

4.6 Minimum services specification

A key feature of the final 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 final 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 final 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 final rule to ensure the metering installation meets the minimum services specification (subject to the limited circumstances 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 disconnection¹⁵⁷ 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 remote retrieval of metering data (including quality flags) from the metering installation for a specified point or points in time and the provision of such data to the requesting party.¹⁵⁸

¹⁵⁷ "Disconnection" and "de-energisation" both refer to the curtailment of supply to a premises. "Disconnection" is the term used in the NER and "de-energisation" is the term used in the NERR.

¹⁵⁸ 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 on-demand meter read service are Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation and a person to whom a small customer has given its prior consent under clause 7.15.4(b)(3) of the NER final rule.

- *Remote scheduled meter read service*: This service is the remote retrieval of metering data (including quality flags) from a metering installation on a regular and ongoing basis and the provision of such data to the requesting party.¹⁵⁹
- *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.¹⁶⁰
- *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 final rule sets out the two operational parameters that, as a minimum, must be capable of being set: the activation or deactivation of a data stream or data streams; and altering the method of presenting energy data and associated information on the meter display.

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

This list of minimum services included in the final 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 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

¹⁵⁹ 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 Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation and a person to whom a small customer has given its prior consent under clause 7.15.4(b)(3) of the NER final rule.

¹⁶⁰ 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 events that have been recorded in the meter log, including information on alarms.

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 exceptions noted below.

A metering installation meets the minimum services specification if it:

- is capable of providing the services listed above in accordance with procedures authorised by AEMO;
- is connected to a telecommunications network which enables remote access to the metering installation; and
- achieves maximum overall error rates not exceeding those required under the NER.

The final rule does not require a metering installation that is connected to a current transformer to be capable of providing remote disconnection and reconnection services. The costs of providing remote disconnection and reconnection services where there is a metering installation connected via a current transformer may outweigh the market benefits.

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.

No telecommunications network

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 install a type 4 meter that meets the minimum services specification.¹⁶¹

¹⁶¹ These arrangements are set out in clauses 7.8.4(a)-(c) of the NER final 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 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 a period of up to five years and may be granted more than once.

If such an exemption is granted, a Metering Coordinator must install a meter that has the capability to provide the services set out in the minimum services specification if the remote access is activated. These meters are classified as type 4A metering installations.

Where AEMO grants an exemption from having to install a type 4 meter at a small customer connection point, the metering installation would need to be manually read. Appendix C1 explains why these metering installations will be classified as type 4A metering installations rather than type 5 metering installations.

A customer refuses to have an advanced meter installed

For reasons discussed in section 4.7 opt out arrangements will apply in new meter deployment scenarios, but the Commission considers that it is neither practical nor appropriate to permit small customers to opt out of the installation of a meter that meets the minimum specification (which applies in new meter deployment scenarios) in the case of faults, maintenance replacements and new connections. However, the Commission acknowledges that it is likely that a minority of small customers will seek to prevent or refuse the installation of a meter that meets the minimum services specification.

To address this, the final rule provides that the Metering Coordinator is not in breach of the NER if it installs a type 4A meter where a customer refuses the installation of a type 4 meter that meets the minimum services specification. The final rule sets out how a customer may communicate a refusal, notification requirements on the Metering Provider or Financially Responsible Market Participant to inform the Metering Coordinator of the refusal, and a requirement for the Metering Coordinator to maintain a written record of refusals for a period of at least seven years.¹⁶²

The Metering Coordinator may, at any time after the installation of the type 4A meter, activate the remote access capabilities where the relevant small customer has consented.

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 a shared market protocol. However, this will depend on a rule change

¹⁶² These arrangements are set out in clauses 7.8.4(d)-(i) of the NER final rule.

request to implement a shared market protocol being submitted to the AEMC. Both AEMO and the AEMC have provided advice to the COAG Energy Council on aspects of a 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 on the governance and implementation of a shared market protocol recommended that a shared market protocol be implemented by way of updating the B2B arrangements in the NER. The Commission recommended that B2B procedures be required to support communications between parties relating to each of the services set out in the minimum services specification. This was on the basis that these services are the advanced metering services most likely to be accessed by parties and would be defined in the NER.¹⁶³ The Commission recommended extending the B2B arrangements in the NER so that the B2B procedures may also cover a broad range of additional services. The content of the B2B procedures would be determined by the IEC with an expanded membership. The Commission expects that the IEC would consider whether to also include a range of other services such as load control in the B2B procedures.¹⁶⁴

4.7 Opt out arrangements

As discussed in section 4.6, the final 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 circumstances 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 final 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.

¹⁶³ AEMC 2015, Implementation advice on the shared market protocol, Final advice, 8 October 2015, p40. Available on the AEMC website.

¹⁶⁴ AEMC 2015, Implementation advice on the shared market protocol, Final advice, 8 October 2015, p40. Available on the AEMC website

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.

The opt out arrangements do not apply where a customer with a prepayment meter subsequently requires life support equipment. In these circumstances, the retailer is obliged under Section 59(2) of the NER to make immediate arrangements for the removal of the prepayment system and the installation of a standard meter at no cost to the small customer.¹⁶⁵ Under the final rule a standard meter will be one that meets the minimum services specification. It is not appropriate to provide such a customer with an opt out due to delays in replacing the meter potentially being life threatening.

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 customers¹⁶⁶ 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 considering 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.

¹⁶⁵ This is an existing obligation under clause 59(2) the National Energy Retail Law.

¹⁶⁶ Standing offer customers are on a retail contract based on model terms and conditions set out in Schedule 1 of the NERR.

4.7.2 New meter deployments

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

“new meter deployment means the replacement of the existing electricity *meter* of one or more small customers which is arranged 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 from the retailer or any other person;
- (b) a *maintenance replacement*;
- (c) as a result of a *metering installation malfunction* or
- (d) required under section 59(2) of the Law.”

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 final 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 25 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 15 business days before the retailer proposes to replace the meter.¹⁶⁷

4.7.3 Maintenance replacements, faults and new connections

Under the final rule, any new metering installation provided as part of a maintenance replacement, where the existing meter is faulty or at a connection point where there is no existing meter (such as a new connection) must meet the minimum services specification.¹⁶⁸ 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.¹⁶⁹ Not providing an opt out in these scenarios is therefore consistent with current arrangements.

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

“maintenance replacement means the replacement of a small customer’s existing electricity *meter* arranged 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.

¹⁶⁷ For further details regarding the opt out process and notification requirements see Appendix C2.

¹⁶⁸ Subject to certain exceptions where a type 4A meter must be installed.

¹⁶⁹ 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 Coordinator must ensure that the metering installation is a type 4 metering installation that meets the minimum services specification, unless it has obtained an exemption in respect of that connection point¹⁷⁰ or the customer refuses to have that meter installed.¹⁷¹

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

¹⁷⁰ Under clause 7.8.4 of the NER final 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.

¹⁷¹ Under clause 7.8.4 of the NER final rule, a Metering Coordinator is not required to install a meter that meets the minimum services specification if the customer has communicated its refusal.

upfront cost solution, eg accumulation meters, which are unlikely to provide benefits to consumers over the long term.

Similarly, the Commission considers that small customers should not be able opt out of having a metering installation that meets the minimum services specification in any other circumstance where there is no existing meter at a connection point. This situation, although unlikely, could arise where a FRMP appoints a new Metering Coordinator and the previous Metering Coordinator has removed the existing meter.

4.8 Managing competition concerns

4.8.1 Distribution ring-fencing

The final 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.¹⁷²

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 final 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.

¹⁷² Clause 6.17.2 of the NER currently states that the AER 'may' develop the distribution ring-fencing guidelines. Under the final 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.

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:

- The number of potential entrants into the market. Barriers to entry are low and the Commission is aware that a number of retailers, DNSPs 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.¹⁷³ 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,¹⁷⁴ 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.¹⁷⁵ 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

¹⁷³ See Appendix E.

¹⁷⁴ See Appendix E.

¹⁷⁵ See Appendix E for a fuller discussion on negotiate/arbitrate model in the context of metering services.

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 service offerings are likely to evolve rapidly.¹⁷⁶ 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 and the specific technical characteristics of the service that is being offered.

The Commission has also considered a number of options for various forms of regulation raised by DNSPs and their consultants in response to the draft determination, and variations of those proposals. In particular, the Commission considered:

- *Requiring Metering Coordinators to respond to information requests regarding the services they may be able to provide via a metering installation.* At its most basic, this approach could require Metering Coordinators to provide a list of potential services that they may be willing to offer at a particular connection point or in a network area. This approach is likely to be limited in its effectiveness for two reasons. First, the Metering Coordinator may not have been appointed at a particular connection point. Therefore it may not be certain what type of meter it is likely to install and the services that it may be able to offer, or the terms and conditions on which it may be able to provide those services. Second, Metering Coordinators already have an incentive to respond to information requests from DNSPs and energy service companies about services they may be able to offer as it would provide an additional revenue stream. Therefore the approach would regulate something that is already likely to occur.
- *Requiring a Metering Coordinator to contact a DNSP once it has entered into contractual arrangements with a retailer for the provision of metering services in a particular network area.* This approach is premised on the assumption that retailers are likely to have contractual arrangements with a "preferred" Metering Coordinator. However, there is no obligation for Metering Coordinators to enter into commercial agreements of this nature with retailers in advance of being appointed at a particular connection point and so there is no guarantee that this will occur. This would make the provision difficult to enforce, since there is no concept of a "preferred Metering Coordinator" in the NER, and it would not

¹⁷⁶ See Appendix E for a fuller discussion of price monitoring and information disclosure in the context of metering services.

necessarily be clear whether a Metering Coordinator had entered into such an arrangement with a retailer.

- *Requiring a Metering Coordinator to negotiate in good faith with a party that wishes to access services provided by its metering installation.* There would be no obligation on the Metering Coordinator to make an offer and no recourse to dispute resolution, otherwise this option would essentially be a negotiate/arbitrate model (see discussion above). Requirements to negotiate in good faith under contract law have traditionally been considered unenforceable because of a lack of certainty about what this obligation requires of parties to a contract. Further, the circumstances in which Courts have given meaning to obligations to negotiate in good faith have been in the context of existing contracts where the parties have agreed to negotiate on specified unresolved matters. An obligation to negotiate in good faith to form a contract is less likely to be enforceable due to lack of certainty as to what the obligation requires the parties to do given there is no existing bargain between the parties to give effect to.

These options, and other options proposed in submissions, are discussed in more detail in Appendix E.

The Commission has carefully weighed up the likely costs and benefits of various regulatory options, together with the factors that may mitigate competition concerns and the ability under the framework for DNSPs to retain or install network devices. The Commission has concluded that introducing access regulation at the beginning of the market to 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. If that occurred, consumers, retailers, DNSPs and energy service companies would not be able to realise any benefits of advanced meters for many years.

For these reasons, the Commission does not propose to regulate access to Metering Coordinator services at market start. However, the Commission acknowledges the concerns raised, particularly by DNSPs, and 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.

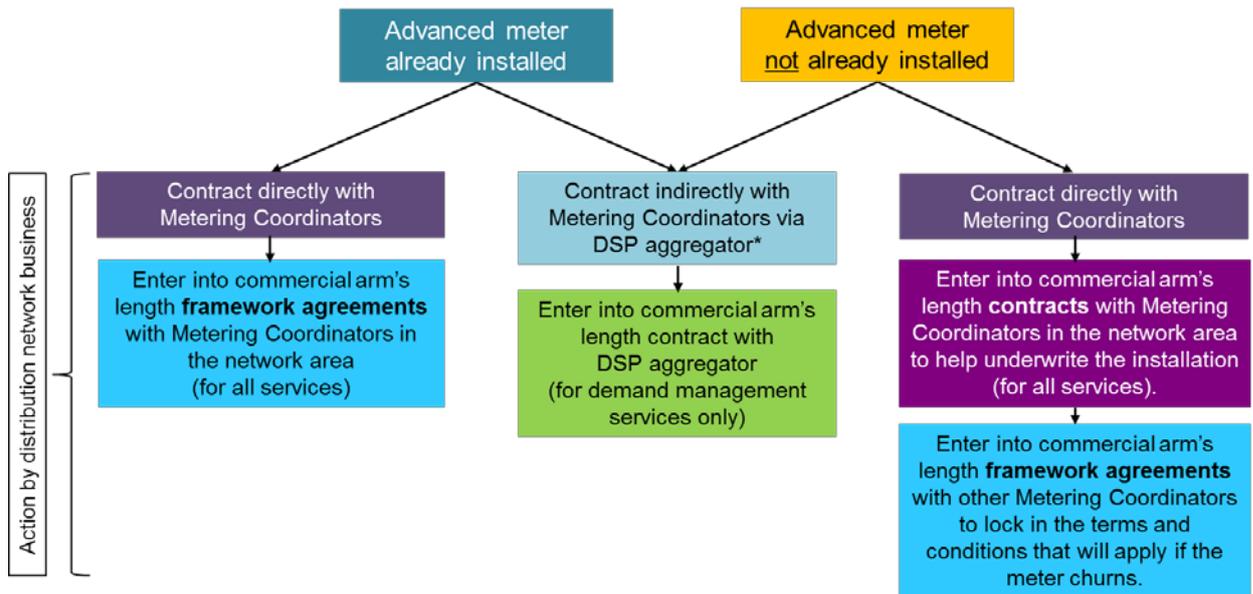
4.8.3 Role DNSPs could play in facilitating the installation of advanced meters

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 the figure below.

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 between a DNSP and a Metering Coordinator that sets out a standard set of terms and conditions of access, including price, that will apply when that Metering Coordinator is appointed at a particular connection point in that DNSP's network. Similar agreements are common between retailers and Metering Coordinators in overseas markets to prevent unnecessary meter churn, and are also expected to be used by retailers in the NEM.

Some distributors in New Zealand, such as Counties Power, have been able to manage such risks and have partnered with retailer-affiliated metering companies to roll out advanced meters. Counties Power is working with Metrix, owned by the retailer Mighty River Power, to install meters in its network area. Metrix is responsible for providing retailers with the metering data, while Counties Power intend to use the

meters to improve power quality, outage detection, reduce outage times and provide pricing incentives to use power during off peak times.¹⁷⁷

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 forecast 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 revenue for the regulatory period.
3. Recovering the costs through the Demand Management 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 load control equipment 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.

¹⁷⁷ Counties Power, Annual Report 2014, pp3-4.

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 final rule addresses these issues by introducing new provisions relating to network devices. A network device is defined as:

“Apparatus or equipment that:

- (a) enables a *Local Network Service Provider* to monitor, operate or control the *network* for the purposes of providing *network services*, which may include switching devices, measurement equipment and control equipment; and
- (b) is located at or adjacent to a *metering installation* at the *connection point* of a *retail customer*.”

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

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

Under the final rule, a DNSP may install a network device at or adjacent to a metering installation for the purposes of monitoring, operating or controlling the network, provided that the installation and maintenance of the network device does not:

- adversely impact on the operation of the metering installation, including its compliance with the Rules and procedures authorised under the Rules;
- damage the metering installation; or
- prevent the metering installation being maintained or removed, as required, by or on behalf of the Metering Coordinator.

Further, a DNSP must not remove a metering installation, or any part of a metering installation, in order to install or maintain a network device.

So that the network device provisions are not used to provide DNSPs with a competitive advantage in contestable markets, DNSPs are not permitted to use the network device to provide services to retail customers or other third parties.¹⁷⁸ However, they may use the network device:

¹⁷⁸ This restriction only applies to network devices. It does not prevent a DNSP from setting up an appropriately ring-fenced business to provide other services via a metering installation.

- To provide services to a retail customer where those services are incidental to the provision of network services that are reasonably required to enable the DNSP to meet its obligations to provide a safe, reliable and secure network. The Commission's intention is that the provision of load control services for the purposes of network management will fall within the exception to the general prohibition on DNSPs using network devices¹⁷⁹ to provide services to retail customers.
- To reconnect or disconnect a metering installation via remote access where it is permitted under energy laws.

The final rule also contains restrictions on the use of any information contained in a network device 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.

Metering Coordinators also have obligations in relation to network devices. First, they must, at the request of a DNSP, ensure the DNSP receives all reasonable assistance to facilitate access to the metering installation for the installation and maintenance of the network device. All reasonable costs associated with this obligation are to be borne by the DNSP.

Second, a Metering Coordinator must not remove a network device without the consent of the DNSP. This requirement applies to all network devices, regardless of whether the DNSP is currently using the functionality of the device. There is an exception to this provision where the Metering Coordinator proposes to install a new or replacement metering installation at a connection point where there is a network device and, effectively, there is not sufficient space to accommodate both the network device and the metering installation in the metering facility. Under the final rule, this concept of sufficient space is captured by providing an exception to the prohibition on a Metering Coordinator removing a network device if, in the Metering Coordinator's reasonable opinion, the metering installation cannot be installed in the metering facility in a manner that allows it to:

- operate effectively and in compliance with the Rules and procedures authorised under the Rules; and
- be maintained or removed, as required, by or on behalf of the Metering Coordinator,

without removing or adversely impact the network device.

Where a Metering Coordinator removes a network device because it has reasonably determined that there is not sufficient space to accommodate both the metering installation and the network device in the metering facility, it must notify the LNSP of

¹⁷⁹ For example, the use of load control devices at numerous premises in a DNSP's network as a way of meeting reliability standards rather than augmenting the network.

its removal as soon as practicable after it is removed. The Metering Coordinator is also required to keep a record of the basis upon which it made this determination.¹⁸⁰

The final rule also requires AEMO to develop procedures that govern a number of issues relating to network devices, such as the return of a network device to the LNSP and notification requirements in relating to activities which affect network devices or metering installations, including the provision of records relating to the removal of network devices when requested by the LNSP.

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 final rule has no role to play in Victoria.

The Commission has considered whether the final 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

¹⁸⁰ Under clause 7.8.6(h) of the NER final rule, the record must include, among other things: the address from which the network device was removed; the date and time of removal of the network device; and photographs and measurements of the network device, the metering installation and the metering facility.

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 final 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 final rule becomes effective.¹⁸¹

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 clause 9.9C of the NER will be extended until 1 December 2017 when the new Chapter 7 of the NER under the final rule 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.

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.¹⁸² 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.

¹⁸¹ 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.

¹⁸² For example in its final decision for the ACT and NSW DNSPs, published on 30 April 2015, the AER did not approve an upfront exit fee to recover residual costs when a consumer switches to a competitive metering service. The AER determined that the ACT and NSW DNSPs could recover residual metering costs through two types of alternative control service charges: an upfront capital charge to the customer for all new and upgraded meters installed after 1 July 2015 and an annual charge comprising two components: a capital charge recovered from all consumers who had a DNSP-provided type 5 or 6 meter at 1 July 2015; and a non-capital charge to be recovered from customers that continue to receive a regulated metering service from the DNSP.

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.¹⁸³

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 in 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 final rule allows a DNSP to install or utilise an existing network device at or adjacent to a metering installation, except in certain circumstances. 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.

4.9.4 Minimum services specification

Some stakeholders have expressed a concern about potential differences between the minimum services specification under the final 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 final 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 final

¹⁸³ 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.

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.

4.9.5 NERR issues

The NERR does not currently apply in Victoria. Retail market issues are instead governed by the Energy Retail Code.

Accordingly, the NERR amendments contained in the final rule will not apply in Victoria. In particular, the following will not apply in Victoria unless it adopts the NERR at a later date:

- the opt out rights for small customers in the event of a new meter deployment;
- the amended NERR provisions on disconnections and reconnections; and
- the ability of retailers to arrange for a retailer planned interruption for the purpose of installing, maintaining, repairing or replacing an electricity meter.

The current version of the Energy Retail Code (version 11) was modelled on the NERR but contains Victorian specific amendments. One of these specific amendments is that the Energy Retail Code only applies to small customers.¹⁸⁴ This means if Victoria implements the retailer planned interruption provisions set out in the NERR final rule, these will not apply to large customers in Victoria unless Victoria extends the application of the Energy Retail Code to all customers.

A number of provisions in the NERR amendments contained in the final rule only apply to small customers. In jurisdictions such as Victoria that have not yet adopted the NECF, the final rule adopts the same consumption threshold between large and small customers as applied under other jurisdictional electricity legislation.¹⁸⁵

The Victorian Government and Essential Services Commission should consider whether to make amendments to the Energy Retail Code for consistency with the amendments to the NERR contained in the final rule.

4.10 Other changes to the NER and NERR

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

¹⁸⁴ Rule 3B(1) of the Victorian Energy Retail Code.

¹⁸⁵ 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.

explain how the final rule differs from the draft rule, and provides an explanation of how stakeholders' comments have been addressed.

The final 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 final rule. In particular, retailers, DNSPs, TNSPs, Metering Providers and Metering Data Providers should review the final rule to understand how their rights and obligations will change under the final rule.

The final rule renumbers Chapter 7 of the NER so that provisions are more logically grouped and ordered.

The final rule also reflects a number of minor editorial changes to clarify existing rules. These minor editorial changes do not reflect a change in policy intent, and many of them were proposed by stakeholders in submissions.

Also published with this final 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 final rule.¹⁸⁶ Stakeholders can also obtain a marked-up version of the re-ordered Chapter 7 and a marked-up version showing changes between the draft and final of the NER on request.¹⁸⁷

¹⁸⁶ This mark-up only contains the NERR Parts and Schedules that contain amendments.

¹⁸⁷ 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 timetable for implementing the final 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 changes under the final rule.

In determining an appropriate commencement date for the new Chapter 7 of the NER, the Commission has considered the timeframes required for a number of parties to undertake necessary steps to implement these reforms. Table 5.2 and table 5.3 set out these steps.

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

5.2 Stakeholder views

5.2.1 Draft implementation plan and workshops

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.¹⁸⁸ 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.¹⁸⁹ Views were also mixed on the extent to which work

¹⁸⁸ 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.

¹⁸⁹ 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.

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.¹⁹⁰ AGL, the ERAA, Lumo Energy and Simply Energy supported the conclusions drawn by the IEC in its submission.

5.2.2 Draft rule determination

The draft rule provided for a period of two years between publishing the final determination and the commencement of the new arrangements.¹⁹¹

Distribution businesses and the IEC expressed concern in their submissions to the draft rule determination that the draft rule did not provide sufficient time for the implementation of this rule change.¹⁹² These stakeholders considered that the AEMC had underestimated the amount of time that would be needed for the interim steps, suggesting that the timeframes outlined in the draft rule would lead to rushed outcomes that may jeopardise the success of the new framework.¹⁹³

To determine a feasible date for implementation of the final rule, distribution businesses called for the development of an industry-endorsed plan which recognises the deliverables of a range of stakeholders.¹⁹⁴

In contrast, AGL expressed concerns that the implementation of the final rule would be delayed due to time needed to develop necessary supporting changes, including AEMO procedures. AGL suggested that if there was a risk of delay, the implementation of the final rule should be staged. AGL considered that implementation could occur in two phases, with the first phase involving aspects that support competition and the second phase enabling the establishment of the Metering Coordinator.¹⁹⁵

¹⁹⁰ IEC, submission on draft implementation plan, p.2.

¹⁹¹ Based on the assumption that the final rule determination would be published on 1 July 2015.

¹⁹² ENA, submission on the draft rule determination, p.23; Ergon Energy (retail), submission on the draft rule determination, p.2; IEC, submission on the draft rule determination, p.1, 2; SA Power Networks, submission on the draft rule determination, p.14; Victorian DNSPs, submission on the draft rule determination, p.29.

¹⁹³ ENA, submission on the draft rule determination, p.23; IEC, submission on the draft rule determination, p.1; Lumo and Red Energy, submission on the draft rule determination, p.6; Victorian DNSPs, submission to the draft determination, p.29, 39, 40.

¹⁹⁴ ENA, submission on the draft rule determination, p.23; Victorian DNSPs, submission on the draft rule determination, p.41.

¹⁹⁵ AGL, submission on the draft rule determination, p.10, 11.

Similarly, IEC also suggested staged implementation of the rules, based on AEMO and industry advice on timing.¹⁹⁶ The Victorian DNSPs proposed that the final rule include a 'go/no go' option, whereby implementation of the final rule could be delayed if industry participants are not ready or key processes are not yet in place.¹⁹⁷

A number of stakeholders expressed support for the implementation timeframes outlined in the draft rule.¹⁹⁸ EDMI supported an earlier implementation date, but considered that there was nothing to stop a proactive market participant from offering a compliant service before the commencement of the new Chapter 7 of the NER.¹⁹⁹

A number of distribution businesses expressed concern that the AEMC's timeframe for publication of the final rule determination would not enable 'adequate review of the critical and inter-connected issues identified with the current drafted rules.'²⁰⁰ These stakeholders called for the AEMC to delay the publication of the final rule determination.²⁰¹

On 16 July 2015, AEMO held a Power of Choice implementation workshop, which AEMC staff attended and which followed on from the AEMC's operational workshop. At the implementation workshop, there was general agreement that the timing set out in the draft rule was tight, but achievable. All stakeholders represented at the meeting agreed that the implementation date of the new arrangements should be 1 December 2017.

5.3 Commission's analysis

Changes between the draft and final rule

- To reflect the extension to the date for publication of the final rule determination from 2 July 2015 to 26 November 2015, the implementation timeframes that were outlined in the draft rule have been extended by a corresponding period.
- This allows parties sufficient time to undertake the necessary steps to implement the changes prior to the commencement of the new Chapter 7 of the NER.

¹⁹⁶ IEC, submission on the draft rule determination, p.2.

¹⁹⁷ Victorian DNSPs, submission on the draft rule determination, p.42.

¹⁹⁸ Metropolis, submission on the draft rule determination, p.3; and Simply Energy, submission on the draft rule determination, D2.5.

¹⁹⁹ EDMI, submission on the draft rule determination, D2.4.

²⁰⁰ Quote: ENA, submission on the draft rule determination, p.23. See also: Energex, submission on the draft rule determination, Attachment A, p.2; SA Power Networks, submission on the draft rule determination, p.14; Victorian DNSPs, submission on the draft rule determination, p.37.

²⁰¹ The publication of the final rule determination was delayed from 2 July 2015 to 26 November 2015.

Table 5.1 Timeframe changes from draft to final rule

Implementation step	Timeframe outlined in the draft rule determination	Timeframe outlined in the final rule determination
Final determination and rule made	July 2015	November 2015
The IEC to make an IEC recommendation to change the B2B procedures	By 1 April 2016	By 1 August 2016
AEMO publication of updated and new procedures	By 1 April 2016	By 1 September 2016
AER publication of ring-fencing guidelines	By 1 July 2016	By 1 December 2016
AEMO publication of information regarding the application process for registering as a Metering Coordinator	By 1 October 2016	By 1 March 2017
DNSPs to publish standard terms and conditions on which it will act as the initial Metering Coordinator.	By 1 April 2017	By 1 September 2017
Retailers and distributors to publish amended standard contracts	By 1 July 2017	By 1 December 2017
New Chapter 7 of the NER commences	1 July 2017	1 December 2017

- The final rule also identifies additional implementation steps, including:
 - DNSPs to make required alterations to deemed standard connection contacts; and
 - AEMO to make procedures relating to the installation and removal of network devices.

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

Most of the amendments to the NERR will also commence on 1 December 2017. Provisions of the final rule that are required for transition will commence on 26 November 2015.

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

Figure 5.1 Implementation timeframe



Consultation with AEMO and the AER indicated that the timeframes in the final 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 initially 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.

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.

The Commission notes that AEMO has already begun working on revising its procedures. AEMO and AEMC staff have been working closely together to reduce implementation risks as far as possible and AEMC staff have been attending AEMO's procedure development public workshops and will continue to do so in 2016.

A number of stakeholders proposed that a body, supported by an independent project manager and secretariat, be established to monitor the implementation of the rule change including the development of relevant procedures.²⁰²

The Commission considers there could be merit in establishing a group to coordinate the implementation of the new arrangements. However, based on discussions with AEMO, the AER, jurisdictional governments and jurisdictional safety regulators, we are confident that all the appropriate parties have already begun, or about to begin, processes to implement the necessary changes by the dates set out in the final rule.

In determining an appropriate commencement date, the Commission has recognised significant inter-linkages between the various Power of Choice projects and other related rule changes that are being undertaken, including the Embedded Networks²⁰³ and Meter Replacement Processes²⁰⁴ rule changes and the development of a shared market protocol.²⁰⁵ The Commission considers that there are likely to be significant reductions in implementation costs from coordinated implementation of these projects. The proposed timeframe will allow realisation of these benefits. The Commission notes:

- by implementing all of the proposed changes on 1 December 2017 all parties will only be required to implement and comply with one set of changes which will reduce costs for DNSPs, retailers, Metering Coordinators, Metering Providers, Metering Data Providers, and embedded network operators and managers;
- the synchronisation of the systems changes will reduce costs to AEMO, retailers, DNSPs, Metering Coordinators, Metering Providers, and Metering Data Providers; and
- the synchronisation of changes to the AER's ring fencing guidelines and potentially exemptions guidelines (related to exempt selling and network service provider registration exemptions) will reduce costs for the AER and stakeholders.

202 IEC, submission on the draft rule determination, p.2; Lumo and Red Energy, submission on the draft rule determination, p.6; Victorian DNSPs, submission on the draft rule determination, p.38-41.

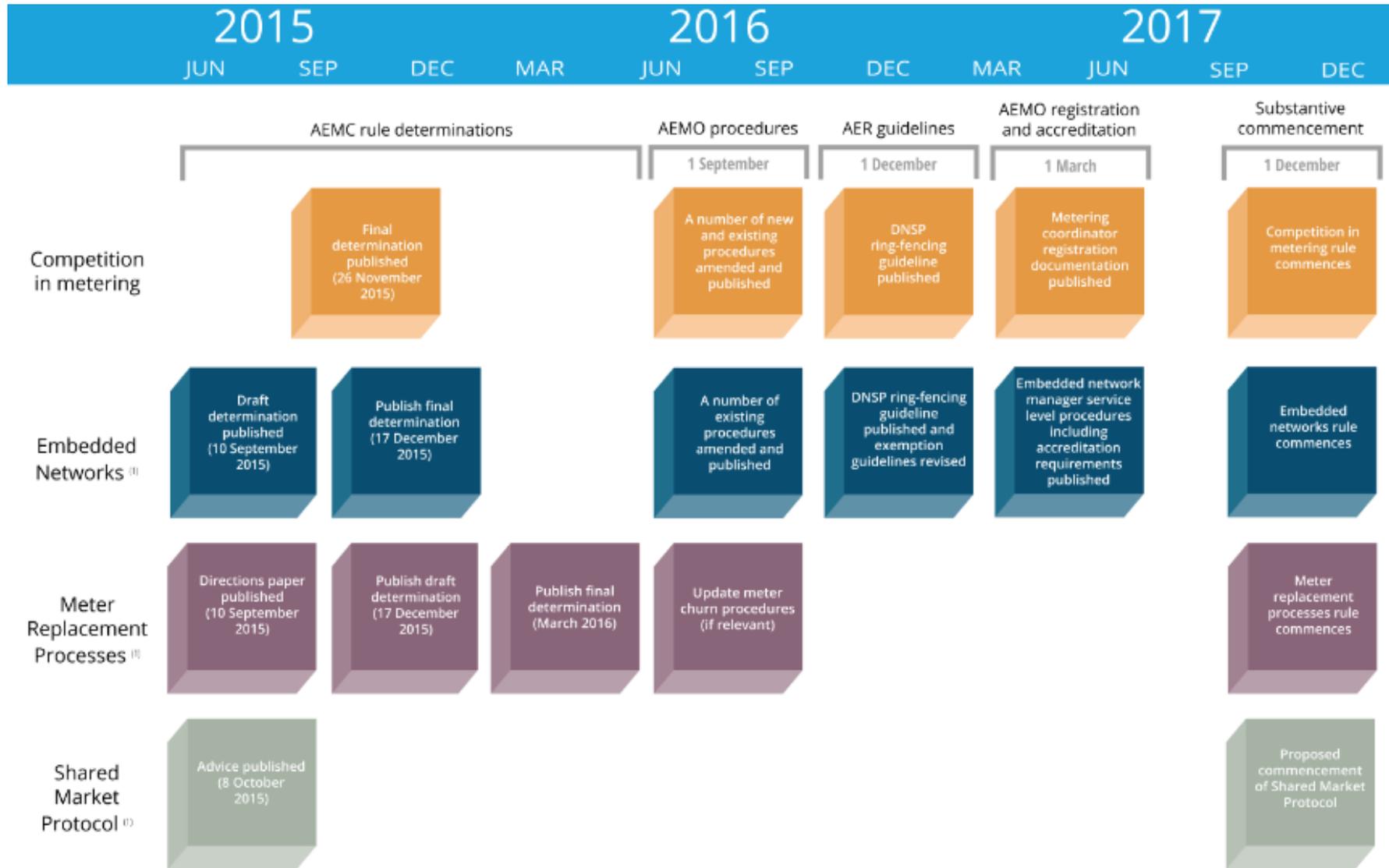
203 <http://www.aemc.gov.au/Rule-Changes/Embedded-Networks>

204 <http://www.aemc.gov.au/Rule-Changes/Meter-Replacement-Processes>

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

Figure 5.2 displays the Commission's anticipated implementation schedule for this rule, the Embedded Networks and Meter Replacement Processes rule changes and the expected shared market protocol rule change. As final rule determinations have not yet been made for either the Embedded Networks or Meter Replacement Processes rule changes, these timeframes can only be confirmed if and when the Commission makes a final rule. In addition, the Commission notes that the implementation of any shared market protocol changes will be dependent on a number of factors, including the timing of receipt of a rule change request from the COAG Energy Council. As such, timeframes outlined in Figure 5.2 should be taken as indicative only.

Figure 5.2 Implementation plan for Power of Choice reforms



(1) Preferable implementation timeframes provided for indicative purposes only, if any rule is made.

5.4 Implementation requirements

Before the new Chapter 7 of the NER under the final rule 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 final rule requires the following steps to occur prior to 1 December 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 5.2 below. The final rule requires the IEC to make an IEC recommendation to change the B2B procedures by 1 August 2016, and AEMO is required to publish final procedures by 1 September 2016.
- The final rule requires the AER to develop a distribution ring-fencing guideline. As outlined in Chapter 4 and Appendix D3, 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 December 2016.
- The final 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 final rule requires AEMO to develop and publish by 1 March 2017, 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 December 2017. These amendments are required to reflect the changes in their obligations under the final rule, including the retailer's obligation to:²⁰⁶
 - appoint a Metering Coordinator to provide metering services at a small customer's premises;
 - access customers premises to read, test or replace meters;
 - 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 final rule; and

²⁰⁶ 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.

- provide small customers with prior written notice of a retailer planned interruption for the purpose of the installation, maintenance, repair or replacement of an electricity meter.
- Standard terms and conditions under which a DNSP will act as an initial Metering Coordinator will need to be published by DNSPs by 1 September 2017.
- Distributor deemed standard connection contracts will need to be amended by DNSPs and published on their websites no later than 1 December 2017. These amendments are required to reflect that distributors are not responsible for retailer planned interruptions.

Table 5.2 AEMO and IEC procedures requiring updating and development²⁰⁷

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 Coordinator under the final rule), the Financially Responsible Market Participant, AEMO, Metering Provider and Metering Data Provider.
Meter Churn Procedures	Existing AEMO procedure	Process for Financially Responsible Market Participants when a meter at a connection point is changed.

²⁰⁷ 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 final rule.

Procedure	Existing or new procedure likely to be required?	Description
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(b) of the NER final 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.
Procedures related to the installation and removal of a network device	May be a new procedure or may be included in the existing meter churn procedures.	Procedures for managing the removal of a network device under cl. 7.8.6(i) of the NER final rule, including the return of the network device and notification requirements.
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 December 2017. The key additional implementation steps are outlined in Table 5.3. Each of these actions will need to occur by 1 December 2017.

Table 5.3 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)
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

Implementation requirements	Person responsible
Appointment of Metering Coordinators	Financially Responsible Market Participants and other parties that are responsible for appointing a Metering Coordinator at a connection point
Appointment of Metering Providers and Metering Data Providers	Metering Coordinators ²⁰⁸
Industry changes to systems and business processes in order to comply with the final rule and amendments to AEMO/IEC procedures	DNSPs, Market Participants, Metering Providers, Metering Data Providers, and any person proposing to be a Metering Coordinator
Required alterations to deemed standard connection contract under the NERL to reflect that distributors are not responsible for retailer planned interruptions.	DNSPs
Amend model standing offers for basic connection services under chapter 5A of the NER to reflect the amending rule.	DNSPs. AER approval required.
Any actions that are required to comply with the AER's distribution ring-fencing guidelines	DNSPs
Amendments to market retail contracts to comply with the final rule, including the retailer's responsibility for appointing a Metering Coordinator	Retailers with small customers
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
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

²⁰⁸ 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
Victorian Government and 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 final rule, eg opt out rights for new meter deployments and retailer supply interruptions (see Appendices A3, 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
Jurisdictional governments to review, and if necessary, amend jurisdictional service installation requirements.	Jurisdictional Governments.
Victorian and ACT Governments to consider reviewing the consumption thresholds over which a customer cannot have a type 5 or type 6 meter. Due to the interaction between these consumption thresholds and the consumption threshold for small customers in these jurisdictions, a gap arises under the new arrangements whereby certain customers could have a type 5 or 6 meter installed and still be compliant with the NER (see Appendix F).	Victorian and ACT Governments

AEMC staff have met with all jurisdiction safety regulators, and wrote to them on 13 April 2015 following the publication of the draft rule and on 29 October 2015 before the publication of the final rule, to explain the key safety issues arising from the draft and final rule and the need for them to review, and if necessary, amend jurisdictional safety legislation and regulations to take into account the final rule.

A Roles and responsibilities

Overview of Appendix A

Appendix A sets out the roles and responsibilities under the final rule of various parties and in relation to accessing energy and metering data, as follows:

- A1 Metering Coordinators' roles and responsibilities.
- A2 Metering Providers' and Metering Data Providers' roles and responsibilities.
- A3 Retailers' roles and responsibilities.
- A4 DNSPs' roles and responsibilities.
- A5 Arrangements for accessing energy and metering data.

A1 Metering Coordinators' roles and responsibilities

Summary

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

Under the final rule, the current role 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 final rule, the Financially Responsible Market Participant (FRMP) at a connection point is responsible for ensuring that a Metering Coordinator is appointed at a connection point. The FRMP at a connection point must appoint a Metering Coordinator for that connection point, other than where a large customer, Non-Market Generator or exempt Generator has appointed its own Metering Coordinator at a distribution connection point. The retailer is the FRMP for the connection points of its retail customers and must appoint Metering Coordinators at these connection points, other than where a large customer has appointed its own Metering Coordinator.

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,²⁰⁹ a DNSP (subject to the requirements of the AER's distribution ring-fencing guidelines),²¹⁰ 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 final rule will become the initial Metering Coordinator at that connection point. The LNSP will continue in this role until there is a new appointment of a Metering Coordinator at that connection point, or the services cease to be classified by the AER as direct control services.

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

²⁰⁹ The NER final rule provides that a person may not be registered as both a Metering Coordinator and a Market Customer (e.g. 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 (e.g. a subsidiary). Clause 2.4A.2(b)(1) of the NER final rule, however, excludes LNSPs and FRMPs that are only appointed as a Metering Coordinator at transmission connection points from the prohibition on a Market Customer being registered as a Metering Coordinator. See Appendix A3.

²¹⁰ See Appendix D3 for details on ring-fencing arrangements for DNSPs.

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

- allow increased competition in the provision of metering services, which is 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 final rule, LNSPs will remain the exclusive provider of metering services for type 7 metering installations (e.g. metering for public lighting). Existing exclusivity arrangements for metering services will also continue to apply at transmission connection points; that is, only the FRMP or the LNSP may act as the Metering Coordinator at a transmission connection point.

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

- security controls for managing access to small customer metering installations, 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.

Under the final rule, a person who is registered as a Metering Coordinator is a Registered Participant.²¹¹

A1.1 Introduction

This appendix sets out the role and responsibilities of the Metering Coordinator under the final 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;

²¹¹ Under clause 2.4A.1 of the NER final rule, however, a person who is registered as a Metering Coordinator is not a Registered Participant for the purposes of Part A of Chapter 5 of the NER, unless the person is also registered in another category of Registered Participant.

- 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, draft determination, additional 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 final rule in relation to the appointment and role of Metering Coordinators.

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

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

The existing 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 the:

- 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 existing 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.²¹² 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.²¹³

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.²¹⁴ An LNSP is required to make an offer to act as the

²¹² Existing clause 7.1.2 of the NER.

²¹³ Existing clause 7.2.1 of the NER.

²¹⁴ Existing clause 7.2.2 of the NER, where the LNSP is the local DNSP.

Responsible Person for a connection point with a type 1-4 metering installation when requested to do so by the Market Participant.²¹⁵

The role of the Responsible Person is exclusively performed by the LNSP for types 5-6 metering installations at small customer connection points. 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 (i.e. residential and small business customers), the LNSP is the Responsible Person for those advanced metering installations.

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.²¹⁶

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;²¹⁷
- 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 clause 7.7(a) of the NER (except where the Responsible Person is a TNSP);²¹⁸
- ensure that the installation is provided, installed and maintained in accordance with the NER, the metrology procedure and other procedures under the NER;²¹⁹
- 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;²²⁰
- 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;²²¹

215 Existing clause 7.2.3(c) of the NER.

216 Different arrangements apply at transmission connection points, where AEMO is responsible for the collection and processing of metering data and delivery of processed data.

217 Existing clause 7.2.5(a) of the NER.

218 Existing clause 7.2.5(c1) of the NER.

219 Existing clause 7.2.5(d)(1) of the NER.

220 Existing clause 7.2.5(d)(2) of the NER.

221 Existing clauses 7.2.5(d)(3) and 7.8.1 of the NER.

- 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;²²² 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.²²³

Generally, the FRMP is currently responsible for payment of all metering services costs at the connection point. 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.

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 small customer connection points. The prices for these services are 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.²²⁴ The prices for direct control services are 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 provided by the DNSP 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. In its most recent determinations, the AER has unbundled charges for type 5-6 metering services from the distribution use of system charges and classified them as alternative control services. 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 metering 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

222 Existing clause 7.2.5(d)(4) of the NER.

223 Existing clause 7.2.5(d)(7) of the NER.

224 Clause 6.2.1(a) of the NER.

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 proposed that:

- The term “Responsible Person” be changed to “Metering Coordinator”.²²⁵
- 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.²²⁶
- 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 metering services.²²⁷ As an example, the COAG Energy Council considered 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; and
 - 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.²²⁸
- The Metering Coordinator must comply with the existing 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 the integrity and delivery of metering data; and
 - engage and coordinate the availability, dispatch, performance and payment of the Metering Provider and Metering Data Provider.²²⁹

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

226 Ibid, p7.

227 Ibid, p17.

228 Ibid, p17.

- 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.²³⁰

A1.4 Stakeholder views

A1.4.1 Consultation paper and initial workshops

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

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 roles may limit competition.²³¹

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 (e.g. retailer).²³² 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.²³³

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

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

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

231 Origin Energy, submission on consultation paper, p3.

232 See the following submissions on the consultation paper: Simply Energy, p1; ESAA, p2.

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

services up to competition.²³⁴ Several DNSPs saw themselves as having an ongoing role to provide a basic, regulated metering service.²³⁵ However, SA Power Networks considered that if the NER allowed jurisdictions to prescribe exclusivity to Metering Coordinators, this should not be limited to certain meter types.²³⁶

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.²³⁷

Lumo Energy considered that jurisdictions should only be able to prescribe exclusivity arrangements where a consumer is not directly involved, i.e. 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.²³⁸

Origin Energy was of the view that exclusivity arrangements for type 6 metering services 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.²³⁹ 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.²⁴⁰

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.²⁴¹

A1.4.2 Draft determination, operational workshop and additional consultation paper

This section sets out stakeholder responses to the draft determination, operational workshop and additional consultation paper as they relate to high level policy issues. Further comments and the AEMC's responses are set out in Table A1.1.

²³⁴ See the following submissions on the consultation paper: Vector, p9; EDML, p8; Simply Energy, p7; Energex, p3.

²³⁵ See the following submissions on the consultation paper: NSW DNSPs, p10; Ergon Energy, p8.

²³⁶ SA Power Networks, submission on consultation paper, p6.

²³⁷ AER, submission on consultation paper, pp4,6.

²³⁸ Lumo Energy, submission on consultation paper, p5.

²³⁹ Origin Energy, submission on consultation paper, p4.

²⁴⁰ Metropolis, submission on consultation paper, p5.

²⁴¹ 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.

A separate Metering Coordinator role

A number of stakeholders commented on the draft decision to establish a Metering Coordinator role. Some stakeholders that commented on this issue considered that establishing a separate Metering Coordinator role would allow for tailored accreditation and registration requirements and would support competition in both the metering services and retail markets.²⁴²

In its submission on the draft determination, EDMI supported the separation of the roles of Metering Coordinator, Metering Provider and Metering Data Provider so that different accreditation or registration requirements could be applied to each role.²⁴³

AGL commented that they supported replacing the Responsible Person role with the new contestable role of Metering Coordinator, which it considered would support the principle of competitive neutrality in the NEM and promote access to advanced metering services.²⁴⁴ Origin Energy commented they understood the benefits of creating the new role of Metering Coordinator and anticipated that due to the low barriers to entry and exit, they expect there will be a number of competitors establishing themselves as Metering Coordinators including a number of existing Metering Providers and Metering Data Providers that may transition into the role.²⁴⁵ Calvin Capital noted their broad support for the operating model and the roles and responsibilities described in the draft determination and considered it would promote competition and facilitate customers to switch retailers.²⁴⁶

The Electrical Trades Union did not object to a separate Metering Coordinator role being established in the NER but was concerned about the ability for one entity to take on all three roles (i.e. Metering Coordinator, Metering Provider and Metering Data Provider), as this could affect safety and quality standards. It questioned the lack of national regulatory oversight to maintain safety standards, both for consumers and those who install the meters.²⁴⁷

Metering Coordinator exclusivity arrangements

Stakeholders widely supported the introduction of a competitive framework for metering services and the Commission's draft decision not to establish any exclusivity arrangements for the role of Metering Coordinator, other than in relation to type 7 metering installations. The AER supported removing the exclusivity arrangements in the NER and allowing any party registered with AEMO to take on the role of Metering

²⁴² See the following submissions to the draft determination: AGL, p4; Calvin Capital, p1; EDMI, p2; Origin Energy.

²⁴³ EDMI, submission on the draft determination, p2

²⁴⁴ AGL, submission on the draft determination, p4.

²⁴⁵ Origin Energy, submission on the draft determination, p3.

²⁴⁶ Calvin Capital, submission on the draft determination, p1.

²⁴⁷ Electrical Trades Union, submission on the draft determination, pp6-7.

Coordinator. The AER considered that this will enable different parties to compete to be appointed to this role.²⁴⁸

Appointment of Metering Coordinators

Calvin Capital considered that allowing retailers to appoint a Metering Coordinator would increase competition and innovation in the range of functions and services that would be offered.

AGL broadly supported the ability of the FRMP to appoint the Metering Coordinator unless a large customer wishes to appoint its own Metering Coordinator.²⁴⁹ However, AGL requested that certain types of Generators, including Non-Market and exempt Generators, be permitted to appoint their own Metering Coordinator if they wished to do so.²⁵⁰

The AER stated that requiring retailers as the FRMP at the connection point to be responsible for appointing the Metering Coordinator would provide a gateway for consumers to negotiate for packages of energy products and services.²⁵¹ The AER also supported allowing the FRMP to terminate the LNSP's role as initial Metering Coordinator and appoint another party to this role, and requiring that the LNSP does not inhibit the FRMP's ability to do so.²⁵²

Transitional arrangements for existing type 5 and 6 metering installations

A number of stakeholders commented that they supported the requirement in the draft rule that retailers appoint the DNSP as the initial Metering Coordinator.²⁵³ The AER commented that this provides a smooth transition to competition by maintaining the terms and conditions including price for these services until such a time as a customer receives a new meter under the competitive arrangements, noting that the price of regulated metering services are set in the AER's regulatory determinations.²⁵⁴

However, some stakeholders raised concerns that the draft rule is unclear on the respective rights and obligations of the FRMP and LNSP (acting as initial Metering Coordinator) in circumstances where meter test results provided by the DNSP as initial Metering Coordinator show that a meter needs to be replaced but the FRMP does not arrange to appoint a new Metering Coordinator for the connection point.

248 AER, submission to the draft determination, p3.

249 AGL, submission on the draft determination, p5.

250 AGL, submission on the draft determination, p5.

251 AER, submission on draft determination, p3.

252 Ibid., p4.

253 See the following submissions on the draft determination: AER, p4; AGL, p5.

254 AER, submission on the draft determination, p4.

The ENA submitted that there were a number of difficulties with the transitional provisions in the draft rule, which would create legal uncertainty for LNSPs, FRMPs and customers. In particular, it submitted that:

- The draft rule does not address the removal of a DNSP's type 5 and type 6 meters on termination of its appointment as the initial Metering Coordinator. It should be clear that the FRMP must not interfere with or remove the LNSP's meter without the LNSP's consent, if the FRMP does not wish to re-engage the LNSP as the Metering Coordinator.
- The LNSP's right to terminate its appointment as the initial Metering Coordinator under the transitional arrangements is unclear. The LNSP should have clear rights to terminate for unremedied defaults, particularly any unremedied payment defaults or where the meter is being interfered with or damaged in any way.²⁵⁵

The NSW DNSPs noted that there was no specific process in the draft rule regarding the termination of the appointment of the LNSP in the event the AER reclassifies type 5 and 6 metering services.²⁵⁶

The AER supported allowing retailers to terminate the DNSP's role as the initial Metering Coordinator. The AER noted for example a retailer might see commercial benefit in providing an advanced meter so that more varied services can be offered to the customer, or to save on meter reading costs. The AER also considered that allowing retailers to terminate the initial Metering Coordinator's appointment would promote competition which could deliver metering services at a lower cost than what might be expected by a regulated service provider.²⁵⁷

Transmission connection points

In response to the draft rule, Grid Australia²⁵⁸ and the ENA²⁵⁹ raised concerns about the practicalities of parties other than the TNSP undertaking the Metering Coordinator role at transmission connection points. Grid Australia noted that there are "differences in the roles and complexity between metering installations at transmission connection points that are often embedded and intrinsic to the transmission network compared to those at other voltages, most often at retail premises".²⁶⁰

For reasons set out in these submissions, Grid Australia and the ENA sought an exemption for TNSPs from aspects of the draft rule that relate to the ability of third parties to undertake the Metering Coordinator role at a transmission connection point.

²⁵⁵ ENA, submission on draft determination, pp30-31.

²⁵⁶ NSW DNSPs, submission on the draft determination, p3.

²⁵⁷ AER, submission on the draft determination, p4.

²⁵⁸ Grid Australia submission to the draft determination.

²⁵⁹ ENA submission to the draft determination, pp. 32-33.

²⁶⁰ Grid Australia, submission to the draft determination, p1.

These include the provisions regarding network devices and access to the metering installation. Grid Australia also questioned how rules around asset ownership and cost recovery would operate in the context of third party Metering Coordinators at transmission connection points.

Grid Australia also considered that an exemption from the B2B requirements should apply to transmission network connections. TNSPs are not currently required to comply with B2B Procedures and therefore do not have the necessary software and systems in place.²⁶¹

Finally, Grid Australia²⁶² and the ENA²⁶³ noted that AEMO is responsible for the collection and processing of metering data and delivery of processed data where the Metering Coordinator is a TNSP, and that AEMO must permit the FRMP to appoint the Metering Data Provider who will perform these data responsibilities. The draft rule required the Metering Coordinator to ensure that metering data is provided to AEMO. Therefore Grid Australia considered this requirement should be modified to make AEMO or the FRMP responsible for ensuring metering data is provided where the Metering Coordinator is a TNSP.

In response to submissions to the draft determination, the Commission proposed in the additional consultation paper that aspects of the framework would not apply at transmission connection points. Specifically, the Commission proposed that:

- only the FRMP would be able to appoint a Metering Coordinator in respect of a transmission connection point;
- only the LNSP or the FRMP at a transmission connection point could be appointed as the Metering Coordinator at that connection point; and
- the following would not apply to an LNSP or FRMP only appointed as a Metering Coordinator in respect of one or more transmission connection points:
 - the prohibition on a Market Customer being registered as a Metering Coordinator; and
 - the requirement that a Metering Coordinator must have processes in place to determine that a person seeking access to a service listed in the minimum services specification is an "access party" in respect of that service.

Submissions on the additional consultation paper that commented on this proposal were generally supportive.²⁶⁴

261 Grid Australia, submission on the draft determination, p3.

262 Ibid., p4.

263 ENA submission to the draft determination, p32.

264 See the following submissions on the additional consultation paper: EnergyAustralia, p4; ENA, p12; NSW DNSPs, p4; Origin Energy, p5; and Victorian DNSPs, p15.

Vector acknowledged that the cost of permitting parties other than the FRMP or the LNSP to provide Metering Coordinator services at transmission connection points is likely to outweigh the benefits. Nonetheless, they consider that transmission connection points should be open to competition.²⁶⁵

Role and responsibilities of the Metering Coordinator

A number of stakeholders expressed general agreement with the role and responsibilities of the Metering Coordinator set out in the draft determination and discussed further at the operational workshop.²⁶⁶

Some stakeholders considered further explanation of the Metering Coordinator's role and responsibilities and its relationship to other parties was required.²⁶⁷ AGL, in particular, did not consider the draft rule provided sufficient detail on the roles and responsibilities of the Metering Coordinator, in the context of its 'gatekeeper' role, to enable AEMO and industry to develop and implement procedures and otherwise prepare for market start. AGL and Active Stream were also unsure how liabilities would be assigned amongst different parties in relation to issues such as the cost of new meters and errors.²⁶⁸

AusNet Services considered that clauses 7.8.2(d) and (e) of the NER draft rule, in respect of the process for applying for and registering a NMI for a connection point, do not reflect operational responsibilities and practice, although they have been retained from the existing rules. AusNet Services submitted that in practice the LNSP establishes a NMI for a new connection point and registers the NMI in MSATS (i.e. with AEMO) as a result of the FRMP's request via a B2B service order for a new connection (or in NSW for a NMI).²⁶⁹

A number of stakeholders were concerned that responsibility for the safe installation, maintenance and operation of metering installations had not been expressly placed on the Metering Coordinator in the NER and NERR.²⁷⁰ Origin considered the application of service and installation rules, licensing requirements and safety standards should apply equally to initial Metering Coordinators (DNSPs) and new Metering Coordinators. The ENA also considered the final rule should include further guidance that Metering Coordinators must develop appropriate systems and undergo accreditation processes in line with jurisdictional safety requirements to ensure the safety both of their personnel and of customers.

²⁶⁵ Vector, submission on additional consultation paper, p5.

²⁶⁶ See the following submissions on the draft determination: AGL, pp2-4; Origin, p3; Vector, p2.

²⁶⁷ AGL, submission on the draft determination, pp4-6.

²⁶⁸ See the following submissions on the draft determination: Active Stream, p4; AGL, pp4-6.

²⁶⁹ AusNet Services, supplementary submission on the draft determination, p10.

²⁷⁰ See the following submissions on the draft determination: Electrical Trades Union, pp6-7; ENA, p29; Energex, Attachment A, p5.

A number of stakeholders expressed general support for the introduction of additional security controls in the NER to address access to advanced metering installations. The AER supported the additional protections that the draft rules introduced with respect to accessing services and information provided by a customer's meter, including limiting access to a meter to parties explicitly nominated in the NER as "access parties", including key market participants and parties that have been granted authorisation by consumers.²⁷¹ SACOSS also welcomed the provisions in the draft rule regarding access to meters by authorised parties.²⁷²

However, some stakeholders considered further requirements relating to cyber security should be included in the NER. The NSW DNSPs expressed concern that the compromise of systems providing direct access to meters could lead to the remote disconnection of large numbers of customers, and not be remotely recoverable. In this situation, the only means of restoration would be a site visit, which would result in long periods without power. The NSW DNSPs and the ENA recommended that the rule explicitly require AEMO to put in place processes to audit, test and enforce cyber security and that AEMO should be provided with appropriate enforcement powers.²⁷³

Registration requirements for a Metering Coordinator

The Victorian DNSPs raised a concern that the registration process for DNSPs as initial Metering Coordinators may be costly to undertake for little benefit. The Victorian DNSPs proposed that the registration and accreditation requirements be streamlined or deemed where DNSPs are the initial Metering Coordinator to avoid unnecessary costs and inefficient allocation of industry resources.²⁷⁴ This was on the basis that they currently perform the role of Responsible Person.

AGL proposed that a Generator that is the FRMP be automatically entitled to be registered as a Metering Coordinator at a nominal charge where they are providing Metering Coordinator services to their own Generator's generating units.²⁷⁵

AGL also requested in its submission that the draft rule be amended to entitle a Generator that is also registered as a Market Customer to act in the role of Metering Coordinator for its generating units.²⁷⁶

²⁷¹ AER, submission on the draft determination, p9.

²⁷² SACOSS, submission on the draft determination, p1.

²⁷³ See the following submissions on the draft determination: ENA, p27; NSW DNSPs, p10.

²⁷⁴ The Victorian DNSPs, submission on the draft determination, p30.

²⁷⁵ AGL submission on the draft determination, p5.

²⁷⁶ Ibid.

A1.5 Commission's analysis

Changes between the draft and final rule

The final rule largely reflects the draft rule with respect to the role and responsibilities of the Metering Coordinator. However, a number of changes have been made between the draft rule and final rule to clarify a number of aspects of the rules, including in relation to the appointment of the Metering Coordinator, transmission connection points, the LNSP's deemed initial appointment, B2B arrangements and the registration requirements for Metering Coordinators. Key amendments include the following:

- The final rule permits Non-Market Generators and exempt Generators to appoint their own Metering Coordinator at a connection point, other than where there is a retail customer at the same connection point.²⁷⁷
- The NER draft rule has been amended to strengthen the delineation between the Metering Coordinator's regulatory obligations that it must perform and additional discretionary services that it may choose to provide under commercial arrangements, including:
 - clarifying that the Metering Coordinator must perform all of the obligations of the Metering Coordinator under the Rules and procedures authorised under the Rules on terms and conditions (including as to price) to be commercially agreed between the Metering Coordinator and the party appointing the Metering Coordinator;²⁷⁸ and
 - clarifying that, subject to the terms of its appointment by the FRMP (or other relevant party), a Metering Coordinator may supply services in respect of a metering installation that are in addition to those services required to be provided under the NER on terms and conditions commercially agreed with the party requesting the service.²⁷⁹
- In respect of transmission connection points:
 - only a FRMP can appoint a Metering Coordinator; and
 - only the LNSP or the FRMP at a transmission connection point can be appointed as the Metering Coordinator at that connection point.

²⁷⁷ Clause 7.6.2 of the NER final rule.

²⁷⁸ Clause 7.6.1 of the NER final rule.

²⁷⁹ Under the final rule, the provision of such discretionary services will be subject to certain constraints – e.g. the Metering Coordinator must ensure that services set in the minimum services specification are only provided to certain authorised parties.

- The final rule clarifies that where the Metering Coordinator at a transmission connection point is the LNSP, AEMO is responsible for the collection, processing and delivery of metering data to the metering database and the provision of metering data in accordance with the NER and procedures authorised under the NER.
- The final rule includes two additional terms and conditions of the LNSP's deemed initial appointment which require:
 - the LNSP to promptly notify the FRMP of a metering installation malfunction which occurs to a metering installation (other than a type 1, 2 or 3 metering installation); and
 - the FRMP to promptly appoint a Metering Coordinator when it receives a notice from the LNSP of a metering installation malfunction.
- The final rule clarifies that the initial Metering Coordinator is not required to comply with clause 7.8.10(a)(2) of the NER final rule relating to a metering installation malfunction.
- Clause 7.3.1 of the NER final rule provides that the Metering Coordinator is the party with overall responsibility in respect of a connection point for the performance of certain obligations under Part D, Part E and Part F of Chapter 7 of the NER.
- The Metering Coordinator does not have an obligation to apply for, and register, a NMI. The NER final rule assigns these obligations to the FRMP and LNSP, respectively.
- A number of new provisions have been introduced in relation to network devices, including:
 - The Metering Coordinator must, at the request of the LNSP, ensure that the LNSP receives all reasonable assistance to facilitate access to a metering facility for the installation or maintenance of a network device.²⁸⁰
 - If a Metering Coordinator removes or arranges the removal of an existing network device under clause 7.8.6(f) of the NER final rule, it must notify the LNSP as soon as practicable after it is removed and keep a record of the basis upon which it determined that it needed to be removed, including:
 - the address from which the network device was removed;

²⁸⁰ Clause 7.8.6(d)(1) of the NER final rule.

- the date and time of removal of the network device;
 - photographs and measurements of the network device, the metering installation and the metering facility; and
 - any other material in relation to its decision to remove the network device that is required by the procedures developed by AEMO (see below).²⁸¹
- The final rule permits a Metering Coordinator to provide an LNSP with access to services provided via a small customer metering installation in addition to those in the minimum services specification where the customer has given prior consent or where, in the Metering Coordinator's reasonable opinion, such access is reasonably required to enable the DNSP to meet its obligations to provide a safe, reliable and secure network.²⁸²
 - Two additional qualifications to the Metering Coordinator's obligation to ensure new and replacement metering installations meet the minimum services specification at the connection point of a small customer have been introduced in the NER final rule:
 - under schedule S7.5.1(d), metering installations that are connected to a current transformer must only be capable of providing the services listed in items (c) to (f) in table S7.5.1.1 in accordance with procedures made under clause 7.8.3, meaning these metering installations will not be required to be capable of remote disconnection and reconnection services; and
 - clause 7.8.4(d) of the NER allows a Metering Coordinator to install a type 4A meter if the customer has communicated its refusal to have a meter that meets the minimum services specification (i.e. a type 4 meter) installed.
 - The approach to the B2B arrangements under Chapter 7 have been revised between the draft and final rule, including:
 - the draft rule added references to Metering Coordinators in several clauses of the B2B provisions, but these references have been removed in the final rule;²⁸³ and
 - new transitional provisions in clause 11.86.9 have been introduced to clarify that the B2B arrangements apply to DNSPs in their role as 'Initial Metering Coordinators'.²⁸⁴

²⁸¹ See clauses 7.8.6(g)-(i) of the NER final rule.

²⁸² Clause 7.15.4(b)(3)(i) of the NER final rule.

²⁸³ For example, the draft rule included Metering Coordinators in clause 7.17.1 as a party that must use the B2B e-Hub for B2B Communications. This reference has now been removed.

- A number of new provisions have been introduced to the registration requirements for Metering Coordinators under clause 2.4A.2 of the final rule. The final rule provides that:
 - The registration requirements relating to processes for determining that a person seeking access to services in the minimum services specification only applies to Metering Coordinators that are appointed at small customer metering installations.²⁸⁵
 - The requirement to have an appropriate security control management strategy and associated infrastructure and communications systems does not apply to Generators that are appointed at the connection points of their own generating units.²⁸⁶
 - The prohibition against Market Customers registering as a Metering Coordinator does not apply to:
 - LNSPs and FRMPs that are only appointed as a Metering Coordinator at transmission connection points;²⁸⁷ or
 - Generators that are only appointed as Metering Coordinator at the connection points of their own generating units.²⁸⁸

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 final 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;

284 For the purposes of the transitional arrangements under the final rule, the "Initial Metering Coordinator" is an LNSP which is appointed, or deemed to be appointed, as a Metering Coordinator at a connection point under clauses 11.86.7(a) and 11.86.7(c), respectively.

285 Clause 2.4A.2(a)(3) of the NER final rule.

286 Clause 2.4A.2(c) of the NER final rule.

287 Clause 2.4A.2(b)(1) of the NER final rule.

288 Clause 2.4A.2(b)(2) of the NER final rule.

- allocate new obligations associated with any new responsibilities to the party best placed to carry out those obligations;
- 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 final 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 final rule;
- the Commission's reasons for requiring that a Metering Coordinator be a Registered Participant; and
- the Commission's response to stakeholder views not addressed elsewhere in this appendix.

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.²⁸⁹

As the requisite capabilities and responsibilities for each role are significantly different, under the final 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.

The final 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. The Commission notes the Electrical Trade Union's view that the ability for one entity to take on all three roles (i.e. Metering Coordinator, Metering Provider and Metering Data Provider) could affect safety and quality standards. However, even if all three roles are performed by a single entity, they will be required to comply with all obligations under the NER, AEMO's registration and accreditation requirements and requirements under jurisdictional electricity legislation for each separate role.

While the Metering Coordinator, Metering Provider and Metering Data Provider are separate roles under the final 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 has 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 was to mitigate the risk that:

- competition may not emerge in a particular market segment or region, in which case a jurisdiction may wish to impose an exclusivity arrangement such that

²⁸⁹ The roles of the Metering Provider and Metering Data Provider are discussed in Appendix A2.

small customers receive regulated metering services in relation to type 5 or type 6 metering installations;

- some 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 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 final 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.²⁹⁰ 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 there is a new appointment of a Metering Coordinator at the connection point, or the services cease to be classified by the AER as direct control services. Small customers will therefore continue to receive metering services, which are subject to regulation by the AER, in relation to existing type 5 and 6 metering installations for as long as the LNSP is providing the service using the existing type 5 or 6 metering installation and the service remains classified a direct control service.

As discussed in Appendix C1, the final rule requires that all new and replacement metering installations for small customer connection points must be a type 4 metering installation that meets the minimum services specification or, in certain circumstances, a type 4A metering installation which is capable of meeting the minimum services specification but is not connected to the telecommunications network. 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 final rule will prevent these metering installation types from being installed for small customers.

The final rule does not prevent a retailer (as the FRMP) appointing a party other than the DNSP to be the Metering Coordinator for existing type 5 and 6 metering

²⁹⁰ Other than for type 7 metering installations and at transmission connection points, as discussed below.

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.²⁹¹ 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).
- 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 (subject to any applicable AER ring-fencing requirements).

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 considers providing 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) would mean the provision of metering services would not be subject to the competitive pressures that constrain prices and encourage service improvements. The Commission is therefore of the view that removing existing exclusivity arrangements, other than in relation to type 7 metering installations and at transmission connection points, will contribute to the National Electricity Objective by promoting competition and innovation.

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, e.g. for public lighting and traffic lights.

²⁹¹ Subject to a limited AEMO exemption power or where a small customer refuses a type 4 metering installation that meets the minimum services specification in new, fault and replacement scenarios, a type 4A metering installation will be installed - see Appendix C1.

For reasons discussed in Appendix D1, the Commission agrees that it is appropriate to retain the existing arrangement that requires the LNSP to be responsible for type 7 metering installations. Under the final rule the FRMP must appoint the LNSP as the Metering Coordinator at connection points which have a type 7 metering installation.

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.

Transmission connection points

The existing exclusivity arrangements that restrict who can be responsible for metering services at transmission connection points to the LNSP and the FRMP will remain under the final rule.

We understand that the technology required for metering installations at transmission connection points is highly specialised and often integrated into a substation with other TNSP assets that are used to operate the transmission network.

The primary purpose of this rule change is to promote competition in metering services in the small customer market. Under the existing NER, the FRMP can already elect to be the Responsible Person, yet at the majority of transmission connection points we understand that it is the TNSP that performs this role.

Further, there are relatively few transmission connection points and, given the specialised nature of the metering required at these connection points, the market for metering services would likely be small.

For these reasons the Commission considers that the complexity and cost of permitting parties other than the LNSP or the FRMP to provide Metering Coordinator services at transmission connection points is likely to outweigh the benefits. Therefore the final rule excludes transmission connection points from the competitive framework and instead provides that, consistent with existing arrangements in the NER for the Responsible Person role, only the LNSP or a FRMP may be appointed as the Metering Coordinator at a transmission connection point.²⁹²

Further, the final rule provides that the FRMP may request that the LNSP offer to act as the Metering Coordinator for transmission connection points.²⁹³ This reflects the existing NER arrangements that require LNSPs to offer to act as the Responsible Person for type 1 to 4 metering installations in certain circumstances.

A1.5.3 Appointment of Metering Coordinators

Under the final rule, the FRMP at a connection point is responsible for appointing a Metering Coordinator for that connection point, other than where a large customer,

²⁹² Clause 7.6.3 of the NER final rule.

²⁹³ Clause 7.6.3 of the NER final rule.

Non-Market Generator or exempt Generator has appointed its own Metering Coordinator (see Appendix B1 for appointment by large customers, Non-Market Generators and exempt Generators).²⁹⁴

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

A party must be registered with AEMO to perform the role of Metering Coordinator. Any party, subject to a number of eligibility requirements, may register with AEMO to perform that role:

- If a retailer wishes to establish a Metering Coordinator business, it will need to establish a separate legal entity (e.g. a subsidiary) to perform the role.²⁹⁵ For the reasons explained in Appendix A3, the final rule provides that a person that is a Market Customer may not be registered as a Metering Coordinator. The final rule includes two exceptions to this prohibition on a Market Customer being registered as a Metering Coordinator:
 - LNSPs and FRMPs who are only appointed to act in the role of Metering Coordinator at a transmission network connection point;²⁹⁶ and
 - Generators who are only appointed at the connection points of their generating units.²⁹⁷
- 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 registration requirements for Metering Coordinators are discussed in further detail under section A1.6.5 below.

Commercial nature of the appointment of the Metering Coordinator

The draft rule set out the commercial nature of the appointment of the Metering Coordinator. The draft rule provided that:²⁹⁸

- the appointment of the Metering Coordinator would be on commercially agreed terms between the Metering Coordinator and the appointing party; and
- the Metering Coordinator may supply services from the metering installation on terms commercially agreed with the requesting party.

²⁹⁴ Clause 7.6.2 of the NER final rule.

²⁹⁵ Clause 2.4A.1(c) of the NER final rule.

²⁹⁶ Clause 2.4A.2(b)(1) of the NER final rule.

²⁹⁷ Clause 2.4A.2(b)(2) of the NER final rule.

²⁹⁸ Clause 7.6.1 of the NER draft rule.

The final rule clarifies that the Metering Coordinator must perform its regulatory obligations under the Rules and procedures pursuant to the terms of its appointment commercially agreed with the FRMP, large customer or Non-Market Generator or exempt Generator (as the case may be).²⁹⁹ The FRMP will enter into a commercial arrangement to appoint the Metering Coordinator, other than where a large customer, Non-Market Generator or exempt Generator has entered into such an agreement with the Metering Coordinator for the relevant connection point. This agreement will set out the terms and conditions on which the Metering Coordinator provides services, including the price for those services.

The final rule also clarifies that, subject to the terms of its appointment by the FRMP (or other relevant party), a Metering Coordinator may also supply services in respect of a metering installation that are in addition to those services required to be provided under the NER on terms and conditions (including as to price) commercially agreed with the party requesting the service.³⁰⁰

The price for access to services provided by Metering Coordinators will not be regulated under the final rule.³⁰¹

As payment for services performed by the Metering Coordinators will be subject to commercial arrangements, it is not necessary or appropriate for the NER to provide that the FRMP (or other relevant appointing party) is responsible for payment for all metering services. Accordingly, the existing clause 7.3A of the NER has been removed in the final rule.³⁰²

A similar approach has been taken to certain other existing provisions in the NER that address payments for services provided by the Metering Provider or Metering Data Provider. The existing clauses 7.11.2(b) and S7.2.1(b) of the NER have accordingly been removed in the final 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

Under the transitional arrangements in the final rule, the LNSP that is acting as the Responsible Person for a type 5 or 6 metering installation immediately before the commencement date of the new Chapter 7 of the NER (1 December 2017) must be

²⁹⁹ Clause 7.6.1(a) of the NER final rule.

³⁰⁰ Clause 7.6.1(b) of the NER final rule. Under the final rule, the provision of such discretionary services will be subject to certain constraints – e.g. the Metering Coordinator must ensure that services set out in the minimum services specification are only provided to certain authorised parties.

³⁰¹ 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 in accordance with Chapter 6 of the NER.

³⁰² The existing 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 final rule. The existing clause 7.3A(e) of the NER is retained (subject to certain consequential amendments) under the final rule in clause 7.9.3(f) of the NER.

appointed as the Metering Coordinator at that connection point by the FRMP.³⁰³ The Victorian DNSPs will become the initial Metering Coordinator for the advanced meters they deployed under the AMI program.

The LNSP's deemed appointment as initial Metering Coordinator only applies in respect of the person that is the FRMP as at 1 December 2017. If the FRMP at a connection point changes after that date, e.g. due to a consumer changing its retailer, the new FRMP will need to either enter into an agreement with the LNSP for it to continue as the Metering Coordinator or appoint a new Metering Coordinator.

As the initial Metering Coordinator, LNSPs will be required to fulfil the obligations of the Metering Coordinator role, with some exceptions set out in the transitional arrangements.³⁰⁴

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

- by no later than 1 September 2017, the LNSP must provide each FRMP with a standard set of terms and conditions on which it will agree to act as the Metering Coordinator;
- unless the FRMP 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 final rule includes a number of the terms and conditions under which the initial Metering Coordinator must be appointed. These include terms relating to such matters as price, scope of services and termination of the appointment. The Commission agreed with stakeholders that two new terms and conditions in addition to those set out in the draft rule should be included in the final rule to facilitate a smooth transition when a metering installation malfunction occurs and a new Metering Coordinator must be appointed.

In summary, the terms and conditions on which the LNSP is appointed as initial Metering Coordinator must:³⁰⁵

- include terms relating to price which are consistent with Chapter 6 (and, where relevant, Chapter 11) of the NER (i.e. 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;

303 Clause 11.86.7(a) of the NER final rule.

304 See clause 11.86.7(g)(1)-(2) of the NER final rule.

305 See clause 11.78.7 of the NER final rule.

- provide that the FRMP may terminate an appointment on reasonable notice to the Metering Coordinator;
- require the LNSP to promptly notify the FRMP of a metering installation malfunction which occurs to a metering installation (other than a type 1, 2 or 3 metering installation);
- require the FRMP to promptly appoint a Metering Coordinator when it receives a notice from the LNSP of a metering installation malfunction; and
- not prevent, hinder or otherwise impede a FRMP from replacing the LNSP with another Metering Coordinator after the commencement of the new Chapter 7 of the NER.

The final rule provides that, despite anything to the contrary in the terms and conditions on which a LNSP is appointed (or deemed to have been appointed) by the FRMP as Metering Coordinator, that appointment will continue until the earlier of:

- a new appointment of the Metering Coordinator at that connection point; or
- the services provided with respect to the metering installation ceasing to be classified by the AER as direct control service.

In the event that the AER reclassifies type 5 and 6 metering services and the initial Metering Coordinator's appointment is terminated under the transitional provisions, the FRMP would be responsible for appointing a new Metering Coordinator, or agreeing with the LNSP to reappoint it as the Metering Coordinator on a commercial basis, at the relevant connection point.

Because the LNSP's role as initial Metering Coordinator for type 5 and 6 metering services is a regulated distribution service,³⁰⁶ the DNSP should not be able to decide to terminate its role as Metering Coordinator at these sites, as was proposed by the ENA in its submission to the draft determination. The LNSP's role as initial Metering Coordinator will only terminate under the scenarios provided for above.

In response to questions in submissions, the Commission's view is that when a competitive Metering Coordinator is appointed at a connection point for an existing type 5 or 6 metering installation, the metering service will cease to be regulated by the AER, even if the LNSP is retained as the Metering Provider and/or Metering Data Provider at the connection point. Where the LNSP is retained as the Metering Provider and/or Metering Data Provider it would not be performing a regulated distribution service in this scenario as the Metering Coordinator would be ultimately responsible for providing these services.

As under the draft rule, DNSPs have no obligation under the final rule to be the Metering Coordinator and/or Metering Provider of last resort, for example at new

³⁰⁶ Type 5 and 6 metering services are classified as a direct control service under the current AER determinations.

connections in the event that there is no competition to take on those roles, or where a Metering Coordinator default event occurs. The FRMP will bear responsibility for ensuring that there is a Metering Coordinator at each connection point for which it is financially responsible.³⁰⁷

Type 7 metering installations

LNSPs currently act as the Responsible Person for all type 7 metering installations.³⁰⁸ The final rule requires the LNSP to take on the Metering Coordinator role for all type 7 metering installations.

To give effect to the initial appointment of the LNSP as the Metering Coordinator for type 7 metering installations, the final rule provides that:³⁰⁹

- the LNSP must provide the FRMP 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;
- where the LNSP has not provided the FRMP with a standard set of terms and conditions, the FRMP must request an offer from the LNSP to act as the Metering Coordinator for the relevant connection point;
- the LNSP must, within 15 business days of receipt of the request to act as the Metering Coordinator for a type 7 metering installation, make an offer to the FRMP setting out the terms and conditions on which it will agree to act as the Metering Coordinator;
- the terms and conditions of the LNSP's offer must be fair and reasonable and must not have the effect of unreasonably discriminating between FRMPs or between customers of a FRMP; and
- a FRMP must accept an offer on the standard terms and conditions of appointment provided by the LNSP, unless the FRMP 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. As discussed above, only an LNSP or the FRMP at a transmission connection point may be appointed as the Metering Coordinator at a transmission connection point.

The arrangements for interconnectors are not changed under the final rule. Under clause 7.2.1(c) of the NER in the final rule, the TNSP (and not the Metering

³⁰⁷ Clause 7.2.1(a)(1) of the NER final rule.

³⁰⁸ 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.

³⁰⁹ Clause 7.6.4 of the NER final rule.

Coordinator) is responsible for the provision, installation and maintenance of metering installations for interconnectors.

Consequential amendments have been made to the existing NER provisions on joint metering installations to reflect the introduction of the Metering Coordinator role. Most notably, some aspects of the provision are no longer required.³¹⁰

A1.5.4 Role and responsibilities of the Metering Coordinator

Under the final rule, the Metering Coordinator is responsible for appointing a Metering Provider and Metering Data Provider in accordance with the NER and has overall accountability for the provision of metering services under the NER.

Clause 7.3.1 of the NER final rule provides that the Metering Coordinator is the party responsible for the:

- provision, installation and maintenance of a metering installation in accordance with Part D of Chapter 7 of the NER;
- except as otherwise specified in clause 7.5.1(a), collection of metering data with respect to the metering installation, the processing of that data, retention of metering data in the metering data services database and the delivery of the metering data to the metering database and to other persons in accordance with Part E of Chapter 7 of the NER; and
- managing access to and the security of the metering installation, services provided by the metering installation, energy data held in the metering installation and metering data from the metering installation in accordance with Part F of Chapter 7 of the NER.

This clarifies the Metering Coordinator is responsible for ensuring that these services are provided in compliance with the rules. The Metering Coordinator must appoint a Metering Provider for the provision, installation and maintenance of each metering installation.³¹¹ However, the Metering Coordinator remains responsible for ensuring that the metering installation is installed and maintained in accordance with the NER and relevant procedures.³¹²

The Metering Coordinator will take on all of the existing responsibilities of the Responsible Person as summarised in section A1.1 above. The Metering Coordinator will also assume a number of new obligations under the final rule as discussed in this section.

³¹⁰ Clause 7.8.13 of the NER final rule. Clause 7.8.13(a) has been removed between the draft and final rule in light of the commercial arrangements for appointing Metering Coordinators under the new framework.

³¹¹ Clause 7.3.2(a)(1) of the NER final rule.

³¹² See clause 7.3.2(e)(1) of the NER final rule.

Process for obtaining and registering a NMI

Under the draft rule, the Metering Coordinator at a connection point was required:

- to apply to the LNSP for a NMI with respect to a connection point; and
- register the NMI with AEMO in accordance with procedures from time to time specified by AEMO.

Stakeholders noted this process does not reflect current industry practice and did not allocate responsibilities to parties in a way that would achieve the most efficient process for obtaining and registering a NMI.

The Commission agrees that the FRMP, which instigates the new connection process with an LNSP, is the most appropriate party to be responsible for applying for a NMI. The Commission also agrees that it would be more efficient to require the LNSP to both issue a NMI for a new connection and register it with AEMO.

Therefore, the NER final rule assigns these obligations to the FRMP and LNSP, respectively. The final rule requires that:

- the FRMP must apply to the LNSP for a NMI and provide the Metering Coordinator with the NMI for the connection point within 5 business days of receiving the NMI;³¹³ and
- the LNSP must issue a unique NMI for each metering installation to the FRMP and register the NMI with AEMO in accordance with procedures from time to time specified by AEMO.³¹⁴

Responsibilities relating to a metering installation

A number of existing obligations of the Responsible Person in relation to metering installations and data have been placed on the Metering Coordinator in the final rule. For example the Metering Coordinator must:

- ensure that metering installations are provided, installed and maintained in accordance with the NER and procedures;³¹⁵
- ensure the security and accuracy of metering installations;³¹⁶
- ensure that metering data services are provided in accordance with the NER and procedures;³¹⁷

³¹³ Clause 7.8.2(c) of the NER final rule

³¹⁴ Clause 7.8.2(d) of the NER final rule.

³¹⁵ Clause 7.3.2(e)(1) of the NER final rule.

³¹⁶ Clause 7.3.2(e) of the NER final rule.

³¹⁷ Clause 7.3.2(h)(2) of the NER final rule.

- ensure that energy data held in the metering installation is protected from direct local or remote electronic access by suitable password and security controls;³¹⁸ and
- manage metering installation malfunctions, inspections, testing and auditing.³¹⁹

The Metering Coordinator must also ensure that any new or replacement metering installation for a small customer connection point is a type 4 metering installation that meets the minimum services specification. However, there are two circumstances in which a Metering Coordinator may arrange for a new and replacement metering installation at a small customer connection point to be installed that does not meet the minimum services specification:

- where 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; and
- where the customer has communicated its refusal to have a meter that meets the minimum services specification (i.e. a remotely read meter) installed.

In both cases, a Metering Coordinator is permitted to install a type 4A metering installation.

The obligation on the Metering Coordinator to install a metering installation that meets the minimum services specification, and the exceptions to this obligation, are discussed in detail in Appendix C1.

Security controls for managing access to small customers' metering installations

A key benefit of advanced meters is their capability to provide a range of services to parties across the value chain, including retailers, DNSPs and third party energy service companies. However, it is important that access to these services is managed appropriately. A key responsibility of the Metering Coordinator is to ensure only parties authorised to access services from advanced meters under the NER are provided access to these services.

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.³²⁰

³¹⁸ Clause 7.15.3(a) of the NER final rule.

³¹⁹ Clause 7.8.10(a) of the NER final rule (malfunctions) and clause 7.9.1 of the NER final rule (inspection, testing, and audit).

³²⁰ AEMC, Framework for open access and common communication standards, Final advice, AEMC, 10 April 2014.

The final rule places obligations on the Metering Coordinator with respect to additional security controls for "small customer metering installations" to implement this gate keeper function.³²¹

These new provisions only apply to "small customer metering installations", i.e. any metering installation that meets or is required to meet the minimum services specification.³²²

Access to energy data and services from the metering installation

While advanced metering services may be provided by the Metering Provider or Metering Data Provider,³²³ the Metering Coordinator is responsible for ensuring that access to advanced services are only provided to parties authorised under the NER.

In summary, under the final rule, the Metering Coordinator must ensure that:³²⁴

- 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;³²⁵ 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;³²⁶
 - a person and for a purpose that is permitted under the NER;³²⁷ or
 - a person and for a purpose to which the small customer has given prior consent or the LNSP, to the extent that, in the Metering Coordinator's reasonable opinion, such access is reasonably required to enable the DNSP to meet its obligations to provide a safe, reliable and secure network.³²⁸

The access parties listed in Table S7.5.1.1 of the NER, which are those parties permitted to request and access the services listed in the minimum services specification are:

- For the remote disconnection service: the LNSP and FRMP.

³²¹ See clause 7.3.2(i) and clause 7.15.4 of the NER final rule.

³²² See the definition of "small customer metering installation" in Chapter 10 of the NER final rule. This definition does not cover manually read meters that are classified as type 4A metering installations - see Appendix C1.

³²³ Subject to relevant technical requirements and prescribed in procedures authorised under the NER.

³²⁴ Clause 7.15.4 of the NER final rule.

³²⁵ Clause 7.15.4(a) of the NER final rule.

³²⁶ Clauses 7.15.4(b)(1) NER final rule.

³²⁷ Clause 7.15.4(b)(2) of the NER final rule.

³²⁸ Clause 7.15.4(b)(3)(ii) of the NER final rule.

- For the remote reconnection service: the LNSP, FRMP and 'Incoming Retailer'.³²⁹
- For the remote on-demand and scheduled meter read services: Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation, and any person any person who has a small customer's prior consent.
- For the meter installation inquiry service: the LNSP, FRMP and any person who has a small customer's prior consent.
- For the advanced meter reconfiguration service: the LNSP and FRMP.

Appendix C1 discusses certain amendments between the draft rule and the final rule with respect to these access parties.

The additional requirement that a Metering Coordinator ensure that an LNSP only be provided with access to services provided by the metering installation to the extent it is reasonably required by the LNSP to meet certain obligations was introduced to the final rule in response to stakeholder concerns that it would not be efficient require the LNSP to obtain customer consent for accessing services which are used for certain network services.³³⁰ Consistent with the draft determination, LNSPs may also access services set out in the minimum services specification as an access party or with the customer's consent. This is discussed in further detail in Appendix D4.

The AER, Jurisdictional Regulators and energy ombudsman also have rights to access data, but only on request to AEMO. Appendix A5 sets out the arrangements for accessing energy and metering data in detail.

Remote and local access to the metering installation

Under the final 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.³³¹

The final rule introduces requirements regarding 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.

³²⁹ 'Incoming Retailer' is defined in Chapter 10 as a retailer that: has a contract with a customer at a connection point; and has initiated the customer transfer process in accordance with the Market Settlement and Transfer Solution Procedures, but which is not yet designated the FRMP for that connection point.

³³⁰ Clause 7.15.4(b)(3) of the NER final rule.

³³¹ Clause 7.15.4(c) and (e) of the NER final 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 existing 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 final rule.

As an extension of its existing 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.³³²

Remote connection and disconnection

The draft rule permitted the Metering Coordinator to disconnect or reconnect a metering installation in defined circumstances.

A number of stakeholders were concerned the draft rule did not include express requirements with respect to safety issues that may arise when reconnecting or disconnecting a metering installation remotely. This issue has been addressed by placing obligations on the Metering Coordinator to only arrange remote disconnections and reconnections in accordance with jurisdictional electricity legislation. As discussed in chapter 5, it is the role of jurisdictional electrical safety regulators to determine how to address safety issues and put in place appropriate detailed requirements.

The final rule prohibits the Metering Coordinator from:³³³

- arranging a disconnection unless that disconnection is effected remotely, at the request of the FRMP or the LNSP, in accordance with the jurisdictional electricity legislation, and (if applicable) in accordance with emergency priority procedures; and
- arranging a reconnection unless that reconnection is effected remotely, at the request of the FRMP, the Incoming Retailer or the LNSP, in accordance with the jurisdictional electricity legislation, and (if applicable) in accordance with emergency priority procedures.

Appendix A3 sets out arrangements for remote connections and disconnections in further detail.

Registration and accreditation requirements relating to security and access

While a number of stakeholders expressed general support for the introduction of additional security controls in the NER to address access to advanced metering installations,³³⁴ the Commission notes that the ENA and NSW DNSPs considered the NER should explicitly require AEMO to put in place processes to audit, test and enforce cyber security and that appropriate enforcement powers should be provided to AEMO.³³⁵

The Commission considers that adequate requirements have been included in the NER in regard to safeguarding the security of, and access to, small customer metering

³³² Clause 7.15.4(e)(2) of the NER final rule.

³³³ Clause 7.3.2(i)(2) and clause 7.3.2(j)(3) of the NER final rule.

³³⁴ See the following submissions on the draft determination: AER, p9; SACOSS, p1.

³³⁵ See the following submissions on the draft determination: ENA, p27; NSW DNSPs, p10.

installations and the energy data within metering installations. In addition to the requirements set out above, under the registration requirements in clause 2.4A.2 a Metering Coordinator at small customer metering installations must 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 installation.³³⁶

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.³³⁷ This requirement is retained in the final rule, with the obligation being imposed on the Metering Coordinator.³³⁸

In addition, the final 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.³³⁹

This obligation applies to all existing 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 must 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.

³³⁶ There are also accreditation requirements on Metering Providers and Metering Data Providers with regards to the security of small customer metering installations. AEMO undertakes regular audits of Metering Providers and Metering Data Providers and has the power to revoke accreditation for non-compliance.

³³⁷ Clause 7.7(c1) of the existing NER.

³³⁸ Clause 7.15.5(b) of the NER final rule.

³³⁹ Clause 7.8.5 of the NER final rule.

The emergency priority procedures will only apply during emergency conditions.³⁴⁰ The requirement on Metering Coordinators to comply with these procedures 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 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 final 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.³⁴¹

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

³⁴⁰ The criteria for emergency conditions will be set out in the procedures.

³⁴¹ See clause 7.8.5(c) of the NER final rule.

- the costs of energy at times of peak demand.

These existing load management schemes generally involve a load control device³⁴² 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.

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.³⁴³ 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 final rule addresses these issues by introducing new provisions relating to network devices. A network device is defined as:

“Apparatus or equipment that:

- (a) enables a *Local Network Service Provider* to monitor, operate or control the *network* for the purposes of providing *network services*, which may include switching devices, measurement equipment and control equipment; and
- (b) is located at or adjacent to a *metering installation* at the *connection point* of a *retail customer*.”

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 may be used to enable the monitoring, operating or controlling of the network for the purposes of providing network services, including the AMI meters that were deployed by Victorian DNSPs.

Under the final rule, a DNSP may install a network device at or adjacent to a metering installation for the purposes of monitoring, operating or controlling the network, provided that the installation and maintenance of the network device does not:

³⁴² 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.

³⁴³ This issue is discussed in more detail in Appendix E.

- adversely impact on the operation of the metering installation, including its compliance with the Rules and procedures authorised under the Rules;
- damage the metering installation; or
- prevent the metering installation being maintained or removed, as required, by or on behalf of the Metering Coordinator.

Further, a DNSP must not remove a metering installation, or any part of a metering installation, in order to install or maintain a network device.³⁴⁴

So that the network device provisions are not used to provide DNSPs with a competitive advantage in contestable markets, DNSPs are not permitted to use the network device to provide services to retail customers or other third parties. However, they may use the network device:

- To provide services to a retail customer where those services are incidental to the provision of network services that are reasonably required to enable the DNSP to meet its obligations to provide a safe, reliable and secure network. The Commission's intention is that the provision of load control services for the purposes of network management will fall within the exception to the general prohibition on LNSPs using network devices³⁴⁵ to provide services to retail customers.
- To reconnect or disconnect a metering installation via remote access where it is permitted under energy laws.

The final rule also contains restrictions on the use of any information contained in a network device 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.

Metering Coordinators also have obligations in relation to network devices. First, they must, at the request of a DNSP, ensure the DNSP receives all reasonable assistance to facilitate access to the metering installation for the installation and maintenance of the network device. All reasonable costs associated with this obligation are to be borne by the DNSP.

Second, a Metering Coordinator must not remove a network device without the consent of the DNSP. This requirement applies to all network devices, regardless of whether the DNSP is currently using the functionality of the device. There is an exception to this provision where the Metering Coordinator proposes to install a new or replacement metering installation at a connection point where there is a network device and, effectively, there is not sufficient space to accommodate both the network device and the metering installation in the metering facility. Under the final rule, this

³⁴⁴ Clause 7.8.6(a)(2) of the NER final rule.

³⁴⁵ For example, the use of load control devices at numerous premises in a DNSP's network as a way of meeting reliability standards rather than augmenting the network.

concept of sufficient space is captured by providing an exception to the prohibition on a Metering Coordinator removing a network device if, in the Metering Coordinator's reasonable opinion, the metering installation cannot be installed in the metering facility in a manner that allows it to:

- operate effectively and in compliance with the Rules and procedures authorised under the Rules; and
- be maintained or removed, as required, by or on behalf of the Metering Coordinator

without removing or adversely impacting the network device.

Where a Metering Coordinator removes a network device because it has reasonably determined that there is not sufficient space to accommodate both the metering installation and the network device in the metering facility, it must notify the LNSP of its removal as soon as practicable after it is removed. The Metering Coordinator is also required to keep a record of the basis upon which it made this determination.³⁴⁶

The final rule also requires AEMO to develop procedures that govern a number of issues relating to network devices, such as when an existing metering installation that is to be replaced by the Metering Coordinator may be a network device, the return of a network device to the LNSP and notification requirements in relation to activities which affect network devices or metering installations, including the provision of records relating to the removal of network devices when requested by the LNSP.

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.

B2B arrangements

The B2B provisions under Chapter 7 of the NER currently provide that Local Retailers, Market Customers and DNSPs must use the B2B e-Hub for B2B Communications.³⁴⁷ "B2B Communications" are defined as communications between Local Retailers, Market Customers and DNSPs relating to an end-user or supply to an end-user provided for in the B2B procedures.³⁴⁸ The "B2B Objective" is that the benefits from B2B Communications to Local Retailers, Market Customers and DNSPs as a whole

³⁴⁶ Under clause 7.8.6(h) of the NER final rule, the record must include, among other things: the address from which the network device was removed; the date and time of removal of the network device; and photographs and measurements of the network device, the metering installation and the metering facility.

³⁴⁷ Clause 7.2A.1 of the existing NER.

³⁴⁸ See Chapter 10 of the existing NER.

should outweigh the detriments to Local Retailers, Market Customers and DNSPs as a whole.³⁴⁹

We understand from AEMO that in practice, the B2B e-Hub is required to be used for communications related to type 5 and 6 metering installations. Further, the Commission understands that some parties choose to use B2B for some type 1-4 metering installation communications, although they are not required to do so.

The draft rule amended the B2B provisions in Chapter 7 of the NER to introduce references to Metering Coordinators in several provisions so that Metering Coordinators would also be required to use the B2B e-Hub for B2B Communications. However, because the draft rule did not amend the chapter 10 definitions of "B2B Communications" or "B2B Objective", the draft changes to Chapter 7 of the NER would be unlikely to have any practical effect and would not extend the types of communications for which the B2B e-Hub must be used.

In response to stakeholders requesting clarification regarding the B2B arrangements, we have revised the approach to this issue in the final rule. The amendments in the draft rule have not been adopted in the final rule, which does not include references to Metering Coordinators in the B2B provisions. Rather, the final rule provides that certain rights and obligations under existing B2B arrangements in the NER will apply to DNSPs who have been appointed (or deemed to have been appointed) as the Initial Metering Coordinator under the transitional arrangements.³⁵⁰

The effect of these changes is that the current scope of the B2B arrangements will remain unchanged. The Commission considers that it is not appropriate as part of this rule change to extend the scope of the B2B arrangements to require other Metering Coordinators, other than the Initial Metering Coordinator, to use the B2B e-Hub or to make use of the B2B e-Hub mandatory for additional metering installation types. If the scope of the B2B provisions was extended to all Metering Coordinators, a range of other amendments to the B2B provisions would need to be made so that there were appropriate governance arrangements. The COAG Energy Council is currently considering advice from the AEMC on this issue.³⁵¹

The final rule requires the IEC to make an IEC recommendation to change the B2B procedures by 1 August 2016.³⁵² AEMO will be required to publish the amended B2B

349 Ibid.

350 This is being implemented in the final rule by introducing a local definition of "Initial Metering Coordinator" in the transitional arrangements (which is a LNSP which is appointed as a Metering Coordinator under clause 11.86.7(a) or deemed to be appointed as a Metering Coordinator under paragraph 11.86.7(c). Under clause 11.86.9 of the NER final rule, certain provisions have also been deemed to include a reference to the Initial Metering Coordinator. As the B2B requirements relate to the Metering Coordinator only apply to the Initial Metering Coordinator, TNSPs will not need to comply with the requirements.

351 AEMC 2015, Implementation advice on the shared market protocol, Final advice, 8 October 2015. Available on the AEMC website.

352 Clause 11.86.6(e) of the NER final rule.

procedures by 1 September 2016.³⁵³ The changes to the procedures are not expected to be significant.³⁵⁴

Transmission connection points and interconnectors

Under the draft rule, AEMO was to be responsible for the collection and processing of metering data and delivery of processed data where the Metering Coordinator is a TNSP.³⁵⁵ Further, the draft rule required AEMO to permit the FRMP to appoint a MDP to perform these metering data services.³⁵⁶

Grid Australia noted in submissions that the TNSP who is engaged as the Metering Coordinator in these circumstances may not have a commercial arrangement with the FRMP appointed Metering Data Provider. Accordingly, Grid Australia recommended amending clause 7.10.6(a) of the NER draft rule to make AEMO or the FRMP responsible for ensuring metering data is provided where the Metering Coordinator is a TNSP.

The final rule clarifies that the Metering Coordinator is not responsible for provision of data for trading intervals in circumstances where the Metering Coordinator is a TNSP, consistent with clause 7.5.1. The words 'except as otherwise specified in clause 7.5.1' have been added in clause 7.10.7(a) of the NER final rule to make it clear that in cases where the Metering Coordinator is a TNSP the provisions of clause 7.5.1 will apply.

The final rule also requires AEMO is responsible for the collection of metering data from a metering installation at an interconnector, the processing of that data and the delivery of the processed data to the metering database.

A1.5.5 Registration requirements for a Metering Coordinator

The Commission has considered the role 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.

Existing 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, e.g. 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.

³⁵³ Clause 11.86.6(f) of the NER final rule.

³⁵⁴ If the AEMC's advice on a shared market protocol is implemented through a rule change process, a second version of the B2B procedures to implement the shared market protocol is expected to made in 2017.

³⁵⁵ Clause 7.5.1 of the NER draft rule.

³⁵⁶ Clause 7.5.1(b)(1) of the NER draft rule.

Certain rights and obligations apply to all Registered Participants under the NER, including:

- participation in the NER dispute resolution process;³⁵⁷
- confidentiality obligations with respect to confidential information;³⁵⁸
- reporting requirements as determined by the AER;³⁵⁹ and
- an obligation to pay participant fees to AEMO.³⁶⁰

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.³⁶¹ However, Metering Providers and Metering Data Providers are not Registered Participants.³⁶²

Metering Coordinator to be a new class of Registered Participant

Under the final rule, the Responsible Person's responsibilities in relation to the provision, maintenance and installation of metering installations and metering data 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, the Commission considers 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.

Some stakeholders considered that it was unclear whether initial Metering Coordinators would be required to meet the registration requirements in relation to small customer metering installations. It is appropriate that the registration

357 Rule 8.2 of the NER.

358 Existing clause 8.6.1(b) of the NER

359 Existing clause 8.7.2(e) of the NER.

360 Existing clause 2.1.2 (f) of the NER.

361 See existing schedule 7.4 of the NER (Metering Provider) and existing schedule 7.6 of the NER (Metering Data Provider).

362 However, as set out in clause 8.2.1(a1), for the purposes of some provisions of rule 8.2 only, Metering Providers and Metering Data Providers who are not otherwise Registered Participants are also deemed to be Registered Participants.

requirements a Metering Coordinator must satisfy are relevant to the services being provided. Therefore the final rule has been clarified to specify that registration requirements relating to access to services listed in the minimum services specification only apply to Metering Coordinators that are appointed at small customer metering installations.³⁶³

Under the final rule, to be eligible for registration as a Metering Coordinator, an applicant must:³⁶⁴

- not be a Market Customer except in two defined circumstances outlined below;
- satisfy AEMO that it is complying with and will comply with the NER and the procedures authorised under the NER;
- in respect of a Metering Coordinator appointed at a small customer metering installation, 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:³⁶⁵
 - this requirement does not apply to initial Metering Coordinators;
- have insurance as considered appropriate by AEMO; and
- pay the prescribed fee in accordance with rule 2.11.

Registration requirements for DNSPs and Generators registering as a Metering Coordinator

A number of stakeholders considered that either a "deemed" or "streamlined" form of registration should be available to DNSPs that become the initial Metering Coordinator or Generators that are appointed to the role of Metering Coordinator for their own generating units.³⁶⁶

The Commission has decided that DNSPs that act as initial Metering Coordinators under the transitional arrangements will still be required to register as a Metering Coordinator. It is appropriate that all Metering Coordinators be required to undergo registration with AEMO and satisfy the registration criteria. It is also appropriate that

³⁶³ Clause 2.4A.2(a)(3) of the NER final rule.

³⁶⁴ Clause 2.4A.2 of the NER final rule.

³⁶⁵ This requirement does not apply to a Generator that is only appointed as a Metering Coordinator at the distribution connection points of its own generating units. See clause 2.4A.2(c) of the NER final rule.

³⁶⁶ See the following submissions on the draft determination: AGL, p5; Victorian DNSPs, p30.

the same registration requirements apply to both DNSPs as the initial Metering Coordinator and to competitive Metering Coordinators, subject to the exception discussed below.

Similarly, it is also appropriate that Generators be required to register with AEMO before being permitted to undertake the role of Metering Coordinator for their own generating units. While there are no consumer protection issues, a Metering Coordinator at a generation connection point will still be responsible for undertaking functions that are essential to the operation of the NEM.

However, the Commission has determined that the requirement to have an appropriate security control management strategy does not apply to initial Metering Coordinators³⁶⁷ or Generators that are appointed at the connection points/ of their own generating units.³⁶⁸ The objective of the requirement to have an appropriate security control management strategy in place is to protect customer metering installations from unauthorised remote access. This is not relevant to:

- Initial Metering Coordinators, who are only responsible for type 5 and 6 metering installations, which are not small customer metering installations and generally are not capable of remote access; or
- Metering Coordinators that are only appointed at the metering installations of their own generating units at distribution connection points.

Transmission connection points

TNSPs and FRMPs that act as Metering Coordinators in relation to transmission connection points would also need to be registered as a Metering Coordinator.

The final rule excludes LNSPs and FRMPs that are only appointed as a Metering Coordinator at transmission connection points from the prohibition on a Market Customer being registered as a Metering Coordinator.³⁶⁹ This is because the competition concerns raised regarding a Metering Coordinator that is a retailer obtaining information that may assist it to win back a customer do not apply at transmission connection points, since only the LNSP or the FRMP can be the Metering Coordinator.

The final rule also allows AEMO to exempt TNSPs from satisfying one or more of the registration requirements when the TNSP is registering as a Metering Coordinator 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.³⁷⁰

³⁶⁷ Clause 11.86.7(g)(1) of the NER final rule.

³⁶⁸ Clause 2.4A.2(c) of the NER final rule.

³⁶⁹ Clause 2.4A.2(b)(1) of the NER final rule.

³⁷⁰ Clause 2.4A.1 of the NER final rule.

This exemption power is appropriate because:

- under the existing NER provisions and the final 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;³⁷¹ and
- the TNSP would already need to be a Registered Participant by virtue of being registered as a TNSP.

Also, the requirement that a Metering Coordinator must have processes in place to determine that a person seeking access to a service listed in the minimum services specification is an “access party” in respect of that service does not apply at transmission connection points.³⁷² This is because these requirements only apply to small customer metering installations.

As noted above, the arrangements for interconnectors do not change under the final 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.

Exceptions to the prohibition against Market Customers registering as a Metering Coordinator

Under the final rule, a Market Customer (e.g. 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, e.g. a subsidiary.

This restriction has been introduced under the final 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 FRMP (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 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.

³⁷¹ Clause 7.5.1(a) and 7.2.1(c) of the NER final rule.

³⁷² Clause 2.4A.2(a)(3) of the NER final rule.

However, the final rule has introduced two exceptions to the prohibition against Market Customers registering as a Metering Coordinator compared to the draft rule.

First, as discussed above, the final rule excludes LNSPs and FRMPs that are only appointed as a Metering Coordinator at transmission connection points from the prohibition on a Market Customer being registered as a Metering Coordinator.³⁷³ Competition concerns do not arise in this scenario if a customer changes retailer, since the new retailer must appoint either the LNSP or itself as Metering Coordinator. Therefore concerns raised regarding a Metering Coordinator that is a retailer obtaining information that may assist it to win back a customer do not apply at transmission connection points.

Second, the final rule does not apply the prohibition on Market Customers registering as a Metering Coordinator to Generators that are only appointed to perform the role of Metering Coordinator at the connection points of its own generating units at distribution connection points.³⁷⁴ This is because the concerns that arise in relation to retailers having access to the data of other retailers do not apply to Generators that act as their Metering Coordinator only. While it is important that the Metering Coordinator role does not act as a barrier to customers switching retailers, there is not a comparable issue for generators.

A1.5.6 AEMC response to other stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

³⁷³ Clause 2.4A.2(b)(1) of the NER final rule.

³⁷⁴ Clause 2.4A.2(b)(2) of the NER final rule.

Table A1.1 Stakeholder views and AEMC response

Stakeholder	Issue	AEMC response
AGL, submission on the draft determination, p5.	AGL requested that for Small Generator Aggregators (SGA), the final rule establishes the Market Customer as the default party that appoints the Metering Coordinator as this will remove the complexity for small customer sites. Following further clarification being provided, we understand that AGL's concern was that SGAs should be able to appoint their own Metering Coordinator.	Under the NER final rule, the FRMP at a connection point must ensure a Metering Coordinator is appointed in respect of the connection point ³⁷⁵ and may itself appoint a Metering Coordinator at that connection point. ³⁷⁶ Each generation unit of a SGAs generation portfolio must have a separate connection point. Therefore, as the FRMP at the connection point, the Market Small Generator Aggregator will be able to appoint the Metering Coordinator in respect of the connection point.
AGL, supplementary submission on the draft determination, p19	AGL commented that clause 7.15.2(g) of the NER draft rule regarding the requirement on the Metering Coordinator not to prevent, hinder or impede a LNSP from accessing a metering installation or connection point for the purposes of reconnecting or disconnecting the connection had not been linked to a Metering Coordinator's obligations under clause 7.3.2 of the NER draft rule.	Clause 7.3.2(g) of the NER final rule has been moved from clause 7.15.2 to clearly reflect that this requirement comprises part of the Metering Coordinator's role in relation to a connection point.
AusNet Services, supplementary submission on the draft determination, p7, item 5	AusNet Services queried whether the different wording in clause 7.3.2(b) and (d) which use the terms "agreement", in relation to the MC and MP's relationship and "appoint" in relation to the Metering Coordinator and Metering Data Provider's relationship respectively, indicate a different approach and obligations for these two relationships.	References to the Metering Coordinator entering into an "agreement" with the Metering Provider and Metering Data Provider have been amended to "appoint" throughout the final rule for consistency. This includes clause 7.3.2(b) and (c) of the NER final rule.
AusNet Services,	AusNet services submitted that it is unclear what emergency	Clause 7.8.5 does not attempt to define what emergency

³⁷⁵ Clause 7.2.1(a)(1) of the NER final rule.

³⁷⁶ Clause 7.6.2(a)(1) of the NER final rule.

Stakeholder	Issue	AEMC response
supplementary submission on the draft determination, p13, item 24.	would drive a requirement for "special" access to metering data under clause 7.8.5 of the NER draft rule.	would drive a requirement for 'special' access to metering data. While there may be no emergency conditions that require metering data at present, in light of the capacity of an increasing amount of data to be captured by advanced meters, AEMO may wish to consider the availability of energy data in an emergency condition in future.
AusNet Services, supplementary submission on the draft determination, p14.	AusNet Services submitted that under an emergency when the DNSP is utilising load or customer switching for load reduction and load cycling all installations will be potentially be involved. For example it is envisaged that smart meter capabilities will enable the DNSP, looking to minimise the impact of load reduction in an emergency, to switch individual customers rather than at remotely operated network devices. Hence a DNSP could switch off all customers in an area but retain the a number of sensitive loads (e.g. hospital, fire station, traffic lights) on supply.	Noted. DNSPs will be able to negotiate such priority in their contracts with the Metering Coordinator. Also, under the final rule AEMO is responsible for establishing, maintaining and publishing the emergency priority procedures. Where a Metering Coordinator supplies services to an LNSP from a metering installation that is affected by an emergency condition, the emergency priority procedures will set out which services the Metering Coordinator must prioritise at the request of the LNSP.
ENA, submission on the additional consultation paper, p13.	The ENA considers it is not clear that TNSPs will necessarily be the "LNSP" for their own transmission connection points, given the way the term "LNSP" is defined in the NER. They note this is an existing problem in the rules, and that "To a large extent this problem seems to be ignored in the practical application of the existing NER chapter 7 provisions to transmission connection points, with the relevant parties assuming that "LNSP" must mean the TNSP for the TNSP's own transmission connection points".	This issue arises because of the way in which the term "LNSP" is defined in the chapter 10 of the existing NER. To amend this would require significant changes as it would affect the definition of LNSP and so every instance of its use in the rules. Such a change is not within the scope of this rule change.
ENA, submission on the additional consultation paper, p24.	The ENA considers that to avoid uncertainty and inconsistency with the load shedding and system security requirements of NER chapter 4 and Part 8 of the NEL, the proposed new clause 7.8.5 should make clear that any emergency priority procedures developed by AEMO under section 7.8.5(b) must be consistent with and made in	The load shedding regime in Part 8 of the NEL has a specific purpose which we consider to be distinct from the purpose of the emergency priority procedures. The emergency priority procedures only apply where a DNSP has negotiated for services to be provided from a metering installation by a Metering Coordinator. For this reason we do not consider the

Stakeholder	Issue	AEMC response
	accordance with any procedures developed under the load shedding regime set out in Part 8 of the National Electricity Law and section 4.3.2(h) of the NER.	proposal necessary.
ENA, submission on the additional consultation paper, p24.	Further to the above comment, the ENA considered that the Metering Coordinator's and LNSP's obligations under clause 7.8.5 must also be subject to the load shedding and system security requirements of chapter 4.	The Commission does not consider that it was necessary to make the Metering Coordinator's and LNSP's obligations under clause 7.8.5 be subject to the load shedding and system security requirements of chapter 4, as suggested by the ENA. The role of Metering Coordinator under clause 7.8.5 of the NER final rule is to prioritise service requests. The Metering Coordinator is not involved in load or system security – it arrange services such as remote disconnection of connection points, or meter installation inquiries, at the request of a party under a commercial arrangement with the requesting party. LNSP obligations to comply with procedures relate only to only sending a request when an emergency condition is present. This would operate concurrently with any LNSP obligations in Chapter 4.
ENA, submission on the draft determination, p27.	The ENA considered that the AEMC should expand guidance to AEMO on prudential requirements for Metering Coordinators to ensure their capability to manage high consequence events, including cyber security issues.	Chapter 2 sets out the registration requirements for Metering Coordinators, which include insurance requirements. The Commission considers that AEMO is best placed to make an assessment of the insurance requirements for Metering Coordinators.
Energex, submission on the draft determination, Attachment A, p4.	Energex seeks further clarification from the AEMC on the obligation that the Metering Coordinator has "insurance as considered appropriate by AEMO" to ensure Metering Coordinators have sufficient coverage for high consequence events, eg mass meter recalls.	AEMO is best placed to make an assessment of the insurance requirements for Metering Coordinators.
Energex, submission on the draft determination,	Energex agreed that AEMO is the appropriate body to develop the emergency priority procedures, but recommended that clause 7.8.5 be amended to include a	See above response to ENA.

Stakeholder	Issue	AEMC response
Attachment A, p6.	requirement that the procedures be consistent with the load shedding regime set out in Part 8 of the NEL and the system security requirements in Chapter 4 of the NER.	
Energex, submission on the draft determination, Attachment A.	Energex also recommends that the clause 7.8.5 be amended to make it clear that all Metering Coordinators operating in the LNSP's area (not only those contracted to supply services to the LNSP) must comply with the emergency priority procedures. Energex did not consider it reasonable to expect LNSPs to pay for services under emergency conditions.	The emergency priority procedures only act to prioritise service requests that a DNSP would otherwise be provided under a commercial agreement with the Metering Coordinator.
Energex, submission on the draft determination, Attachment A, p9.	Energex was of the view that clause 11.78.7(d)(3) should more clearly reflect the position that a new Metering Coordinator would only be able to take over responsibility for providing services for existing type 5/6 meters if it reaches a commercial agreement to acquire or lease the existing meters. Energex was concerned that the current drafting may leave DNSPs financially disadvantaged through the termination of their role as Metering Coordinator.	The final rule does not prevent the FRMP from appointing a party other than the LNSP to act as Metering Coordinator for an existing type 5 or 6 metering installation. Neither the retailer nor the incoming Metering Coordinator will acquire the existing meter at the premises as a consequence of the FRMP's appointment of another Metering Coordinator. Rather, 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 at the relevant connection point. The Commission is of the view that these issues do not need to be addressed in the transitional provisions and can be managed commercially.
Grid Australia, submission on additional consultation paper, p5	Confirm that the proposed emergency management requirements are intended for the retail market segment.	The emergency management provisions under clause 7.8.5 of the NER final rule apply to all connection points.
Landis+Gyr, p8.	Landis+Gyr are concerned that Metering Coordinators will develop unique security systems for the meter and that a new Metering Coordinator's systems may be incompatible,	The AEMC's open access review recommended that a common metering protocol for communicating with the meters should not to prescribed, rather the metering service providers

Stakeholder	Issue	AEMC response
	possibly resulting in meter churn.	(MC, MP and MDP) should be able to determine the communication protocol (and associated security) that suits their technology. This does mean that there is a risk that a metering provider may install meters with a unique security system. However, that would be a commercial risk they are best placed to assess and bear. The Commission considers that there are likely to be significant commercial incentives on metering businesses not to develop incompatible security systems, and on FRMPs and Metering Coordinators not to procure services that utilise such meters, as that would risk the asset being replaced before the relevant businesses have been able to earn a return on their costs.
Metropolis, submission on the draft determination, p8.	Metropolis considers that emergency management requirements are at odds with other positions on access to Metering Coordinator services. Metropolis was concerned that mandating that a Metering Coordinator must comply with emergency priority procedures would remove any incentive for a DNSP to negotiate for these services from the Metering Coordinator. Metering Coordinators may have no opportunity to recover their costs, and this could present a barrier to entry.	LNSPs will be able to negotiate for services to be provided from a metering installation with the Metering Coordinator. The emergency priority procedures will not require a Metering Coordinator to provide additional services to the LNSPs other than those already negotiated for with the Metering Coordinator. Where a Metering Coordinator supplies services to an LNSP from a metering installation, the emergency priority procedures will set out which services the Metering Coordinator must prioritise at the request of the LNSP. In addition, the emergency priority procedures will also provide a common framework for what constitutes an emergency and which services can be prioritised. This will streamline the LNSP's ability to manage emergencies, particularly when more than one Metering Coordinator has metering installations within its network.
Origin, submission on the draft determination, p3.	When a meter is transitioned to the Metering Coordinator, the existing DNSP or FRMP should be responsible for ensuring it has no existing defects in the event of Metering Coordinator default.	A change in ownership of a meter would be subject to commercial agreement. The Commission expects that the terms of that agreement would address such issues.

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 final rule.

The Metering Provider and Metering Data Provider retain their current roles under the final rule.

The general approach with regard to introducing the Metering Coordinator role in the NER has been to impose obligations on the Metering Coordinator rather than impose new obligations on 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 final rule in relation to the following matters:

- In relation to "small customer metering installations" (a new defined term in the NER), the final rule introduces restrictions on 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 to small customer metering installations. 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.
- As part of the drafting of the new Chapter 7 of the NER in the final rule, the Commission has identified several existing obligations that do not state which person is required to comply with that obligation. This is addressed in the final rule, which specifies who is responsible for those obligations. One such obligation has been clarified as being imposed on Metering Providers (in relation to metering installation components) and one on Metering Data Providers (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 final rule in relation to the roles and responsibilities of a Metering Provider and Metering Data Provider under the 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 draft determination 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.³⁷⁷

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.³⁷⁸ 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.³⁷⁹

A2.3 Stakeholder views

A2.3.1 Consultation paper and initial workshops

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

³⁷⁷ COAG Energy Council, rule change request, p7.

³⁷⁸ AEMC, Framework for open access and common communication standards, Final advice, AEMC, 10 April 2014.

³⁷⁹ Ibid., p62.

COAG Energy Council's proposal for a separate Metering Coordinator role.³⁸⁰ 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.³⁸¹

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.

A2.3.2 Draft determination and operational workshop

During the operational workshop some stakeholders raised concerns about a divergence in the way that the references to agreements between the Metering Coordinator and the Metering Provider, and the Metering Coordinator and Metering Data Provider, are expressed. Specifically, the draft rule (consistent with the existing NER) expressly referred to a Metering Coordinator having to "enter into an agreement with a Metering Provider",³⁸² however there is no such reference with respect to the Metering Coordinator's engagement of the Metering Data Provider. Stakeholders were concerned that this divergence in approach may give rise to uncertainty as to how the Metering Coordinator role is incorporated into the regulatory framework.

The AER suggested that clarification was required in relation to new property developments and who in these circumstances would appoint the Metering Coordinator. They were concerned that arrangements for new property developments should not prevent customers from freely choosing their retailer at any time.³⁸³

Lumo and Red Energy noted that the NER prevents a Market Generator and a Market Customer that is involved in the trading of energy from being registered as a Metering Provider or a Metering Data Provider for connection points in respect of which the metering data relates to its own use of energy. They questioned whether it is the intention of this rule to allow Market Customers to be able to be registered as a Metering Provider or Metering Data Provider for connection points where it is not the FRMP.³⁸⁴

During the operational workshop held on 16 July 2015, the Victorian DNSPs indicated that they considered it necessary for the responsibilities for the provision of advanced metering services to be clearly defined in the NER so that:

³⁸⁰ ERM Power, submission on consultation paper, p6; ERAA, submission on consultation paper, p2; AGL, submission on consultation paper, p3.

³⁸¹ Vector's submission to the consultation paper.

³⁸² Clause 7.3.2(b) of the draft NER.

³⁸³ AER, submission on draft determination, p5.

³⁸⁴ Lumo, submission on draft determination, p7; and Red Energy, submission on draft determination, p7.

- the accreditation requirements for the provision of advanced metering services can be included in AEMO's existing accreditation requirements for the Metering Provider and Metering Data Provider roles; and
- the B2B procedures can clearly identify who receives requests for services.

A2.4 Commission's analysis

Changes between the draft and final rule

The majority of the final rule, as it relates to the role and responsibilities of Metering Providers and Metering Data Providers, remains unchanged from the draft rule. However, four key changes that have been made to the draft rule are:

- The Metering Provider no longer has an obligation to ensure that any metering installation established at a connection point for a new connection is a type 4 metering installation that meets the minimum services specification. This is solely the responsibility of the Metering Coordinator.
- The final rule clarifies the nature of the appointment of the Metering Provider or Metering Data Provider as it relates to the regulatory obligations that they must perform³⁸⁵ and the discretionary services³⁸⁶ that they may provide.
- The final rule also clarifies the obligations imposed on a Metering Data Provider to provide metering data and relevant NMI Standing Data to authorised persons and provide access to metering data and NMI Standing Data in the metering data services database to such persons, if required under AEMO procedures.
- The final rule introduces a prohibition on Market Customers acting as Metering Provider or Metering Data Providers at any connection point.

In assessing whether any changes are required to the Metering Provider and Metering Data Provider roles as consequence of introducing the Metering Coordinator role in the NER, 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;

³⁸⁵ Regulatory obligations in this context refers to those services that a Metering Coordinator must perform pursuant to its appointment by the retailer, large customer or Non-Market or exempt Generator.

³⁸⁶ Discretionary services in this context refers to services that a Metering Coordinator may offer on terms commercially agreed with the party requesting the service.

- 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.³⁸⁷ This engagement is given effect through a commercial 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;³⁸⁸ and
- programming and certifying metering installations to required standards,³⁸⁹ and providing and maintaining the security controls of a metering installation.³⁹⁰

These responsibilities require a particular skill set, including technical knowledge and understanding of meters, instrument transformers, connection configurations, software access and testing regimes.³⁹¹

Requirements under the final rule

The final rule requires a Metering Coordinator at a connection point to appoint a Metering Provider for the provision, installation and maintenance of a metering

³⁸⁷ Under existing clause 7.2.5 of the NER, the Responsible Person must (subject to the metrology procedure) allow another person to engage a Metering Provider to install a metering installation.

³⁸⁸ Existing clause 7.4.1(a) of the NER.

³⁸⁹ Existing clause S7.4.3(b) of the NER.

³⁹⁰ Existing clause 7.4.1(b) of the NER.

³⁹¹ Existing clause S7.4.3 of the NER.

installation at that connection point.³⁹² This appointment is given effect through a commercial arrangement between the parties, with supporting requirements in the NER. A minor change has been made between the draft and final rules so that the final rule refers to the Metering Coordinator's "appointment" of a Metering Provider, rather than "enter into an agreement with" a Metering Provider for consistency with the way in which the provision is expressed in respect of Metering Data Providers.³⁹³ This was in response to stakeholder views at the operational workshop.

Under the final 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 final rule imposes obligations on the Metering Coordinator (in addition to those currently imposed on the Responsible Person) in relation to managing access to "small customer metering installations",³⁹⁴ including services provided by, and energy data held in, such installations.

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.³⁹⁵

In practice, the Metering Provider will have a role in ensuring aspects of these obligations are met. However, the general approach under the final 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 final rule introduces restrictions on which parties can obtain passwords allowing local access and 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 to such installations.

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

³⁹² Clause 7.3.2(a) of the NER final rule.

³⁹³ Clauses 7.3.2(b) and (d) of the NER final rule.

³⁹⁴ 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" to be introduced in Chapter 10 of the NER under the final rule.

³⁹⁵ Clause 7.15.4 of the NER final rule.

remote access to the metering installation or energy data held in the metering installation.³⁹⁶

As part of the drafting of the new Chapter 7 of the NER in the final 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 final rule, which specifies who is responsible for those obligations. In one case, such an obligation has been clarified as being imposed on 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 final rule.³⁹⁷

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.³⁹⁸

Under the draft rule the Metering Provider had a new obligation to ensure that any metering installation established at a connection point for a new connection (e.g. 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.³⁹⁹ This obligation was included to address a concern that there may not be a FRMP at a new connection point, prior to a property developer arranging for a meter to be installed by a Metering Provider.

This obligation has been removed between the draft and final rules because the Commission considers that the final rule is clear that a metering installation may only be installed by a Metering Provider and that a Metering Provider must be appointed by a Metering Coordinator who, in turn, must be appointed by a FRMP. Accordingly, to receive energy supply at a new connection, a property developer would need to arrange for a metering installation to be installed through the FRMP (ie the retailer) at the connection point. Consequently it is only necessary to impose the obligation to install a type 4 metering installation that meets the minimum services specification on the Metering Coordinator. These arrangements will not limit the ability of customers to appoint a new retailer when they move in to the premises.

The Commission notes this is different from existing arrangements where the LNSP is generally the Responsible Person at small customer connection points and would arrange the new connection in that capacity.

³⁹⁶ Clause 7.15.4(e)(2) of the NER final rule.

³⁹⁷ The current obligation is set out in existing clause 7.3.1 of the NER.

³⁹⁸ See new clause 8.6.1A and paragraph (d) of the substituted definition of Registered Participant in the final rule.

³⁹⁹ Clause 7.8.3(b) of the NER 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.⁴⁰⁰ Metering Data Providers must also provide and maintain the security controls associated with metering data services in accordance with the NER.⁴⁰¹

Requirements under the final rule

The final rule requires a Metering Coordinator at a connection point to appoint a Metering Data Provider for the collection, processing, storage and delivery of metering data from a metering installation at that connection point.⁴⁰² This appointment is given effect through a commercial arrangement between the parties, with supporting requirements in the NER.

Under the final rule, a Metering Data Provider retains its role 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 under the new framework for competitive metering services. However, as with the Metering Provider, the general approach with regard to introducing the Metering Coordinator role in the NER has been to impose 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 under the NER.

The Metering Data Provider currently has a role in providing metering data to people that are authorised to access such data. A number of amendments have been made to the existing NER to clarify various parties' rights to receive metering data and to access metering data in the Metering Data Provider's metering data services database. The final rule provides that the Metering Data Provider must provide metering data and relevant NMI Standing Data to the parties listed in clause 7.15.5(c)(1) to 7.15.5(c)(5) of the NER final rule, in accordance with the rules and procedures.⁴⁰³ The Metering Data Provider is also required to provide access to the metering data to such parties and NMI Standing Data in the metering data services database if required in procedures

400 Existing clause 7.4.1A(a) of the NER.

401 Existing clause 7.4.1A(b) of the NER.

402 Clause 7.3.2(d) of the NER final rule.

403 Clause 7.10.3(a) of the NER final rule.

authorised by AEMO.⁴⁰⁴ The arrangements for accessing energy and metering data under the final rule are addressed in detail in Appendix A5.

As part of the drafting of the new Chapter 7 of the NER in the final 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 final rule, which specifies who is responsible for those obligations. In one case, such an obligation has been clarified as being imposed on the Metering Data Provider: the obligations in relation to periodic energy metering that are now contained in clause 7.10.5(a) of the NER final rule.⁴⁰⁵

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.⁴⁰⁶

A2.4.3 Nature of the appointment of the Metering Provider and Metering Data Provider

The final rule clarifies the division between services provided via a metering installation that are a regulatory obligation versus those that are provided as a discretionary service. In doing so, the final rule clarifies that Metering Providers and Metering Data Providers must perform all of their respective regulatory obligations under the NER, and procedures that are authorised under the NER, on terms and conditions that are to be commercially agreed with the appointing Metering Coordinator.⁴⁰⁷

The final rule also clarifies that Metering Providers and Metering Data Providers may supply discretionary services to parties other than the Metering Coordinator on a commercial basis, subject to the terms of its appointment agreed with the Metering Coordinator,⁴⁰⁸ the NER and procedures under the NER.

The final rule does not stipulate whether the Metering Provider or Metering Data Provider is responsible for the provision of the specific services set out in the minimum services specification or discretionary services that are not otherwise set out in the minimum services specification. The Commission considers assigning the responsibility of providing each service may inadvertently drive particular technology and/or business outcomes. The Commission considers the arrangements should be sufficiently flexible to allow for multiple business models to develop.

404 Clause 7.10.2(a)(3) of the final rule. See exception in clause 7.5.1 of the NER final rule.

405 The current obligation is set out in existing clause 7.11.5 of the NER.

406 See new clause 8.6.1A and paragraph (d) of the substituted definition of Registered Participant in the final rule.

407 Clause 7.4.3(a) of the NER final rule.

408 Clause 7.4.3(b) of the NER final rule.

Accordingly, Metering Providers and Metering Data Providers may provide such services subject to commercial arrangement with the relevant party and applicable technical requirements set out in AEMO procedures.

A2.4.4 Registration and 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.⁴⁰⁹

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.⁴¹⁰

The final 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.⁴¹¹

While the Commission considers that the roles and responsibilities of a Metering Provider and Metering Data Provider under the final rule are similar to their existing roles and 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.

Under the final 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.⁴¹²

⁴⁰⁹ Existing schedule 7.4 of the NER for Metering Providers and existing schedule 7.6 of the NER for Metering Data Providers.

⁴¹⁰ A material breach of the provisions of the NER or of the procedures under the NER is defined in existing clause 7.4.3(aa) of the NER.

⁴¹¹ Clauses S7.2.5 and S7.3.4 of the NER final rule.

⁴¹² Clause 8.6.1A of the NER final rule.

The key confidentiality obligations to which Metering Providers and Metering Data Providers will be subject as a result of this amendment to the NER 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 final rule.

The final rule prohibits a Market Customer from being registered as a Metering Provider or Metering Data Provider at any connection point.⁴¹³ The existing arrangements only prohibit Market Customers from being registered as Metering Providers or Metering Data Providers at a connection point in respect of which the metering data relates to its own use of energy. This prohibition has been extended to all connection points for consistency with the prohibition on Market Customers being registered as Metering Coordinators. The prohibition does not apply where the relevant entity is a Network Service Provider.⁴¹⁴

A2.4.5 AEMC response to stakeholder other views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

⁴¹³ Clause 7.4.1(f) and clause 7.4.2(f) of the NER final rule.

⁴¹⁴ Clause 7.4.1(g) and clause 7.4.2(g) of the NER final rule.

Table A2.1 Stakeholder views and AEMC response

Stakeholder	Issue	AEMC response
Metering Data Providers, operational workshop	Concerns were raised at the operational workshop regarding the removal of clause 7.3A, which provides that the FRMP is responsible for the payment of all costs associated with the provision of metering data services. Metering Data Providers were concerned this would place additional commercial risk on them in the event of a payment dispute as suspending the provision of metering data services would leave them in breach of the Meter Data Provider Service Level Procedures.	The final rule clarifies the commercial nature of the appointment of the Metering Data Provider by the Metering Coordinator for the provision of the Metering Data Provider's regulatory obligations under the NER and procedures. The final rule therefore makes it clear that the Metering Coordinator is responsible for payment for the Metering Provider's services in relation to its regulatory obligations. If the Metering Data Provider terminates its appointment with the Metering Coordinator, the Metering Coordinator will be responsible for appointing a new Metering Data Provider for the relevant connection points to ensure the ongoing provision of metering data services in accordance with the NER. Stakeholders will have the opportunity to participate in AEMO's consultation process on how the Meter Data Provider Service Level Procedures are to be updated, during which concerns regarding obligations in the procedures can be raised.
AusNet Services, submission on draft determination, p21.	AusNet commented on the categories of registration as set out in Table S7.3.2.1	The proposed change has been reflected in the revised Chapter 7.
NSW DNSPs, submission on draft determination, p9.	NSW DNSPs considered that where a customer appoints a Metering Provider for the provision and maintenance of a metering installation, the Metering Coordinator should be required to agree to supply meters to a metering provider as part of the terms and conditions of an agreement pursuant to 7.3.2(b)(1)(ii).	This change is not required. Clause 7.3.2 provides for the situation where the MC appoints a Metering Provider "for the provision and maintenance" of the metering installation and "another person" (such as a customer) appoints a different Metering Provider "to install" the metering installation (clause 7.3.2(a)(2)). The reference to the Metering Coordinator entering into an agreement with a Metering Provider for the "provision" of the metering installation makes it clear that this Metering Provider is required to supply the meter, which the

Stakeholder	Issue	AEMC response
		<p>other Metering Provider will install. In practice, these two Metering Providers will need to work together, with one Metering Provider providing the meter to the other Metering Provider to install. However, it is not appropriate for the NER to place an obligation on the Metering Coordinator to supply a meter, as that is an obligation that the NER places on the Metering Provider that is appointed by the MC. The NSW DNSPs propose adding this obligation as part of the Metering Coordinator's agreement with the Metering Provider under clause 7.3.2(b)(1)(ii). But that agreement is with the wrong Metering Provider and the proposed obligation could not be added to this agreement. The agreement referred to in clause 7.3.2(b)(1)(ii) is between the Metering Coordinator and the Metering Provider that it appoints for provision and maintenance. There is no agreement between the Metering Coordinator and the Metering Provider appointed by another person for installation, and it would not be appropriate or practical to require the Metering Coordinator to enter into an agreement with this Metering Provider that is appointed by another person.</p>

A3 Retailers' roles and responsibilities

Summary

This appendix provides an overview of the role and responsibilities of retailers under the final rule.

Retailers, as the Financially Responsible Market Participant (FRMP) 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.

Under the final rule, a Market Customer may not be registered as a Metering Coordinator.⁴¹⁵ Accordingly, a retailer that wishes to establish a Metering Coordinator business, including to provide metering services to its own retail customers, will need to do so through a separate legal entity.

The retailer, as the FRMP, 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.⁴¹⁶ The Responsible Person's current responsibility for the provision, installation and maintenance of a metering installation will be performed by the Metering Coordinator under the final rule. The Metering Coordinator role will be able to be performed by any person that satisfies the applicable registration requirements.

Under the final rule, retailers will be able to arrange remote de-energisation and re-energisation 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 final rule amends the NERR to require that retailers and DNSPs inform each other when they arrange the de-energisation or re-energisation of a premises, and to manage issues related to consumers with life support equipment. A retailer's ability to arrange for the de-energisation or re-energisation of a customer's premises will be subject to applicable requirements of relevant jurisdictional safety laws.

Under the final rule, retailers will be able to arrange an interruption to the supply of electricity to a customer for the purposes of installing, maintaining, repairing

⁴¹⁵ This rule does not apply to a person that is only appointed, or proposed to be appointed as Metering Coordinator in respect of one or more connection points or proposed connection points on a transmission network, or that connect a Generator's generation unit to a distribution network. See Appendix A1 for further information on these exceptions.

⁴¹⁶ See Appendix A1 for an explanation of who is required to act as the Responsible Person for type 1-4 metering installations under the existing NER.

or replacing metering equipment. The final rule sets out the process retailers must follow when arranging such an interruption, defined as a "retailer planned interruption" in the final rule, including requirements to notify affected customers.⁴¹⁷

The final rule also introduces an ability for the retailer to arrange the de-energisation of a premises if the customer fails to give safe and unhindered access to the premises for the retailer to carry out its responsibilities with regard to metering.

The final rule does not introduce any arrangements with respect to the Metering Coordinator role that operate in conjunction with the retailer of last resort (ROLR) provisions in the NERL in the event a retailer fails. The Commission is of the view that the powers afforded to AEMO under the NERL are sufficiently flexible to allow it to introduce requirements in the ROLR procedures (if necessary) to manage the impacts of meter churn following a ROLR event. Under the final rule, AEMO must amend and publish the ROLR procedures by 1 September 2016 to take into account changes made under the final rule.

The final rule makes a number of amendments to the model terms and conditions for standard retail contracts to reflect the retailer's new rights and obligations under the final rule. Retailers will be required to make the required alterations to their standard retail contracts by 1 December 2017, being the same date when relevant rights and obligations of retailers commence.

A3.1 Introduction

This appendix provides an overview of the role and responsibilities of retailers in relation to metering services under the final rule. The relationship between retailers and consumers is discussed in Appendix B.

This appendix covers:

- the existing responsibilities of a retailer under the NER (with respect to the provision of metering services) and NERR (with respect to de-energisation, re-energisation and supply interruptions);
- the COAG Energy Council's rule change request covering the proposed responsibilities of a retailer;
- stakeholder views including submissions to the consultation paper, draft determination and additional consultation paper, and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for its final rule.

⁴¹⁷ A retailer planned interruption refers to a temporary curtailment of supply for the purposes of installing, maintaining, repairing or replacing an electricity meter. It does not include de-energisation for non-payment or other for other reasons specified under Part 6 of the NERR.

A3.2 Existing arrangements

A3.2.1 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.⁴¹⁸

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.⁴¹⁹
- 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 existing NER provides 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.⁴²⁰ This provision is discussed further in Appendix A2.

The retailer has a range of other responsibilities relating to metering services under the existing NER.⁴²¹ For example, where a retailer is the FRMP for a connection point, it is responsible for the payment of all metering services costs at that connection point.⁴²²

The existing 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.⁴²³ The deemed standard connection contract provides

⁴¹⁸ Existing clause 7.1.2 of the NER. The retailer is generally the Market Participant and the FRMP in relation to the connection points of each of its retail customers.

⁴¹⁹ Existing clauses 7.1.2(a)(3) and 7.3.1(d)-(f) of the NER.

⁴²⁰ Existing clauses 7.4.2(d) and 7.4.2A(f) of the NER.

⁴²¹ 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 existing clauses 7.2.4 and 7.2.4A of the NER.

⁴²² Existing 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.

⁴²³ 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.

that the DNSP will provide, install and maintain equipment for the provision of customer connection services at the customer's premises.⁴²⁴ 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.

A3.2.2 Requirements regarding de-energisation and re-energisation

Initiating de-energisation and re-energisation services

Retailers have a number of grounds under the existing NERR on which to arrange the de-energisation⁴²⁵ of a customer's premises, including for the non-payment of energy charges.⁴²⁶ Under the existing NERR, a retailer must not arrange for a customer's premises to be de-energised in certain prescribed circumstances, including those circumstances where the DNSP is prohibited from initiating a de-energisation..⁴²⁷

A retailer or DNSP that has arranged for the de-energisation of a customer's premises is required to arrange for re-energisation of the premises once the matter that led to the de-energisation has been rectified and the customer that requested the re-energisation has paid any re-energisation charges.⁴²⁸

Performing de-energisation and re-energisation services

The existing NERR permits DNSPs to perform de-energisation and re-energisation services,⁴²⁹ and in practice it is the only party that does so.⁴³⁰

When a DNSP carries out a de-energisation or re-energisation service it must determine how to provide the service. Outside of Victoria, generally a DNSP (or its agent) will attend the premises to manually remove or replace the service fuse in order to de-energise or re-energise the premises.⁴³¹ In Victoria, disconnection and reconnection services can be performed using the advanced meters already installed.

424 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.

425 "Disconnection" and "de-energisation" both refer to the curtailment of supply to a premises. "Disconnection" is the term used in the NER and "de-energisation" is the term used in the NERR.

426 Existing Part 6 Division 2 of the NERR.

427 Existing rule 116 of the NERR.

428 Existing rules 121(1) and 122(2) of the NERR.

429 Existing rules 119 and 122 of the NERR.

430 Existing rule 111 of the NERR states that a retailer "may arrange de-energisation of a customer's premises" but does not expressly state with whom it can arrange the de-energisation. Existing rule 121 of the NERR states that, where a retailer has arranged for a de-energisation of a small customer's premises, it must initiate a request to the distributor to re-energise the premises.

431 DNSPs can use different methods to manually de-energise and re-energise 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.

DNSPs charge a fee to retailers for the provision of de-energisation and re-energisation services. These fees are determined as part of the process of economic regulation by the AER. If a customer's premises is mistakenly de-energised by the DNSP, it is obliged to re-energise the premises at no cost to the customer.⁴³²

Safety issues associated with de-energisation and re-energisation services

Obligations relating to the safe de-energisation of a customer's premises, whether manual or remote, primarily relate to confirming that the customer at the premises does not have life support equipment, as the de-energisation of such premises could be fatal. The existing NERR requires both DNSPs and retailers to maintain registers of premises with life support equipment, and they are not permitted to de-energise these premises.⁴³³

Where a customer has life support equipment at its premises, it is required to inform either the retailer⁴³⁴ or the DNSP.⁴³⁵ Where a customer informs its retailer that a person residing at the customer's premises requires life support equipment, the retailer must:

- list the premises on its life support register;
- advise the distributor that a person residing at the premises requires life support equipment;
- give the distributor relevant information about the premises for the purposes of updating the distributor's distribution records and registers;
- not arrange for de-energisation of the premises while the person continues to reside at the premises and requires life support equipment; and
- give the customer an emergency telephone contact number for the distributor.⁴³⁶

Under the existing NERR, a DNSP is not required to inform the relevant retailer when the DNSP is notified by a customer that a person residing at the customer's premises requires life support equipment. However, the Commission understands that:

- while it is not a requirement under the existing NERR, some DNSPs do inform the customer's retailer when the customer advises the DNSP that a person residing at the customer's premises requires life support equipment; and

⁴³² Clause 13.3 of the Model terms and conditions for deemed standard connection contracts, Schedule 2 of the NERR.

⁴³³ The existing NERR contains an exception to the restriction on a DNSP de-energising the premises in the case of an interruption under Division 6 of Part 4 of the NERR. See existing rule 125(2)(b) of the NERR.

⁴³⁴ Existing clause 6.3(b) of the model terms and conditions for standard retail contracts in schedule 1 of the NERR.

⁴³⁵ Existing clause 6.4(b) of the model terms and conditions for standard connection contracts in schedule 2 of the NERR.

⁴³⁶ See existing rule 124 of the NERR.

- the IEC⁴³⁷ 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.

The Commission understands that re-energisation of a customer's premises also has safety implications. Because of this, DNSPs typically:

- check that the customer has not left any appliances on while the premises was de-energised, which could impose a fire hazard when the supply is restored and the appliance turns on;⁴³⁸
- inspect the wiring at the premises following a prolonged period of de-energisation; and
- do not allow re-energisation during an emergency (such as flood or bush-fire), at the direction of the jurisdiction's emergency coordinators.

In addition to the requirements in the existing NERR, DNSPs are required to manage safety risks associated with de-energisation and re-energisation in accordance with the relevant jurisdiction's safety laws.

This may involve the DNSP performing de-energisation and re-energisation 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.⁴³⁹ The DNSP may also be required to liaise with the relevant jurisdictional emergency coordinators during emergencies 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.

A3.2.3 Requirements regarding supply interruptions

Retailers do not have a right under the existing NERR to arrange an interruption (as defined under rule 88 of the NERR) of supply at a connection point of a customer independently of the DNSP, including for the purposes of installing, maintaining, repairing or replacing an electricity meter.⁴⁴⁰

⁴³⁷ The IEC is a body established under the NER to manage the ongoing development of B2B procedures. See existing clause 7.1.3 of the NER.

⁴³⁸ The Commission understands that when re-energisations are performed manually by DNSPs, they will confirm with the customer that all appliances are off. In Victoria, where remote re-energisation is possible, the DNSPs can rely on retailers to check the status of customers' appliances, provided that their processes for doing so are approved by Energy Safe Victoria, as required by legislation administered by Energy Safe Victoria.

⁴³⁹ For example, in Victoria remote disconnection and reconnection services can only be provided in accordance with processes approved by Energy Safe Victoria.

⁴⁴⁰ See Division 6, Part 4 of the existing NERR.

Under the existing NERR, a DNSP may, subject to and in accordance with any requirement of the energy laws, interrupt the supply of energy to a premises (including for a planned interruption or an unplanned interruption).⁴⁴¹

A3.2.4 Retailer of last resort provisions

Retailers also have responsibilities with respect to metering under the ROLR provisions in the NERL. The ROLR scheme seeks to ensure that a customer's continuity of supply is maintained if a ROLR event⁴⁴² occurs, by establishing arrangements that transfer a customer of a 'failed retailer' to another retailer.

Under the existing 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 existing 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.⁴⁴³

A3.3 Rule proponent's view

The rule change request did not seek to change the existing responsibilities of retailers as Market Participants, including the requirement to ensure 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.⁴⁴⁴ The proposal that customers be able to engage their 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 consumers, 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.⁴⁴⁵

⁴⁴¹ The existing arrangements for DNSPs to effect interruptions, including 'planned interruptions' and 'unplanned interruptions' are set out in more detail in Appendix A4.

⁴⁴² ROLR event is defined in section 122 of the NERL. In summary, it is a specific event or circumstance that triggers the ROLR provisions in the NERL, for example the revocation of a retailer's retailer authorisation.

⁴⁴³ Section 140(2) of the NERL.

⁴⁴⁴ COAG Energy Council rule change request, p8.

⁴⁴⁵ Ibid., p8.

The rule change request did not propose any amendments to the NERR in relation to de-energisation or re-energisation. Similarly, the rule change request did not propose any amendments to the NERR in relation to supply interruptions, including for the purposes of installing, maintaining, repairing or replacing an electricity meter.

The rule change request asked that the Commission consider whether any consequential changes to the existing ROLR arrangements would be required to ensure the continued provision of metering services when a ROLR event occurs. It also requested that the Commission advise the COAG Energy Council of any required changes to the ROLR arrangements in the NERL.⁴⁴⁶

The COAG Energy Council proposed that the model terms and conditions for standard retail contracts 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).⁴⁴⁷

A3.4 Stakeholder views

A3.4.1 Consultation paper and initial workshops

Requirement for the FRMP to establish a metering installation at a connection point

In submissions to the consultation paper, stakeholders supported the continuation of the existing arrangements in which retailers are responsible for ensuring a connection point has a metering installation and that the metering installation is registered with AEMO.

Requirement for the FRMP to appoint a Metering Coordinator

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".⁴⁴⁸

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.⁴⁴⁹

⁴⁴⁶ Ibid., p14.

⁴⁴⁷ COAG Energy Council rule change request, p8.

⁴⁴⁸ EDML, submission on consultation paper, p12; Ergon Energy, submission on consultation paper, p14; SA Power Networks, submission on consultation paper, p7.

⁴⁴⁹ AGL, submission on consultation paper, p7; Energy Australia, 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; EDML, submission on

Requirements regarding de-energisation and re-energisation

Stakeholders agreed that the existing practice whereby DNSPs de-energise and re-energise premises manually should continue; that is, where a fuse or other connection is physically removed at the premises. However, there was no consensus on whether DNSPs should exclusively manage the provision of remote de-energisation and re-energisation services that could be enabled by advanced meters. DNSPs were of the view that they should manage both manual and remote de-energisation and re-energisation services to ensure that safety requirements would be met.

Retailers and metering service providers considered that the ability to negotiate directly with a Metering Coordinator for de-energisation and re-energisation services would lead to significant business efficiencies and support their business case to deploy advanced meters.

At the sixth stakeholder workshop, the Commission noted the potential risks that could arise from DNSPs and retailers holding separate life support registers if retailers are able to arrange a remote de-energisation independently of the DNSP. To address this issue, the Commission proposed removing the obligations on retailers to maintain a register and requiring DNSPs to hold a single register. Under this approach, retailers would be required to notify DNSPs when customers notified them that they have life support equipment.

All but one stakeholder opposed this approach at the workshop. Stakeholders considered that this approach would significantly increase the risks of incorrect de-energisation of life support customers compared with the existing arrangements of having two registers. Most retailers at the workshop indicated that they would be likely to maintain their own register even if there was no longer a requirement to do so under the NERR.

Requirements regarding supply interruptions

A number of stakeholders raised questions at stakeholder workshops about where the responsibility for interrupting supply to the premises would lie when a Metering Coordinator is arranging the installation or maintenance of metering equipment at small customer premises. Under the existing NERR, responsibility for supply interruptions lies solely with the DNSP.⁴⁵⁰

consultation paper, p3; Metropolis, submission on consultation paper, p6; Vector, submission on consultation paper, p11.

⁴⁵⁰ See Appendix A4 for a detailed description of DNSP rights and obligations with regard to supply interruptions under the existing NERR.

Retailer of last resort provisions

Several stakeholders were of the view that the existing ROLR arrangements would need to be expanded to accommodate the Metering Coordinator role.⁴⁵¹ The ENA noted that, where metering competition exists, the number of customers and data being transferred in a ROLR event may be significant.⁴⁵²

A3.4.2 Draft determination and operational workshop

Requirement for the FRMP to establish a metering installation at a connection point

There were no specific comments on this aspect of the draft rule in submissions to the draft determination.

Requirement for the FRMP to appoint a Metering Coordinator

Throughout the consultation process, stakeholders expressed broad support for the requirement that the FRMP be responsible for appointing a Metering Coordinator at a connection point.

In its submission to the draft determination, the AER noted that this approach would provide a gateway for consumers to negotiate for packages of energy products and services.⁴⁵³ The AER also supported allowing the FRMP to terminate the LNSP's role as initial Metering Coordinator and appoint another party to this role, and requiring that the LNSP does not inhibit the FRMP's ability to do so.⁴⁵⁴

Landis+Gyr was of the view that the NER should identify the party responsible for metering services if the retailer cannot find a Metering Coordinator to appoint at a connection point, and that the rules expressly cater for circumstances where a Metering Coordinator fails, such as a 'Metering Coordinator of last resort'.⁴⁵⁵

Restriction on a Market Customer registering as a Metering Coordinator

The draft rule provided that AEMO must not register a Market Customer (e.g. a retailer) as a Metering Coordinator.⁴⁵⁶ The effect of this provision is that a retailer

451 Energex, submission on consultation paper, p3; Origin Energy, submission on consultation paper, p4.

452 ENA, submission on consultation paper, p20.

453 AER, submission on draft determination, p3.

454 Ibid., p4.

455 Landis+Gyr, submission on draft determination, p9.

456 Clause 2.4A.1 of the NER draft rule.

wishing to establish a Metering Coordinator business would need to do so through a separate legal entity.⁴⁵⁷

Lumo and Red Energy expressed concern that a Metering Coordinator that is a subsidiary of a retailer (or exempted retailer) may not be sufficiently independent of the retailer, and may therefore impede retail competition. They were particularly concerned that retail competition would be at risk if it is uneconomical to churn the meter where it is owned by a retailer's subsidiary.⁴⁵⁸

Energy Australia considered that the restriction on a Market Customer also registering as a Metering Coordinator was unnecessary and would introduce a cost for retailers that choose to become the Metering Coordinator where they are currently the Responsible Person for their own retail customers. It was of the view that the market would resolve this issue over time as retailers choose to either appoint an alternative Metering Coordinator or establish a separate Metering Coordinator business to benefit from economies of scale that will be achieved when managing this function for multiple retailers.⁴⁵⁹

Momentum considered it likely that the draft rule would impose disproportionate costs on smaller retailers who wish to take on the Metering Coordinator role for their own customers only. It considered that the requirement for a retailer to establish a separate legal entity is insufficient to address the competition risk that this rule is intended to address. In Momentum's view, there is a risk that consumers who received an advanced meter would no longer receive competitive offers from alternative retailers if the alternative retailer believes it will need to churn the meter and/or the alternative retailer is concerned the current retailer will still have technical access to the site's data and to innovations introduced by the alternative retailer.⁴⁶⁰

Simply Energy considered that the draft rule would appropriately address retail competition risks without imposing overly onerous requirements that would increase costs and reduce competition.⁴⁶¹

The ENA noted the potential for retailers to benefit from operating Metering Coordinator businesses and was of the view that the AEMC should explicitly restrict the flow of commercially sensitive customer information between retailers and affiliated Metering Coordinator businesses.⁴⁶²

Several retailers recommended that the draft rule be strengthened to preclude any party with a retail authorisation or exemption from retail authorisation under the NERL from taking on the Metering Coordinator role. They considered that this would ensure the intent of the draft rule is met, under current and future arrangements,

⁴⁵⁷ Section A3.5.1 of the draft determination sets out this aspect of the draft rule in more detail.

⁴⁵⁸ Lumo and Red Energy, submission on draft determination, p4.

⁴⁵⁹ Energy Australia, submission on draft determination, p2.

⁴⁶⁰ Momentum, submission on draft determination, pp1-2.

⁴⁶¹ Simply Energy, submission on draft determination, p4.

⁴⁶² ENA, submission on draft determination, p25.

where it is conceivable that an alternative (exempted) energy retailer may be the party that has the dominant retail contract with the consumer.⁴⁶³ Origin Energy also considered that the requirement for the Metering Coordinator to be a separate legal entity to the retailer should be extended to other market participants, including embedded network operators.⁴⁶⁴

To address these issues, several retailers asked that further consideration be given to placing an obligation on the AER to establish a metering ring-fencing guideline. These stakeholders were of the view that such a guideline would ensure that Metering Coordinators compete in the metering services market on a competitively neutral basis, retail competition is not adversely affected and consumers' ability to choose retail products and services is not impeded.⁴⁶⁵ Momentum proposed other options, including providing the AER with the ability to introduce ring-fencing requirements if certain circumstances occur, or instituting a mechanism to bring forward the review of competition at the three year mark if there is clear evidence of anti-competitive behaviour.

Requirements regarding de-energisation and re-energisation

The draft rule provided retailers with an explicit ability to arrange remote de-energisation and re-energisation 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 provided for a number of changes to the NERR to require retailers and DNSPs to inform each other when they arrange the de-energisation or re-energisation of a premises, and to ensure issues related to consumers with life support equipment are managed.

A number of stakeholders supported the ability for retailers to directly request de-energisation and re-energisation services from the Metering Coordinator.⁴⁶⁶

The ENA and Energex noted that the NERL places obligations on DNSPs to provide "customer connection services", which include responsibility for energisation, de-energisation and re-energisation of premises, but the draft rule requires LNSPs to negotiate with Metering Coordinators to perform remote de-energisation and re-energisation and prohibits them from using network devices for this purpose.⁴⁶⁷ The ENA was concerned that the DNSP's ability to perform its regulatory obligations would be contingent on its ability to reach commercial agreements with Metering

⁴⁶³ AGL, submission on draft determination, p4; Alinta, submission on draft determination, p1; ERAA, submission on draft determination, p4; Lumo and Red Energy, submission on draft determination, p3; Origin Energy, submission on draft determination, p3.

⁴⁶⁴ Origin Energy, submission on draft determination, p3.

⁴⁶⁵ Alinta, submission on draft determination, p1; Lumo and Red Energy, submission on draft determination, p4; Momentum, submission on draft determination, pp1-2.

⁴⁶⁶ AGL, submission on draft determination, p10; Origin Energy, submission on draft determination, p5; SA Power Networks, submission on draft determination, p4.

⁴⁶⁷ ENA, submission on draft determination, p12-13; Energex, submission on draft determination, Attachment A, p11.

Coordinators. It was of the view that the AEMC's proposed changes to the de-energisation and re-energisation provisions risk breach of "legal validity", and recommended that the AEMC clarify the interactions between the DNSP's obligations under the NERL and the draft rule.⁴⁶⁸

SA Power Networks was of the view that the draft rule did not address the significant contractual, legal and safety implications of having a party other than the LNSP de-energising or re-energising a premises. It noted provisions in the procedures around remote disconnection and reconnection in Victoria, and suggested that these be reflected nationally.⁴⁶⁹

The NSW DNSPs considered that the ability of FRMPs and DNSPs to arrange for de-energisation necessitated the introduction of robust procedures and a clear audit trail to demonstrate compliance. They considered that there would be significant costs (including civil penalties) for DNSPs and FRMPs should they fail to comply with the re-energisation requirements under the NERR.⁴⁷⁰

The ENA considered that the draft rule exposed DNSPs to being liable for the actions of other parties. It asked that the final rule include a provision relieving DNSPs of liability to customers and of responsibility for compliance with relevant de-energisation/re-energisation provisions where premises are de-energised or re-energised by someone other than the LNSP, or without the LNSP's authorisation.⁴⁷¹

SA Power Networks considered it important that the DNSP be notified immediately when a retailer arranges a de-energisation. It recommended that draft clause 104(2) of the NERR be amended to replace the words "as soon as practicable" with "at the time the de-energisation is arranged and as soon as practicable, but no later than 15 minutes, after the de-energisation takes place" and that draft clause 106A(2) of the NERR be amended to replace the words "as soon as practicable" with "as soon as practicable, but no later than 15 minutes after the re-energisation".⁴⁷²

EDMI supported the requirements around remote reconnection services, but noted that technical solutions could be used as safeguards. For example, firmware in the meter of a life support customer could prevent de-energisation. It was of the view that this would not need to be mandated but that incentives on particular parties would encourage them to look for technical solutions.⁴⁷³

A number of stakeholders raised technical and economic feasibility issues associated with providing remote de-energisation and re-energisation services at premises with a CT-connected meter. This issue is explained in Appendix C1.

468 ENA, submission on draft determination, pp12-13.

469 SA Power Networks, submission on draft determination, pp4-5.

470 NSW DNSPs, submission on draft determination, p7.

471 ENA, submission on draft determination, pp14-15.

472 SA Power Networks, submission on draft determination, p7.

473 EDMI, submission on draft determination, p3.

Lumo raised a concern that, under the draft rule, a retailer that has won a move-in customer (but is not yet the FRMP at the connection point) would not be able to arrange remote re-energisation at the prospective customer's premises. This issue is discussed further in Appendix C1.

Life support customers

The AER supported the introduction of additional protections to address the increased risk of interrupting supply to critical customers, such as those on life support.⁴⁷⁴ Energy Australia supported the additional obligation on DNSPs to advise retailers of changes to the life support status of a premises. It submitted that an obligation on both retailers and DNSPs to maintain a life support register should minimise system data errors for life support customers.⁴⁷⁵ EWON also supported the proposed arrangements.⁴⁷⁶ The NSW DNSPs were of the view that allowing retailers to arrange de-energisation increases the risk of the inadvertent de-energisation of premises with life support.⁴⁷⁷

The ENA expressed concern at the removal of the 'double check' provisions and the difference in obligations of retailers and DNSPs with respect to life support customers. It noted that, under the draft rule, DNSPs would have to ensure that registration details under rule 125 of the NERR in relation to life support customers are kept up to date. It noted that there is no such obligation on retailers, and also that the obligation on DNSPs is a civil penalty provision. The ENA also noted that a DNSP is able to request that a customer whose premises have been registered as requiring life support inform the DNSP if the person who requires the life support equipment has vacated the premises or no longer requires the equipment but that retailers do not have an equivalent power.⁴⁷⁸ The NSW DNSPs echoed these views, arguing that the different requirements on retailers and DNSPs in relation to life support customers would mean that the registers maintained by each party are more likely to be inconsistent.⁴⁷⁹

Energex proposed that rule 124(1) of the NERR draft rule be amended to place the obligation on the retailer to register premises as having life support equipment when the LNSP advises the retailer that this is the case (where the customer provides the LNSP with confirmation from a registered medical practitioner).⁴⁸⁰

Safety concerns

Throughout the consultation process, a number of parties highlighted the importance of jurisdictional safety regulators engaging with industry to develop a consistent approach to de-energisation and re-energisation.

⁴⁷⁴ AER, submission on draft determination, p11.

⁴⁷⁵ Energy Australia, submission on draft determination, p4.

⁴⁷⁶ EWON, submission on draft determination, p3.

⁴⁷⁷ NSW DNSPs, submission on draft determination, pp7,8.

⁴⁷⁸ ENA, submission on draft determination, p14.

⁴⁷⁹ NSW DNSPs, submission on draft determination, pp7,8.

⁴⁸⁰ Energex, submission on draft determination, Attachment A, p12.

The ENA was of the view that the draft rule potentially exposes customers to significant safety risks when Metering Coordinators and/or retailers undertake de-energisation and re-energisation of premises. Its concern related to both the potential for the de-energisation of customers on life support equipment and to issues relating to wiring integrity and safety, including fire and injury risks associated with the remote re-energisation of sites. The ENA recommended that the safety implications of remote de-energisation and re-energisation be addressed in the final determination. Specifically, the ENA was of the view that clear guidance should be provided that these services will not be available from Metering Coordinators unless and until they have developed appropriate systems and undergone accreditation processes in line with jurisdictional safety regulators to ensure the safety both of their personnel and of customers.⁴⁸¹

Requirements regarding supply interruptions

As noted in section A3.3, the issue of whether retailers should have the ability to arrange supply interruptions to facilitate the installation or maintenance of a metering installation was not raised in the rule change request and as a result was not set out in the consultation paper. However, information from stakeholders throughout the consultation process indicated that the existing arrangements under the NERR needed to be reviewed to recognise that, under the new framework, parties other than the DNSP will be responsible for metering arrangements at retail customer premises and will therefore need to arrange for supply interruptions to install, maintain, repair or replace an electricity meter.

To address this issue, the draft rule provided for the introduction of the following new rights and obligations under the NERR:

- a DNSP must effect a supply interruption when a Metering Coordinator requires an interruption to install, maintain, repair or replace metering equipment and provide such assistance as the Metering Coordinator may reasonably require to effect such installation, maintenance, repair or replacement;
- the Metering Coordinator must provide such information and assistance that the DNSP may reasonably require to enable it to carry out its obligations under rules 90 and 91 of the NERR in relation to the interruption; and
- the DNSP and the Metering Coordinator must cooperate and give all other reasonable assistance to each other in relation to the interruption.⁴⁸²

These changes were provided for on the basis that it would be the DNSP who would effect an interruption that was required for the installation, maintenance, repair or replacement of electricity meters by a Metering Coordinator. The draft rule (consistent with the existing NERR) did not provide a retailer with the right to arrange supply

⁴⁸¹ ENA, submission on draft determination, p12-14.

⁴⁸² See rule 91A of the NERR draft rule.

interruptions independently of the DNSP. See section C2.5.2 of the draft determination for a more detailed description of the draft rule.

Stakeholders made a number of comments in relation to the arrangements regarding supply interruptions in their submissions to the draft determination.

Party carrying out the work

A number of stakeholders questioned why DNSPs should continue to be responsible for supply interruptions in circumstances where they are not the party initiating or carrying out the work in relation to the metering installation.

The Department of State Development (SA) expressed concern that the draft rule would only allow a DNSP to interrupt a customer's supply for work on the customer's meter. It considered that the responsibility for undertaking the work to install a new meter lies with the Metering Provider.⁴⁸³ Active Stream sought clarification on which rights and obligations would transfer from the DNSP to the Metering Coordinator, including the ability to interrupt supply in certain circumstances.⁴⁸⁴ Some stakeholders considered that the ability to interrupt supply should extend to Metering Coordinators to allow them to effect interruptions for the purposes of carrying out metering work.⁴⁸⁵ AGL submitted that retailers would need a similar right to interrupt supply under the standard retail contract as that which exists for distributors under the existing deemed standard connection contract.⁴⁸⁶

The Victorian DNSPs submitted that rule 91A(b) of the NERR in the draft rule was unclear about the circumstances where the DNSP must effect the interruption and provide assistance to enable the Metering Coordinator to carry out the meter exchange or repair.⁴⁸⁷ Energex expressed concern that a DNSP may have difficulty meeting its obligation under rule 91(c) of the NERR (a civil penalty provision) given it will have to notify the FRMP of the need to replace the meter and may not be able to restore supply until a working meter is installed.⁴⁸⁸

The issue of supply interruptions was discussed at the Commission's operational workshop. Information provided by stakeholders at this workshop indicated that there are divergent views on what constitutes a supply interruption, which party can effect an interruption, and in what circumstances. Further, arrangements regarding who can interrupt supply and the process to be followed appear to differ between participating jurisdictions as a result of jurisdictional regulations. Nevertheless, many stakeholders were of the view that the party necessitating a supply interruption should be responsible for notifying the customer, effecting the interruption and restoring supply.

⁴⁸³ Department of State Development (SA), submission on draft determination, p3.

⁴⁸⁴ Active Stream, submission on draft determination, p2.

⁴⁸⁵ AGL, supplementary submission on draft determination, p28; NSW DNSPs, submission on draft determination, p8.

⁴⁸⁶ AGL, supplementary submission on draft determination, p33.

⁴⁸⁷ Victorian DNSPs, submission on draft determination, p60.

⁴⁸⁸ Energex, submission on draft determination, Attachment A, p11.

Responsibility for notifying the customer

Several stakeholders noted that the draft rule would require the DNSP to notify the customer even if it is not the party initiating the work.⁴⁸⁹ Several DNSPs considered that responsibility for notifying the customer should lie with the Metering Coordinator.⁴⁹⁰ Energex also noted an inconsistency between the last date a customer can opt out under a new meter deployments (three business days before the scheduled work) and the notification requirement for planned interruptions (four business days before the scheduled work). This is discussed further in Appendix C2.

Under the draft rule, the DNSP's contact details would be on the supply interruption notification. Energex submitted that it would be unable to respond to consumer enquiries about the interruption as it has no visibility of the work that is being carried out. It recommended that an obligation be placed on retailers to notify customers about maintenance replacements to mitigate the risk that customers will call the DNSP with enquiries and complaints. Energex was of the view that this would be a particular concern where large numbers of meters are replaced due to batch failure.⁴⁹¹

The Victorian DNSPs proposed that life support customers be afforded the same level of timely notification of an interruption for the planned or routine maintenance of metering equipment regardless of whether the DNSP or the retailer is managing the metering installation.⁴⁹²

Cooperation on supply interruptions

SA Power Networks submitted that it was unclear what assistance a Metering Coordinator could reasonably require from the DNSP, other than work to interrupt and restore supply, and on what basis a DNSP would recover any costs of assistance. It considered that this may conflict with the DNSP's obligations (e.g. its obligation to restore supply) or with jurisdictional technical/safety requirements. It was also of the view that this clause was superfluous because the intent (that there should be reasonable cooperation between the DNSP and Metering Coordinator) is expressed in rule 91A(d) of the NERR draft rule. SA Power Networks recommended that clause 91A(b) of the NERR draft rule be replaced with 'the DNSP must effect the interruption'.⁴⁹³

The ENA was of the view that the rights and obligations of DNSPs and Metering Coordinators under rule 91A of the NERR draft rule needed to be expressly subject to

⁴⁸⁹ Department of State Development (SA), submission on draft determination, p4; Energex, submission on draft determination, Attachment A, p11.

⁴⁹⁰ Energex, submission on draft determination, Attachment A, p11; NSW DNSPs, submission on draft determination, p8.

⁴⁹¹ Energex, submission on draft determination, Attachment A, p11.

⁴⁹² Victorian DNSPs, submission on draft determination, p60.

⁴⁹³ SA Power Networks, submission on draft determination, p6.

compliance with all relevant jurisdictionally based technical and safety requirements.⁴⁹⁴

The AER suggested that the AEMC consider whether a civil penalty should accompany rule 91A of the NERR draft rule, which requires that Metering Coordinators cooperate with distributors for the purpose of ensuring that DNSPs are able to meet their obligations when interrupting supply. The AER submitted that not having a civil penalty here would be at odds with rule 90 and 91 of the NERR draft rule, which set out civil penalty provisions applying to DNSPs. The AER considered there may be a risk that the DNSP would be in breach of these rules if the Metering Coordinator does not cooperate.⁴⁹⁵

The Victorian DNSPs proposed that DNSPs should be notified when planned maintenance is occurring. They submitted that this would help them provide customers with supply information, including whether the interruption was arranged by the DNSP or the retailer.⁴⁹⁶

Other DNSP obligations

SA Power Networks noted that the deemed standard connection contract commits DNSPs to guaranteed service levels in respect of a connection, and includes a requirement to pay a penalty to the customer if these service levels are not met. It expressed concern that a Metering Coordinator's ability to cause supply interruption through the remote de-energisation service may expose DNSPs to being in breach of these obligations through no fault of their own, e.g. error or cyber-attack. SA Power Networks sought clarity on what would indemnify DNSPs in this situation, and if there is doubt, proposed that the NERR be amended to relieve DNSPs of their obligations under existing rules 90 and 91 of the NERR when supply is interrupted by a party not acting at the request of the DNSP.⁴⁹⁷ The NSW DNSPs asked that supply interruptions initiated or caused by the Metering Coordinator be excluded from DNSP performance incentive schemes, and that the final determination provide commentary on this issue.⁴⁹⁸

Retailer of last resort provisions

EnergyAustralia expressed concern that the draft rule did not address the responsibilities of the Metering Coordinator under a ROLR event. It noted that the designated retailer would be responsible for appointing a Metering Coordinator for each metering installation that it was allocated under a ROLR event and argued that, as

⁴⁹⁴ ENA, submission on draft determination, p29.

⁴⁹⁵ AER, submission on draft determination, p12.

⁴⁹⁶ Victorian DNSPs, submission on draft determination, p60.

⁴⁹⁷ SA Power Networks, submission on draft determination, p6.

⁴⁹⁸ NSW DNSPs, submission on draft determination, p8.

ROLR events occur with very little notice, the reappointment of Metering Coordinators could be problematic.⁴⁹⁹

The ERAA was of the view that there was ambiguity as to how arrangements for the continued provision of services from a Metering Coordinator would operate where a retailer failure occurs. The ERAA asked that the AEMC provide further advice and direction to AEMO on what arrangements are intended to operate in ROLR scenarios.⁵⁰⁰

A3.4.3 Additional consultation paper

The additional consultation paper proposed a number of amendments to the draft rule with regard to supply interruptions to address the issues raised by stakeholders in submissions to the draft determination. In summary, the Commission proposed to introduce a right for retailers to arrange an interruption to the supply of electricity to one of their customer's premises, without the involvement of the DNSP, for the purposes of installing, maintaining, repairing or replacing metering equipment. This right was termed a 'retailer planned interruption'.

The proposed approach also involved imposing obligations on the retailer to notify affected customers, consistent with those that currently apply to DNSPs, as well as requirements to notify the DNSP when arranging an interruption.⁵⁰¹

A number of stakeholders expressed broad support for this approach, and considered that the proposed amendments appropriately allocated responsibilities for supply interruptions between DNSPs and retailers.⁵⁰²

Several stakeholders submitted that the notification requirements for a retailer planned interruption would increase regulatory compliance costs and possibly worsen the customer experience due to delays, inflexible processes and multiple notifications.⁵⁰³ A number of retailers were of the view that retailers should be able to arrange a planned interruption within a period of less than four days with the customer's agreement.⁵⁰⁴

The ENA submitted that the definition of 'distributor planned interruption' might be argued to include 'retailer planned interruptions' in some circumstances, and

499 EnergyAustralia, submission on draft determination, p3.

500 ERAA, submission on draft determination, p4.

501 See section 3 of the additional consultation paper for more information.

502 AGL, submission on additional consultation paper, p7; Department of State Development (SA), submission on additional consultation paper, p1; ERM Power, submission on additional consultation paper, p3; SA Power Networks, submission on additional consultation paper, p2.

503 Metropolis, submission on additional consultation paper, pp4-5; Origin Energy, submission on additional consultation paper, p3; Red Energy and Lumo, submission on additional consultation paper, pp3-4.

504 AGL, submission on additional consultation paper, p7; ERM Power, submission on additional consultation paper, p3-4; Red Energy and Lumo, submission on additional consultation paper, pp3-4.

recommended that the definition of 'distributor planned interruption' expressly exclude 'retailer planned interruptions'.⁵⁰⁵

A number of retailers suggested that the final rule provide retailers with the ability to arrange 'unplanned interruptions', e.g. for where a meter malfunctions and requires immediate repair or replacement to restore supply.⁵⁰⁶

AGL supported the proposal put forward in the additional consultation paper that DNSPs should be responsible for planned interruptions at multiple occupancy premises because of the difficulties associated with retailers appropriately notifying all residents in a complex if they are unable to arrange a retailer planned interruption for only their retail customer.⁵⁰⁷

There were divergent views with respect to whether retailers should be required to notify DNSPs of retailer planned interruptions and how detailed the notification should be. SA Power Networks proposed that the NERR explicitly stipulate that retailers must give DNSPs at least 4 days' notice of a retailer planned interruption to prepare for potential "no-supply" calls.⁵⁰⁸ Ergon Energy considered that retailers be required to notify DNSPs in real time when a retailer planned interruption occurs, and that they be required to leave visible evidence on-site that an interruption has been carried out in the event that the LNSP is called to site.⁵⁰⁹

SA Power Networks also proposed that retailers be required to provide the DNSP with the NMI and address details for each customer that is to be affected by a retailer planned interruption. It submitted that it would not be sufficient to only provide the "area" in which the retailer planned interruption will occur.⁵¹⁰

Metropolis did not consider that retailers should be required to notify DNSPs of a retailer planned interruption because the consumer has requested the new service, is aware of the planned outage and there is a technician onsite for the duration of the outage.⁵¹¹

A number of DNSPs proposed that the same compliance and enforcement regime that applies to DNSPs for planned interruptions apply to retailers for retailer planned interruptions.⁵¹² Specifically, SA Power Networks and Energex recommended that subrule 59C and 99A of the NERR draft rule be made civil penalty provisions. The

505 ENA, submission on additional consultation paper, p9.

506 AGL, submission on additional consultation paper, p8; ERAA, submission on additional consultation paper, p2; ERM Power, submission on additional consultation paper, pp3-4.

507 AGL, submission on draft determination, p8.

508 SA Power Networks, submission on additional consultation paper, pp2-3.

509 Ergon Energy, submission on additional consultation paper, p5.

510 SA Power Networks, submission on additional consultation paper, p3.

511 Metropolis, submission on additional consultation paper, pp4-5.

512 Energex, submission on additional consultation paper, p7; Ergon, submission on additional consultation paper, p5; SA Power Networks, submission on additional consultation paper, p3; Victorian DNSPs, submission on additional consultation paper, p12.

Victorian DNSPs were of the view that the rules should require retailers initiating a retailer planned interruption to be subject to jurisdictional safety requirements and liable for adverse impacts to customers, rather than the DNSP.⁵¹³

The NSW DNSPs proposed a number of changes to clearly delineate the roles of DNSP and Metering Coordinator in relation to supply interruptions. They proposed that rule 91A of NERR draft rule be deleted because it would allow a Metering Coordinator to effect an interruption, an activity that (in NSW) is routinely carried out by Level 2 Accredited Service Providers.⁵¹⁴ SA Power Networks also expressed concern with this clause, submitting that it was unclear what assistance a commercial Metering Coordinator could reasonably require from the DNSP to install or maintain a meter (beyond the work required to effect the interruption), or on what basis a DNSP would recover any costs associated with this assistance.⁵¹⁵ The Victorian DNSPs and the ENA reiterated their concerns regarding the legal validity of rule 91A of the NERR draft rule.⁵¹⁶

A3.5 Commission's analysis

Changes between the draft and final rule

A number of changes between the draft and final rules have been made to better implement the Commission's policy intent and resolve operational issues raised by stakeholders in their submissions to the draft determination.

The most significant change is that, in line with the approach set out in the additional consultation paper, the final rule introduces an ability for retailers to arrange an interruption to the supply of electricity to a customer for the purposes of installing, maintaining, repairing or replacing metering equipment. The final rule sets out the process retailers must follow when arranging such an interruption, defined as a "retailer planned interruption" in the final rule. Specifically, the final rule:

- introduces obligations on a retailer that is arranging a retailer planned interruption (similar to those imposed on the DNSP under existing rule 90 of the NERR in relation to planned interruptions) to:
 - notify each affected customer by any appropriate means of the interruption at least four business days before the date of the interruption;
 - include details of, among other things, the expected date, time and duration of the interruption and a 24 hour telephone number for

⁵¹³ Victorian DNSPS, submission on additional consultation paper, p11.

⁵¹⁴ NSW DNSPs, submission on additional consultation paper, p3.

⁵¹⁵ SA Power Networks, submission on additional consultation paper, p3.

⁵¹⁶ ENA, submission on additional consultation paper, p10; Victorian DNSPS, submission on additional consultation paper, p11.

enquiries (the charge for which is no more than the cost of a local call); and

- use its best endeavours to arrange for supply to be restored as soon as possible.
- imposes notification obligations on the retailer when arranging a retailer planned interruption in respect of a life support customer (similar to the obligations imposed on DNSPs under existing rule 125 of the NERR);
- requires the retailer to notify the DNSP of a proposed retailer planned interruption (similar to the obligations imposed on DNSPs to notify the retailer of planned interruptions under existing rule 99 of the NERR); and
- introduces a new clause 7.3.2(i) that (amongst other things) prohibits Metering Coordinators from arranging a retailer planned interruption at a connection point with a small customer metering installation, except when done at the request of the retailer and in accordance with jurisdictional electricity laws.

The final rule also introduces an ability for:

- a retailer to arrange the de-energisation of a premises if the customer fails to give safe and unhindered access to the premises to enable the retailer to carry out its responsibilities with regard to metering;
- a retailer that wins a move-in customer to access the remote reconnection service in the minimum services specification (subject to commercial agreement with the Metering Coordinator).

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 de-energisation and re-energisation.

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 de-energisation and re-energisation services;
- supply interruptions for the purposes of installing, maintaining, repairing or replacing an electricity meter; and
- other issues related to metering services.

A3.5.1 Requirement for a FRMP to establish a metering installation at a connection point

The final rule maintains the existing requirement for a retailer, as the FRMP, to ensure that a connection point has a metering installation that is registered with AEMO before participating in the market in respect of that connection point.⁵¹⁷

Under the final rule, a retailer may appoint a Metering Coordinator for the purposes of satisfying this requirement by either:

- appointing a third party Metering Coordinator that is registered with AEMO to perform this role; or
- establishing a Metering Coordinator business that is registered with AEMO to perform this role.

The FRMP must also ensure that, prior to registering the metering installation with AEMO, a NMI has been obtained with respect to the connection point.⁵¹⁸ The final rule requires the FRMP at a connection point to apply to the LNSP for a NMI and provide it to the Metering Coordinator within five business days of receiving it.⁵¹⁹ This requirement has been amended from that in the draft rule. Specifically, the final rule:

- has removed the requirement on the Metering Coordinator to apply for a NMI and register it with AEMO;
- places an obligation on the FRMP to apply for a NMI from the LNSP; and
- requires the LNSP to issue the Metering Coordinator with a unique NMI for the metering installation and register the NMI with AEMO.

These amendments have been made in response to the submission from AusNet Services that the draft rule did not reflect current practice, whereby the LNSP registers the NMI with AEMO regardless of whether the LNSP or the retailer is the Responsible Person. Amendments to clause 7.2.1(a) of the NER have been made between the draft and final rules to reflect these changes.

⁵¹⁷ Clause 7.2.1(a)(2) of the NER final rule.

⁵¹⁸ Clause 7.2.1(a)(3) of the NER final rule.

⁵¹⁹ Clause 7.8.2(c) of the NER final rule.

A3.5.2 Requirement for the FRMP to appoint a Metering Coordinator

A key principle underpinning the Commission's final rule is that the arrangements should be simple and practical from a consumer's perspective.

The final rule requires the FRMP to appoint a Metering Coordinator in respect of a connection point,⁵²⁰ unless the large customer, Non Market Generator or exempt Generator (as the case may be) at that connection point chooses to appoint its own Metering Coordinator.⁵²¹ The Commission considers that these arrangements are simple and practical from a small customer's perspective and support existing consumer protections.⁵²²

If the FRMP at a connection point has appointed the Metering Coordinator at that connection point and subsequently ceases to be the FRMP (e.g. due to a customer changing its retailer), the new FRMP will need to either enter into an agreement with the existing Metering Coordinator for it to continue as Metering Coordinator at the connection point or otherwise appoint a new Metering Coordinator.

Details regarding the FRMP's appointment of a Metering Coordinator, including the commercial nature of the appointment and payment for Metering Coordinator services, are set out in Appendix A1.

Transitional arrangements

As a transitional arrangement, an 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 (1 December 2017) will become the initial Metering Coordinator for that connection point. The final rule provides that, despite anything to the contrary in the terms and conditions on which a LNSP is appointed (or deemed to have been appointed) by the FRMP as initial Metering Coordinator under the transitional arrangements, that appointment will continue until the earlier of:

- the metering services being provided by the LNSP cease to be classified by the AER as a direct control service;⁵²³ and
- a different Metering Coordinator being appointed at that connection point.⁵²⁴

⁵²⁰ Clause 7.2.1(a)(1) of the NER final rule. Note that clause 7.2.1(c) of the NER final rule requires the relevant TNSP to be responsible for the provision, installation and maintenance of a metering installation for an interconnector.

⁵²¹ Clause 7.6.2(2) of the NER final rule.

⁵²² The rationale for why small customers are not able to appoint their own Metering Coordinator under the final rule is discussed in Appendix B1.

⁵²³ These arrangements are explained further in Appendix A4.

⁵²⁴ As noted above, in the case of a connection point with a retail customer, the large customer will have an ability to appoint a Metering Coordinator.

There will need to be a new appointment of a Metering Coordinator by the FRMP to replace an existing, regulated meter, 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 identifies a business case for deploying advanced meters, such as potential operational efficiencies resulting from more advanced metering technology) or a 'maintenance replacement'.⁵²⁵

Under the final rule, the FRMP is also required to appoint a new Metering Coordinator at a connection point in circumstances where:

- a Metering Coordinator default event occurs; or
- the contract under which the existing Metering Coordinator is appointed by a person other than the FRMP (e.g. a large customer) is terminated or expires and the relevant person does not appoint a new Metering Coordinator within a specified period.⁵²⁶

Restriction on a Market Customer registering as a Metering Coordinator

The final rule provides that a Market Customer (e.g. a retailer) may not be registered as a Metering Coordinator.⁵²⁷ The effect of this provision is that a retailer that wishes to establish a Metering Coordinator business to provide metering services in respect of retail customer connection points will need to do so through a separate legal entity (e.g. a subsidiary).

This restriction was introduced under the draft rule to prevent a retailer-affiliated Metering Coordinator business from conferring an unfair advantage on the retail part of its business by providing it with access to information about a customer that is not available to other retailers. For example, 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 FRMP (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.

⁵²⁵ These arrangements are set out in more detail in Appendix C2.

⁵²⁶ Rule 7.7 of the NER final rule. These arrangements are set out in further detail in Appendix B1.

⁵²⁷ Clause 2.4A.1(c) of the NER final rule. This rule does not apply to a person that is only appointed, or proposed to be appointed as Metering Coordinator in respect of one or more connection points or proposed connection points on a transmission network, or that connect a Generator's generation unit to a distribution network. See Appendix A1 for further information on these exceptions.

If the Metering Coordinator and former retailer were part of the same legal entity, the confidential information provisions in 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.⁵²⁸ 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.

The existing confidential information provisions will apply and will prevent a Metering Coordinator from providing energy or metering data to, amongst others, a related body corporate (e.g. 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.⁵²⁹

In submissions to the draft determination, some retailers considered that the draft rule would be too onerous for small retailers. These stakeholders were of the view that retailers should be able to provide Metering Coordinator services to their own customers without legal separation. However, the Commission remains of the view that allowing a retailer to perform the role of Metering Coordinator for its own customers is unlikely to be beneficial for the development of competition in the retail market because:

- doing so would give retailers an incentive to only take on the Metering Coordinator role for their own customers to avoid the cost of establishing a separate legal entity, which may result in churn in the Metering Coordinator role each time there is retailer churn;
- retailers that are also Metering Coordinators may be less able or willing to reach competitive outcomes for the provision of metering services to other retailers; and
- this could have implications for the competitiveness of the retail market and the ease with which customers can churn retailers.

Lumo and Red Energy proposed that the prohibition on a Market Customer being a Metering Coordinator be extended to other market participants that are exempt from holding a retailer authorisation, i.e. exempt sellers. The Commission considers it unnecessary to amend the draft rule in response to this proposal for a number of reasons:

⁵²⁸ The confidential information provisions are set out in rule 8.6 of the NER.

⁵²⁹ 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.

- Exempt sellers are generally not competing with authorised retailers for the sale of energy.
- Exempt sellers in an embedded network are 'on-selling' electricity and would not be required to appoint a Metering Coordinator for their off market customers.
- Where exempt sellers are providing products and services, for example under a solar PV power purchase agreement, there will be a retailer who is responsible for appointing the Metering Coordinator at that connection point. If the retailer chooses to appoint the exempt seller as a Metering Coordinator, this is unlikely to inhibit other retailers competing for that customer.

Lumo and Red Energy also argued that the draft rule did not go far enough, and that the AER should be required to develop ring-fencing guidelines for retailers with metering businesses. The draft rule has not been amended in response to this proposal. The Commission does not consider it necessary or appropriate to require the AER to develop guidelines on additional ring-fencing measures for retailers with metering businesses for a number of reasons:

- The issue that the prohibition on Market Customers being registered as Metering Coordinators is seeking to address is anti-competitive behaviour that may arise because of a gap that would otherwise exist in the confidential information provisions in the NER, as discussed above.
- The draft rule requires legal separation which, when combined with the confidential information provisions, is sufficient to appropriately restrict retailers from using their affiliated Metering Coordinator business to obtain energy and metering data of the customers of competing retailers.

The final rule also broadens restrictions under the existing NER, and proposed under the draft rule, regarding when a Market Customer can be registered as a Metering Provider or Metering Data Provider. Under the final rule, a Market Customer must not be registered as a Metering Provider or Metering Data Provider at any connection point, subject to a limited exception.⁵³⁰ This is discussed further in Appendix A2.

The final rule does not impose any other ring-fencing obligations on retailers and Metering Coordinators, as was proposed by some stakeholders in submissions.

A3.5.3 Requirements regarding de-energisation and re-energisation

One of the benefits of advanced meters is their ability to enable the remote de-energisation and re-energisation of a premises. The Commission's final rule recognises this benefit and enables retailers to remotely de-energise or re-energise 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.

⁵³⁰ See clauses 7.4.1(f) and 7.4.2(f) of the NER final rule.

The Commission considered the potential impact of this ability on consumers and safety, to be confident that existing consumer protections in the NERR are effectively maintained and safety risks are managed.

The final rule does not change the existing arrangements as they relate to manual de-energisation and re-energisation. Due to the nature of these services, these will continue to be performed exclusively by DNSPs.

This section discusses the implications of a Metering Coordinator offering remote de-energisation and re-energisation services, including the parties that:

- can arrange a request for de-energisation and re-energisation services; and
- can action a request and provide the service.

Options for responsibility to de-energise and re-energise

The Commission considered two options for allocating responsibility for remote de-energisation and re-energisation services through a Metering Coordinator:

1. Maintaining the existing arrangements, whereby only DNSPs are able to de-energise and re-energise premises, including remotely (which, following the introduction of the Metering Coordinator role, would be arranged through a Metering Coordinator).
2. Permitting both retailers and DNSPs to de-energise and re-energise premises remotely through a Metering Coordinator.

Option 1: DNSPs continue to perform de-energisation and re-energisation

Under this option, DNSPs have exclusive responsibility for the provision of de-energisation and re-energisation services, including remote de-energisation and re-energisation services.

A retailer that seeks de-energisation or re-energisation services would continue to make this request to the DNSP, under the existing provisions of the NERR. The DNSP would then determine whether the de-energisation or re-energisation service could be performed remotely under contract with a Metering Coordinator, or manually.

The AEMC discussed this approach at its fourth stakeholder workshop. Stakeholders in attendance generally agreed that the responsibilities associated with a manual de-energisation should remain with DNSPs. However, there were divergent views on the treatment of remote de-energisation and re-energisation services.

DNSPs generally considered that they should retain responsibility for de-energisation and re-energisation 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 de-energisation and re-energisation of a premises directly with a Metering Coordinator could undermine existing consumer protections and the safe operation of the power system.

However, retailers and metering service providers considered that maintaining DNSP responsibility for de-energisation and re-energisation services would not create sufficient incentives for DNSPs to offer remote de-energisation and re-energisation services. Further, these stakeholders considered that the DNSP's 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 de-energisation and re-energisation 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 de-energisation and re-energisation services with Metering Coordinator

Under this option, retailers would be able to arrange remote de-energisation and re-energisation services through the Metering Coordinator. Maintaining the existing level of 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 de-energisation and re-energisation 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.

Further, allowing retailers to negotiate directly with a Metering Coordinator would not prevent retailers from arranging a manual de-energisation with DNSPs. A manual de-energisation may still be necessary to manage instances of theft or illegal use of energy, safety issues at a premises, or consumer requests for de-energisation for alterations at the premises.

Risks of allowing retailers to arrange de-energisation directly with a Metering Coordinator

Under the existing NERR, a retailer is not permitted to arrange de-energisation at a premises under certain circumstances, including if the premises is registered as having life support equipment.⁵³¹ In addition, a DNSP cannot undertake a de-energisation service requested by the retailer before meeting its own requirements to check that there are no reasons under the NERR why the de-energisation cannot be performed.⁵³² This results in a 'double check' by the DNSP when the retailer is arranging the de-energisation. If retailers are able to arrange de-energisation 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 de-energisation 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.

The Commission also notes that a 'double check' does not occur currently when the DNSP initiates the de-energisation.

Retailers would also need to comply with any additional requirements of the relevant jurisdictional safety arrangements before arranging for remote de-energisation of a consumer's premises. This would be expected to include any additional safety requirements that the jurisdiction considers necessary to address safety risks associated with a remote de-energisation.

Risks of allowing retailers to arrange re-energisation directly with a Metering Coordinator

The safety risks associated with re-energising a consumer's premises are generally greater than for de-energisation, 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 re-energise a premises that a DNSP has de-energised for safety or emergency reasons. In these instances, remote re-energisation by a retailer could be unsafe. De-energisation for safety reasons is likely to be done manually, which would make it impossible for supply to be remotely re-energised. Consequently a safety issue would not arise in this instance. However, de-energisation during an emergency, such as a bush-fire, could be performed remotely and remote re-energisation by the retailer could occur, potentially resulting in safety issues.⁵³³ These risks would need to be managed under arrangements where retailers can organise remote de-energisation and re-energisation services.

The Commission considers the risks associated with retailers directly arranging remote re-energisation of a consumer's premises with a Metering Coordinator would be appropriately addressed if:

⁵³¹ Existing clause 116(1)(a) of the NERR.

⁵³² Existing rule 120 of the NERR.

⁵³³ The DNSP's decision whether to de-energise manually or remotely would need to be made in accordance with any relevant jurisdictional requirements.

- the retailer is not able to re-energise a premises that has been de-energised by a distribution business; and
- the retailer meets any obligations imposed by the relevant jurisdictional safety regulator.

The Commission's final determination and final rule

Consistent with the draft rule, the final rule allows both retailers and DNSPs (subject to negotiating access to the service with the Metering Coordinator) to arrange remote de-energisation and re-energisation services directly with the relevant Metering Coordinator at a connection point in certain circumstances. DNSPs will continue to be the only party that can provide manual de-energisation and re-energisation services.⁵³⁴

The Commission considers that allowing retailers to arrange remote de-energisation and re-energisation services directly with a Metering Coordinator will further the overall objectives of the rule change request and the long term interests of consumers. In particular it is expected to:

- provide a competitive framework for de-energisation and re-energisation services;
- provide de-energisation and re-energisation services at an efficient cost;
- reduce transaction costs for retailers when arranging remote de-energisation and re-energisation 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 final rule also introduces an ability for a retailer to arrange the de-energisation of a premises if the customer fails to give safe and unhindered access to the premises for the retailer to carry out its responsibilities with regard to metering.⁵³⁵ This mirrors a right afforded to DNSPs under the model terms and conditions for deemed standard connection contracts.⁵³⁶ This right has been incorporated into the model terms and conditions for standard retail contracts to reflect that, under the final rule, retailers will

⁵³⁴ Note that under the NERR final rule retailers will have the ability to effect 'retailer planned interruptions', which would be carried out manually at the premises. These arrangements are set out in section A3.5.4.

⁵³⁵ See clause 113(2) of the NERR final rule and clause 14.1(d) of the model terms and conditions for standard retail contract in the NERR final rule.

⁵³⁶ See clause 119(1)(f) of the NERR final rule and clause 12.1(f) of the model terms and conditions for deemed standard connection contracts.

be responsible for arranging the provision of metering and related services at a small customer's connection point.⁵³⁷ This provision is discussed further in Appendix C2.

In their submissions to the draft determination, the ENA and Energex expressed concern that the NERL places obligations on DNSPs to provide "customer connection services", which include responsibility for energisation, de-energisation and re-energisation of premises, but the draft rule requires LNSPs to negotiate with Metering Coordinators to perform de-energisation and re-energisation. The ENA was of the view that the AEMC's proposed changes to the de-energisation and re-energisation provisions risk breach of "legal validity".

The Commission notes that:

- under the NERL, the Commission has broad powers to make rules regulating the activities of persons involved in the sale and supply of energy, and the energisation, de-energisation or re-energisation of the premises of customers;⁵³⁸
- under the NEL, the Commission has broad powers to make rules facilitating and supporting the provision of services to retail customers;⁵³⁹ and
- distributors must provide customer connection services for the premises of a customer 'subject to' energy laws,⁵⁴⁰ therefore the obligation to provide customer connection services is not absolute.

The Commission also notes that, under the final rule:

- DNSPs will still have the ability to carry out manual de-energisation and re-energisation services;
- DNSPs will be able to retain existing network devices or install new network devices, subject to certain limitations, and use them to perform remote de-energisation and re-energisation;⁵⁴¹ and
- Metering Coordinators are prohibited from preventing, hindering or otherwise impeding a LNSP from locally accessing a metering installation or a connection point for the purposes of reconnecting or disconnecting the connection point.⁵⁴²

The Commission is therefore of the view that the ENA's concerns are not valid.

Safety issues associated with de-energisation and re-energisation services

⁵³⁷ Section 14.1(d) of the model terms and conditions for standard retail contracts, in Schedule 1 of the NERR final rule.

⁵³⁸ Section 237(1), (2)(h) of the NERL.

⁵³⁹ Section 34(1)(aa) of the NEL.

⁵⁴⁰ Section 66(1) of the NERL.

⁵⁴¹ Network devices are discussed further in Appendix D4.

⁵⁴² Clause 7.3.2(g) of the NER final rule.

The Commission considers that the benefits of allowing retailers to arrange de-energisation and re-energisation services directly with a Metering Coordinator outweigh the risks, and that the risks involved can be appropriately managed.

However, the Commission recognises that there are potential safety risks associated with the provision of de-energisation and re-energisation services, including for life support customers. The draft rule required retailers and DNSPs to share information regarding life support registers and to notify each other regarding changes to the status of customers' supply. The final rule retains these requirements but qualifies them as follows:

- The DNSP must inform the retailer when it registers a retailer's customer's premises as having life support equipment and give the retailer relevant information about the premises to allow the retailer to update its records and registers.⁵⁴³
- A DNSP that de-energises a customer's premises must, as soon as practicable after the de-energisation, notify the retailer of the de-energisation, including providing reasons for the de-energisation and whether it was performed manually or remotely, except where the de-energisation is as a result of the retailer's request.⁵⁴⁴
- A retailer that has arranged the remote de-energisation of a customer's premises must, as soon as practicable after the de-energisation, notify the DNSP of the remote de-energisation, including providing reasons for the de-energisation, except where the de-energisation was at the DNSP's request.⁵⁴⁵
- A retailer that arranges for a person other than the DNSP to re-energise a customer's premises must, as soon as practicable after the re-energisation, notify the DNSP of the re-energisation.⁵⁴⁶
- A DNSP that has re-energised a customer's premises must, as soon as practicable after the re-energisation, notify the retailer of the re-energisation.⁵⁴⁷
- A retailer must not arrange re-energisation of a customer's premises by a person other than the DNSP if the premises were de-energised by the DNSP.⁵⁴⁸

⁵⁴³ Rule 125(2)(b)-(c) of the NERR final rule. The retailer continues to be required to inform the DNSP when it registers premises as having life support equipment - see rule 124(1) of the NERR final rule.

⁵⁴⁴ Rule 104(1) of the NERR final rule. 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 supply.

⁵⁴⁵ Rule 104(2) of the NERR final rule. It is important for the retailer to inform the DNSP when it de-energises 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.

⁵⁴⁶ Rule 106A(2) of the NERR final rule.

⁵⁴⁷ Rule 106A(5) of the NERR final rule.

⁵⁴⁸ Rule 106A(3) of the NERR final rule.

- A DNSP must not re-energise a customer's premises if a de-energisation of the premises was arranged by the retailer, unless the customer's retailer requests the DNSP to arrange the re-energisation.⁵⁴⁹

There are currently jurisdictional technical and safety regulations that regulate the manner in which interruptions, de-energisations and re-energisations are effected in some participating jurisdictions. The NER final rule places an obligation on the Metering Coordinator to install a type 4 metering installation⁵⁵⁰ that is capable of providing remote disconnection and reconnection services, but does not specify the manner in which those services are provided or the technical functionality of the metering installation itself.⁵⁵¹

The Commission considers that safety outcomes are best achieved by placing an obligation in the NER on the parties arranging disconnection and reconnection services to undertake these actions in accordance with jurisdictional safety legislation. Electrical safety regulation is currently undertaken by jurisdictional safety regulators who have specialist expertise and generally regulate electrical safety across a range of industries in order to achieve consistency of safe practices of electrical contractors in many types of work. It is the role of jurisdictional safety regulators to determine whether safety outcomes should be process or technology driven, or a combination of the two. Consequently, the final rule introduces an explicit requirement that a Metering Coordinator must not arrange to disconnect or reconnect a premises except in accordance with jurisdictional electricity legislation.⁵⁵²

Jurisdictions will need to review their electrical safety legislation and regulations to determine whether any amendments are necessary to support the ability for Metering Coordinators to arrange remote de-energisation and re-energisation of a premises in a safe manner.

The Commission understands that DNSPs outside of Victoria do not currently de-energise or re-energise customer premises remotely. To the extent that jurisdictional safety laws do not already contemplate DNSPs effecting remote de-energisation and re-energisation of a premises (as is the case in Victoria), changes may need to be made to recognise DNSPs' ability to do so under the final rule via a network device.

The Commission engaged with jurisdictional safety regulators in each NEM jurisdiction to inform them of the new arrangements that will be commencing on 1 December 2017. Specifically, the Commission:

- met with the organisation responsible for jurisdictional safety regulation in January/February 2015;

⁵⁴⁹ Rule 106A(6) of the NERR final rule.

⁵⁵⁰ This obligation has two exceptions, which are explained in Appendix C1.

⁵⁵¹ "Disconnection/reconnection" and "de-energisation/re-energisation" both refer to the curtailment and restoration of supply to a premises. "Disconnection/reconnection" are the terms used in the NER and "de-energisation/re-energisation" are the term used in the NERR.

⁵⁵² Clauses 7.3.2(i)(3)(iii) and 7.3.2(i)(4)(ii) of the NER final rule.

- presented on the competition in metering rule change and its implications for safety regulation at the annual ERAC conference in May 2015;
- wrote to each organisation:
 - in April 2015 following the publication of the draft determination; and
 - in October 2015 highlighting the key safety issues associated with the draft and final rules.

The final rule maintains the existing requirement for DNSPs and retailers to maintain separate registers of premises that have life support equipment. The Commission considers this to be the most appropriate way to manage the risk of de-energisation of premises with life support equipment. The following changes have been made between the draft and final rule for clarity in response to submissions from stakeholders that the rights and obligations relating to life support customers were not equivalent between retailers and DNSPs:

- The final rule clarifies that the party receiving the information about the life support customer is not required to then notify the party that has just provided them with the information that the relevant customer has life support equipment, as was implied under the draft rule.⁵⁵³
- The final rule introduces equivalent rights and obligations for retailers that currently apply to DNSPs regarding the registration details to be kept by each party.⁵⁵⁴
- Rule 124(1A) of the NERR final rule reflects the wording in rule 125(1) of the NERR, so that rule 124(1) also operates in circumstances where a DNSP advises the retailer (rather than just when the customer notifies the retailer) that there is a life support customer at the premises.

Access to remote reconnection service

The final rule also introduces an ability for a retailer that wins a move-in customer to access the remote reconnection service in the minimum services specification (subject to commercial agreement with the Metering Coordinator).⁵⁵⁵

A3.5.4 Requirements regarding supply interruptions

Under the NERR draft rule, as is the case under the current NERR, a retailer needing to arrange a supply interruption for the purposes of installing, maintaining, repairing or

⁵⁵³ See rule 124(1)(b) and rule 125(2)(b) of the NERR final rule.

⁵⁵⁴ Rule 124A and 126 of the NERR final rule.

⁵⁵⁵ See table S7.5.1 of the NER final rule. This rationale for this decision is set out in detail in Appendix C1.

replacing metering equipment would be required to arrange for the LNSP to effect such an interruption.

As explained in section A3.4.2, a number of stakeholders questioned why, under the draft rule, DNSPs should continue to be responsible for supply interruptions in circumstances where they are not the party initiating or carrying out the work in relation to the metering installation. Under the new framework for competition in the provision of metering and related services, parties other than the LNSP will be responsible for metering arrangements at small customer premises, and will therefore need to arrange for supply interruptions to install, maintain, repair or replace metering equipment. The NERR draft rule, if it had been made, may have led to inefficient practices by industry and be confusing for consumers in certain circumstances if the party initiating the interruption is not the party effecting it and complying with the relevant notification requirements under the NERR.

In its additional consultation paper, the Commission proposed a number of amendments to the draft rule to address these concerns.⁵⁵⁶

Subject to a number of minor amendments, the final rule reflects the approach proposed in the additional consultation paper. That is, under the final rule, retailers will be able to arrange (e.g. with a Metering Coordinator)⁵⁵⁷ an interruption to their customer's supply of electricity without the involvement of the DNSP (termed a 'retailer planned interruption'⁵⁵⁸) provided that the interruption is:

- for the purposes of installing, maintaining, repairing or replacing an electricity meter; and
- does not involve interrupting supply of electricity to a customer that is not the customer of the retailer arranging the interruption.⁵⁵⁹

As with de-energisation and re-energisation, jurisdictions will need to review their electrical safety legislation and regulations to reflect this new right. The previous section sets out the steps the Commission has taken to inform jurisdictional safety regulators of these changes.

The final rule introduces the following definition of retailer planned interruption:⁵⁶⁰

⁵⁵⁶ See section 3 of the additional consultation paper.

⁵⁵⁷ Note that the process for de-energisation under Part 6 of the NERR final rule permits a retailer to 'arrange' for de-energisation of a customer's premises on specific grounds (See rules 107(5) and Division 2 of Part 6 of the NERR final rule). The NERR final rule does not specify with whom the retailer must make such arrangements. Therefore a retailer is not required to arrange the de-energisation with a DNSP and is permitted to arrange for a de-energisation to be effected by a Metering Coordinator.

⁵⁵⁸ A retailer planned interruption refers to a temporary curtailment of supply for the purposes of installing, maintaining, repairing or replacing an electricity meter. It does not include de-energisation for non-payment or other for other reasons specified under Part 6 of the NERR.

⁵⁵⁹ See rule 59C of the NERR final rule. There are a number of other provisions qualifying this right. See Division 9A of the NERR final rule.

“retailer planned interruption means an *interruption* of the supply of electricity to a customer that:

- (a) is for the purposes of installing, maintaining, repairing or replacing an electricity *meter*; and
- (b) does not involve either:
 - (i) the distributor effecting the *interruption* under rule 89; or
 - (ii) *interrupting* the supply of electricity to a customer who is not the customer of the retailer arranging the *interruption*; and
- (c) is not a *distributor planned interruption*.”

In order to clearly distinguish between a retailer planned interruption and a planned interruption as defined under the existing NERR, the final rule substitutes the term 'planned interruption' with the term 'distributor planned interruption'. At the ENA's recommendation, the definition of 'distributor planned interruption' has been amended from that set out in the additional consultation paper to expressly exclude a 'retailer planned interruption'.⁵⁶¹ This amendment provides additional clarity and delineation between these two types of supply interruptions.

The final rule does not provide retailers with the ability to carry out 'unplanned interruptions', as was proposed by several retailers in submissions to the additional consultation paper. The Commission is of the view that DNSPs should retain exclusive responsibility for unplanned interruptions. The grounds for carrying out an unplanned interruption include where a customer's installation or the distribution system poses an immediate threat of injury or material damage to any person, any property or the distribution system.⁵⁶²

The Commission shares the view of several stakeholders that the obligations currently imposed on DNSPs under the existing rules with regard to planned interruptions should apply equally to retailers for retailer planned interruptions, given the impact on the customer is the same.

DNSP involvement

The final rule requires Metering Coordinators and DNSPs to assist and cooperate with each other where the installation, maintenance, repair or replacement of metering equipment is to be undertaken by the Metering Coordinator and:

- such installation, maintenance repair or replacement requires an interruption of supply to the customer's premises; and

⁵⁶⁰ Rule 59B of the NERR final rule.

⁵⁶¹ Rule 88 of the NERR final rule. In addition, the definition of retailer planned interruption expressly excludes a distributor planned interruption.

⁵⁶² See section 88 of the NERR final rule.

- a retailer planned interruption cannot be undertaken.⁵⁶³

In these circumstances:

- the DNSP must effect the interruption and provide such assistance as the Metering Coordinator may reasonably require to enable the Metering Coordinator to carry out the installation, maintenance, repair or replacement of metering equipment;⁵⁶⁴
- the Metering Coordinator must provide such information and assistance as the DNSP may reasonably require to enable the DNSP to carry out reasonably require to enable it to carry out its obligations under rules 90 and 91 of the NERR in relation to the interruption;⁵⁶⁵and
- the DNSP and the Metering Coordinator must give all other reasonable assistance to each other, and cooperate with each other, in relation to the interruption and their respective obligations under the NERR.⁵⁶⁶

The Commission has not amended the final rule in response to SA Power Networks' concern that it was unclear what assistance a Metering Coordinator could reasonably require from the DNSP to install or maintain a meter (beyond the work required to effect the interruption), or on what basis a regulated DNSP would recover any costs associated with this assistance. The Commission considers that the rule already appropriately limits the obligation on DNSPs by stipulating that they are only required to provide such assistance as the Metering Coordinator may "reasonably" require. A DNSPs costs in providing such assistance would need to be recovered through the regulatory process in the same way as other activities a DNSP undertakes to meet its regulated obligations in relation to operating the distribution network.

Requirement to notify the customer

The final rule introduces certain obligations on the retailer to notify customers of a retailer planned interruption. These obligations broadly mirror those on DNSPs for distributor planned interruptions. Specifically:

- The final rule requires the retailer to notify each affected customer, by any appropriate means, of the retailer planned interruption at least four business days before the date of the interruption.⁵⁶⁷
- Retailers may combine the notice of the retailer planned interruption with the second notice required for a new meter deployment.⁵⁶⁸ The Commission is of the

⁵⁶³ See rule 91A(a)-(c) of the NERR final rule.

⁵⁶⁴ Rule 91A(d) of the NERR final rule.

⁵⁶⁵ Rule 91A(e) of the NERR final rule.

⁵⁶⁶ Rule 91A(f) of the NERR final rule.

⁵⁶⁷ Rule 59C(2) of the NERR final rule.

⁵⁶⁸ Rule 59C(3) of the NERR final rule. See rule 59A(2)(b) of the NERR final rule for details of the notification requirements for new meter deployments.

view that this amendment reduces administrative burden and, where utilised, may reduce the complexity of the meter replacement process from the customer's perspective.⁵⁶⁹

- The final rule sets out the minimum content of the notification, including the expected date, time and duration of the interruption, a 24 hour telephone number for enquiries, and a statement that any enquiries about the interruption are to be directed to the retailer.⁵⁷⁰
- The final rule requires the retailer to use its best endeavours to arrange the restoration of the customer's supply as soon as possible after a retailer planned interruption.⁵⁷¹

The final rule has not been amended in response to some stakeholders' proposals that retailers be able to arrange a planned interruption within a period of less than four business days with the customer's agreement. The Commission considers it appropriate that the same obligation to notify the customer at least four business days before the date of the interruption apply to both retailer planned interruptions and distributor planned interruptions. These minimum requirements allow customers sufficient time to plan for the interruption. Consistent with the DNSP's existing obligations to notify customers of planned interruptions under rule 90(1) of the NERR, the final rule permits retailers to provide notification of a retailer planned interruption by any appropriate means.⁵⁷² This rule provides retailers, who often have more customer information than the DNSP, flexibility in the means by which they notify their customers about interruptions, for example by email or text messaging.

Requirement to notify the DNSP

The final rule introduces obligations on the retailer to notify the DNSP when arranging a retailer planned interruption. Specifically:

- The retailer must notify the DNSP of a retailer planned interruption and give the DNSP all information that the retailer is required to give to a customer regarding the interruption, and must do so within the same time period as the retailer is required to notify the customer.⁵⁷³
- The information provided to the DNSP must also include information regarding the NMI and address of the premises affected by the interruption.⁵⁷⁴
- If a customer contacts the DNSP about a retailer planned interruption requested or proposed by the retailer, the DNSP must refer the customer to the retailer or (if

⁵⁶⁹ See Appendix C2.

⁵⁷⁰ See rule 59C(4) of the NERR final rule.

⁵⁷¹ Rule 59C(5) of the NERR final rule.

⁵⁷² Rule 59C(2) of the NERR final rule.

⁵⁷³ Rule 99A(1) of the NERR final rule.

⁵⁷⁴ Rule 99A(2) of the NERR final rule.

the customer does not wish to contact the retailer) give the customer the information the retailer was required to provide to the DNSP.⁵⁷⁵

The Commission supports the proposal put forward by several stakeholders in their submissions on the additional consultation paper that retailers be required to provide DNSPs with the NMI and address of all customers to be affected by a planned interruption. This information, which retailers have readily available, will help DNSPs respond to no-supply calls and customer queries, thereby improving the overall customer experience. The final rule includes this change.⁵⁷⁶ The Commission has not made any further changes to the retailer's obligations to notify the DNSP about retailer planned interruptions in response to submissions on the additional consultation paper. It is appropriate that retailers be required to notify the DNSP within the same time period as the notification to the customer.⁵⁷⁷ Customers must be notified of a retailer planned interruption at least four business days prior to the interruption, which should give DNSPs sufficient time to prepare for "no-supply" calls.

Safety issues associated with supply interruptions

The final rule provides that a retailer may only arrange a retailer planned interruption "subject to and in accordance with any requirements of the energy laws",⁵⁷⁸ a term that captures jurisdictional electricity legislation. This mirrors the requirement that currently exists for DNSPs with regard to planned interruptions.⁵⁷⁹ Jurisdictional electricity legislation is discussed in the context of de-energisation and re-energisation in section A3.5.3.

Life support customers

The final rule makes consequential amendments to the life support provisions in the NERR to reflect the retailer's ability to arrange an interruption to a customer's electricity supply. Specifically, under the final rule, the retailer must:

- at the time of registering the premises as having life support equipment, give the customer general advice that there may be a retailer planned interruption at the premises;⁵⁸⁰ and
- give the customer at least four business days written notice of the retailer planned interruption.⁵⁸¹

Arrangements for Victoria

⁵⁷⁵ Rule 99A(3) of the NERR final rule.

⁵⁷⁶ Rule 99A(2) of the NERR final rule.

⁵⁷⁷ See rule 99A(1)(b) of the NERR final rule.

⁵⁷⁸ Clause 59C(1) of the NERR final rule.

⁵⁷⁹ See rule 89 of the NERR final rule.

⁵⁸⁰ Clause 124(1)(e)(ii) of the NERR final rule.

⁵⁸¹ Clause 124(1)(f) of the NERR final rule.

The provisions regarding retailer planned interruptions are contained in the NERR final rule. The NERR does not currently apply in Victoria because Victoria has not adopted the NERL as a law of that jurisdiction. 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 final rule.

A3.5.5 Other issues

Standard retail contracts

The model terms and conditions for standard retail contracts are amended under the final rule to recognise the new role and responsibilities of retailers in relation to the provision of metering services.

Specifically, the model terms and conditions for standard retail contracts in the NERR are amended under the final rule 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);
- ability to arrange remote de-energisation and re-energisation services directly with the Metering Coordinator in certain circumstances, rather than have to request that the DNSP undertake the de-energisation or re-energisation;
- ability to arrange a 'retailer planned interruption'; and
- ability to arrange for de-energisation of a premises if the customer fails to give safe and unhindered access to the premises to carry out its responsibilities with regard to metering.

Retailer of last resort provisions

Under the existing ROLR arrangements in the NERL, the designated ROLR takes on the role of Responsible Person for any metering installation for which the failed retailer was the Responsible Person. The existing ROLR provisions 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 at 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.⁵⁸²

The final rule does not introduce any arrangements with respect to the Metering Coordinator role that operate in conjunction with the ROLR provisions in the NERL in the event a retailer fails. The powers afforded to AEMO under the NERL are sufficiently flexible to allow it to introduce requirements in the ROLR procedures (if necessary) to manage the impacts of meter churn following a ROLR event. The Commission is of the view that further guidance in the rules is not needed, as was proposed by the ERAA.

This approach avoids 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.

Under the final rule, AEMO must amend and publish the ROLR procedures by 1 September 2016 to take into account changes made under the final rule.

A3.5.6 AEMC response to other stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

⁵⁸² These procedures are contained in the "NEM ROLR Processes", which form part of AEMO's MSATS Procedures.

Table A3.1 AEMC response to other stakeholder views

Stakeholder	Issue	AEMC response
De-energisation/re-energisation		
AER	While the draft rule proposes that a de-energisation or re-energisation can be performed by a Metering Coordinator, it is unclear if these services can only be arranged by a distributor and a retailer. The rule should explicitly limit the arrangement of these services to distributors and retailers and allow the NERR obligations to reside with these two parties. This would support the management of life support customers. ⁵⁸³	<p>The final rule makes it clear that a Metering Coordinator can only arrange a remote disconnection at the request of the FRMP or LNSP. Specifically, under the final rule, the Metering Coordinator cannot arrange a disconnection except on request of the FRMP or the LNSP,⁵⁸⁴ and cannot arrange a reconnection except on request of the FRMP, LNSP or Incoming Retailer.⁵⁸⁵</p> <p>There are limitations on retailers' and distributors' rights to effect de-energisations and re-energisations under Division 2, 3 and 4 of Part 6 of NERR. The arrangements for life support customers under the NERR have also been amended to recognise a retailer's ability to effect a de-energisation without the involvement of the distributor in Part 7 of the NERR.</p>
AGL	Clause 7.3.2(h)(3) of the NER draft rule should be amended to recognise that Metering Coordinators will arrange, not effect, disconnections and reconnections, and introduce a requirement that it only do so in accordance	The Commission supports these suggested changes and has amended the final rule accordingly. ⁵⁸⁷

⁵⁸³ AER, submission on draft determination, p12.

⁵⁸⁴ Clause 7.3.2(i)(2)(i) of the NER final rule.

⁵⁸⁵ Clause 7.3.2(i)(3)(i) of the NER final rule.

⁵⁸⁷ See clause 7.3.2(i)(2)-(3) of the NER final rule.

Stakeholder	Issue	AEMC response
	with jurisdictional electricity legislation. ⁵⁸⁶	
AusNet Services	Clause 7.3.2(h)(3)(iii) of the NER draft rule (a requirement that the Metering Coordinator not disconnect or reconnect a metering installation except in accordance with the emergency priority procedures) appears to have been incorrectly included. This is not a separate condition on a Metering Coordinator disconnection/reconnection; whether in an emergency or not, the first two conditions are all that applies. The obligation to follow the emergency priority procedures would be clearer drafted into an additional clause (4). ⁵⁸⁸	Under the final rule, a Metering Coordinator must ensure that access to a 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. ⁵⁸⁹ The term "if applicable" has been included in clauses 7.3.2(i)(3)(iii) and (4)(iii) of the NER final rule to clarify that a Metering Coordinator must only arrange to disconnect or reconnect a metering installation in accordance with these procedures, to the extent that they are applicable to a Metering Coordinator carrying out a disconnection or reconnection of a metering installation.
AGL	Clause 7.15.2(g) of the NER draft rule restricts a retailer's ability, through its appointed Metering Coordinator, to remotely disconnect or reconnect a premises. Further, this clause does not link back to clause 7.3.2 of the NER draft rule, where the Metering Coordinators obligations are set out. ⁵⁹⁰	<p>Clause 7.15.2(g) of the NER draft rule was introduced to provide for an express prohibition on a Metering Coordinator denying the LNSP local access for the purposes of reconnecting/disconnecting a premises, rather than, as suggested by AGL, restricting a retailer's ability to effect disconnections and reconnections.</p> <p>The Commission considers that a retailer's rights to arrange de-energisation and re-energisation of a premises through a Metering Coordinator are clearly set out in the draft and final rules. The Commission does not agree that draft clause 7.15.2(g) of the NER would restrict a retailer's rights</p>

⁵⁸⁶ AGL, supplementary submission on draft determination, p9.

⁵⁸⁸ AusNet Services, submission on draft determination, p9.

⁵⁸⁹ See clause 7.8.5(a) of NER final rule.

⁵⁹⁰ AGL, supplementary submission on draft determination, p19.

Stakeholder	Issue	AEMC response
		<p>to do so under the NERR because it does not explicitly refer to retailers.</p> <p>Under the final rule, remote de-energisation or re-energisation by a retailer must be arranged through the Metering Coordinator. Under clause 7.3.2(i)(2)(i) of the NER final rule, a Metering Coordinator cannot arrange a disconnection except on the request of the FRMP or the LNSP. The final rule also introduces limitations on the rights of distributors and retailers to effect de-energisations and re-energisations under Division 2, 3 and 4 of Part 6 of the NERR.</p> <p>The Commission has decided to move the prohibition set out in clause 7.15.2(g) of the draft rule to clause 7.3.2(g) of the final rule because rule 7.3 of the final rule is where the Metering Coordinator's key obligations with respect to metering installations are set out.</p>
AusNet Services	Similar to clause 104(1), clause 104(2) of the NERR draft rule should conclude with the phrase "except where the de-energisation is as a result of the distributor's request". ⁵⁹¹	The Commission agrees with this proposal and has incorporated this amendment in the final rule.
AGL	The word 'arranges' in rule 104(2) of the NERR draft rule is unsuitable. What if the de-energisation is arranged and it never happens? This should just be a notification requirement from the Metering Coordinator to the DNSP, which can be considered by B2B Procedures rather than any requirement in the NERR. This rule should be redrafted	B2B procedures will not apply to all Metering Coordinators, only Initial Metering Coordinators. The Commission therefore considers it appropriate that these notification requirements are set out in the NERR rather than procedures authorised under the NER. An amendment has been incorporated into the final rule to make clear that the

⁵⁹¹ AusNet Services, submission on draft determination, p102.

Stakeholder	Issue	AEMC response
	or included in the Retail Market Procedures as a simple notification requirements between participants. ⁵⁹²	notice is only required after de-energisation. ⁵⁹³
ENA, SA Power Networks	The words "if the premises were de-energised by a retailer" in clause 106A(6) of the NERR draft should be replaced with "if the de-energisation of the premises was arranged by a retailer". ⁵⁹⁴	The Commission agrees with this proposal and has incorporated this amendment in the final rule.
Supply interruptions		
AGL	The definition of 'retailer planned interruption' should explicitly exclude interruptions that are 'initiated', not 'effected' by the distributor, as drafted in the additional consultation paper. This nuance is important, particularly in the transitional period where the DNSP will be required to undertake interruptions as part of a retailer-initiated activity, or through their role as initial Metering Coordinator. ⁵⁹⁵	<p>The Commission does not consider it appropriate for the current exclusion in the definition of 'retailer planned interruptions' to be amended to be distributor 'initiated' rather than 'effected' because such a change would create uncertainty with respect to the rights and obligations of retailers and distributors when interruptions are arranged at a particular connection point. Specifically, the Commission is of the view that the party effecting the interruption (in the case of the retailer, being the retailer by way of the Metering Coordinator) should be responsible for notifying the customer and complying with the other requirements set out in the NERR.</p> <p>Under the final rule, 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</p>

⁵⁹² AGL, supplementary submission on draft determination, p3.

⁵⁹³ See rule 104(2) of the NERR final rule.

⁵⁹⁴ ENA, submission on draft determination, p14-15; SA Power Networks, submission on draft determination, p7.

⁵⁹⁵ AGL, submission on additional consultation paper, p7.

Stakeholder	Issue	AEMC response
		<p>7 of the NER final rule will become the initial Metering Coordinator at that connection point.⁵⁹⁶</p> <p>The final rule requires DNSPs to effect an interruption where the installation, maintenance, repair or replacement of metering equipment is to be undertaken by the Metering Coordinator and a retailer planned interruption cannot be undertaken. The final rule requires Metering Coordinators and DNSPs to assist and cooperate with each other in these circumstances.⁵⁹⁷ In this scenario it is appropriate that the DNSP be responsible for notifying all affected customers and effecting the interruption.</p> <p>The definition of 'retailer planned interruption' has therefore not been amended in response to this proposal.</p>
Vector	<p>The proposal, which requires customers to be notified of the "expected date, time and duration" of a retailer planned interruption implies that all meter replacements need to be performed by appointment. This may increase costs because fewer meter replacements will be scheduled per field service agent to allow ample time to meet each appointment. The notification should include a timeframe within which the retailer planned interruption will occur (i.e. five business days), rather than specifying the expected date, time and duration.⁵⁹⁸</p>	<p>These notification requirements are consistent with those imposed on DNSPs under the NERR with respect to a planned interruption ('distributor planned interruption' under the final rule), the definition of which is an interruption of the supply of energy for the purposes of, among other things, "planned or routine maintenance of metering equipment".⁵⁹⁹ A 'retailer planned interruption' means an interruption of the supply of electricity to a customer that, among other things, is "for the purposes of installing, maintaining, repairing or replacing an electricity meter".⁶⁰⁰</p>

⁵⁹⁶ See clause 11.86.7 of final rule.

⁵⁹⁷ See rule 91A of the NERR final rule.

⁵⁹⁸ Vector, submission on additional consultation paper, p3.

⁵⁹⁹ See rule 88 of the existing and final NERR.

Stakeholder	Issue	AEMC response
		<p>The Commission considers it appropriate that the notification requirements imposed on DNSPs for a distributor planned interruption for maintenance of metering equipment are consistent with those imposed on retailers for a retailer planned interruption for the same activity.</p> <p>The final rule has therefore not been amended in response to this proposal.</p>
Victorian DNSPs	Small and large customers should be afforded the same level of customer protections and notifications in writing for planned or routine maintenance of metering equipment. ⁶⁰¹	<p>Division 5 of Part 4 of the current NERR (which contains the distributor planned/unplanned interruption obligations) is not expressed to apply only to small customers. Therefore the notification requirements for planned interruptions currently apply to both small customers and large customers. The retailer planned interruptions requirements will also apply to large and small customers under final rule.⁶⁰²</p> <p>We note that Victoria has adopted the Energy Retail Code version 11 (Victorian Code), which is modelled on the NERR but contains Victorian-specific amendments. One of these specific amendments is that the entire Victorian Code applies only to small customers.⁶⁰³ If Victoria implements the retailer planned interruption provisions set out in the NERR final rule, these will not apply to customers in Victoria unless Victoria adopts similar requirements in respect of all customers under the Victorian Code.</p>

⁶⁰⁰ See rule 59B of the NERR final rule.

⁶⁰¹ Victorian DNSPs, submission on additional consultation paper, p60.

⁶⁰² See rule 59C(8) of the NERR final rule.

⁶⁰³ Rule 3B(1) of the Victorian Energy Retail Code.

Stakeholder	Issue	AEMC response
Other issues		
Victorian DNSPs	The model terms of the standard retail contract should include the same requirements regarding access to premises under clause 9.2 of the deemed standard connection contract, i.e. requirements to comply with all relevant requirements under the energy laws, carry or wear official identification and show the identification if requested. ⁶⁰⁴	The Commission supports this recommendation and has amended the standard retail contract accordingly. ⁶⁰⁵
AGL	The addition of the text "including an enquiry or complaint relating to the customer's electricity meter" in rule 101(1) of the NERR draft rule is an unnecessary addition. It is unclear how DNSPs would discern between an issue with connection services and an issue with the meter. Not all perceived metering issues will be able to be resolved by the retailer. ⁶⁰⁶	The Commission is of the view that, as retailers will be responsible for appointing Metering Coordinators, complaints about metering services should be directed to the retailer. The final rule therefore retains this addition, but amends the provision slightly to be more specific about the nature of the complaints to be directed to the retailer, i.e. complaints that relate to any of the matters for which Metering Coordinators are responsible under Chapter 7 of the NER final rule. ⁶⁰⁷
AGL	The changes to section 5.2 of the standard connection contract purport to cover the electricity metering obligations, but there is a lot missing. This section needs to be reworked. ⁶⁰⁸	The Commission assumes that AGL is referring to the changes to the standard retail contract, as no changes were made to clause 5.2 of the standard connection contract in the draft rule. AGL appears to be suggesting that other services need to be excluded from the scope of

⁶⁰⁴ Victorian DNSPs, submission on draft determination, p61.

⁶⁰⁵ See clause 11(c) of the model terms and conditions for standard retail contracts in Schedule 1 of the NERR final rule.

⁶⁰⁶ AGL, supplementary submission on draft determination, pp30-31.

⁶⁰⁷ See rule 101(1) of the NERR final rule.

⁶⁰⁸ AGL, supplementary submission on draft determination, p32.

Stakeholder	Issue	AEMC response
		<p>the standard retail contract, but has not suggested which services should be excluded.</p> <p>The Commission has determined that the changes to this clause are sufficient and appropriately clarify that metering equipment is no longer removed from the scope of a contract in the context of supply of electricity.</p>
AGL	<p>There should be a clear right in clause 9.2 of the model terms and conditions for standard retail contracts for retailers to charge for metering services, or "services provided by your Metering Coordinator or Responsible Person".⁶⁰⁹</p>	<p>The Commission does not consider it necessary to make this amendment. Clause 9.2(b) of the model terms and conditions for standard retail contracts, when read together with clause 5.1(a), already makes it clear that bills can be calculated on charges for metering services (i.e. that retailers can include charges for these services in the bill).</p>

⁶⁰⁹ AGL, supplementary submission on draft determination, p32.

A4 DNSPs' roles and responsibilities

Summary

This appendix sets out the roles and responsibilities of DNSPs under the final rule.

Under the final rule, the role and responsibilities of the Responsible Person will be performed by the Metering Coordinator and the LNSP's exclusive role in providing metering services for type 5 and type 6 metering installations will cease. However, LNSPs will be required to take on the Metering Coordinator role for type 7 metering installations. This is discussed further in Appendix D1. LNSPs will no longer be required to make an offer to provide metering services for type 1-4 metering installations at distribution connection points if requested to do so by a Market Participant (as is currently the case under the NER).

Under the transitional arrangements, an LNSP acting as the Responsible Person at a connection point with a type 5 or 6 metering installation immediately before 1 December 2017 will become the initial Metering Coordinator and will continue in this role until another Metering Coordinator is appointed at that connection point 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 another Metering Coordinator is appointed at that connection point 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 on a contestable basis. However, to do so a DNSP will need to comply with the ring-fencing guidelines developed by the AER. Ring-fencing arrangements for DNSPs are discussed further in Appendix D3.

If DNSPs are not performing the Metering Coordinator role at a site, they may still be able to access the network-related services enabled by advanced meters by negotiating access on a commercial basis with Metering Coordinators providing those services.

The final rule also allows DNSPs to retain existing network devices or install new network devices in certain circumstances, for example if it cannot negotiate a satisfactory arrangement with the Metering Coordinator for the provision of those services through the metering installation. These arrangements are discussed further in Appendix D4.

The final rule allows both DNSPs and retailers to arrange remote de-energisation and re-energisation services directly with a Metering Coordinator. DNSPs will continue to retain sole responsibility for performing manual de-energisations and re-energisations.

DNSPs will continue to be able to carry out interruptions to the supply of energy at a customer's premises, including for planned interruptions (referred to as 'distributor planned interruptions' under the final rule) and unplanned interruptions. The final rule requires DNSPs to effect an interruption where the installation, maintenance, repair or replacement of metering equipment is to be undertaken by the Metering Coordinator and a retailer planned interruption cannot be undertaken. The final rule requires Metering Coordinators and DNSPs to assist and cooperate with each other in these circumstances.

The final rule amends the model terms and conditions for deemed standard connection contracts to clarify that DNSPs are not responsible for retailer planned interruptions.

The Commission has considered the potential impacts on network security that could arise from large quantities of load being controlled via advanced meters. As the risks to network security are not limited to meters and it is not possible to predict the proportion of load that will be under control, 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 final rule.

This appendix covers:

- the existing responsibilities of a DNSP under the NER (with respect to the provision of metering services) and NERR (with respect to supply interruptions and de-energisation/re-energisation services);
- stakeholder views including submissions to the consultation paper, draft determination and additional consultation paper, and outcomes of stakeholder workshops held by the AEMC;
- the Commission's analysis of the key issues and reasons for its final rule.

A4.2 Existing arrangements

A4.2.1 Responsibilities of a DNSP in relation to metering services

Under Chapter 7 of the existing 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.⁶¹⁰ The role of the Responsible Person is performed exclusively by the LNSP for

⁶¹⁰ Existing clause 7.1.2 of the NER. The retailer is generally the Market Participant and the FRMP in relation to the connection points of each of its retail customers.

type 5-6 metering installations at the premises of small customers, and type 7 metering installations. The Market Participant is required to 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 existing role and responsibilities of the Responsible Person in relation to the provision of metering services in the NEM are discussed in Appendix A1.

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.⁶¹¹ In practice, small customers generally organise a connection service through their retailer, who liaises with the LNSP to establish a new connection, or alter an existing connection. Large customers often deal directly with the LNSP to organise their connection to the network.

A4.2.2 Requirements regarding de-energisation and re-energisation

DNSPs have a number of rights and obligations under the NERR relating to the de-energisation and re-energisation of customers.

De-energisation and re-energisation services for small customers are regulated under the NERR and jurisdictional safety requirements.⁶¹² While both retailers and DNSPs can initiate these requests, under the existing arrangements only a DNSP is able to effect de-energisations and re-energisations.

Initiating de-energisation and re-energisation services

DNSPs have a number of grounds under the existing NERR to de-energise a customer's premises, 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 de-energising a customer's premises in certain circumstances, including if:⁶¹³

- the premises is registered as having life support equipment;
- it is a protected period;⁶¹⁴
- there is an extreme weather event;⁶¹⁵ or

⁶¹¹ 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.

⁶¹² For example, in Victoria, where the NERR does not apply, remote disconnection and reconnection services can only be provided in accordance with processes approved by Energy Safe Victoria.

⁶¹³ Existing rule 120 of the NERR.

⁶¹⁴ Existing 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.

- there is an unresolved complaint directly related to the proposed de-energisation.

Where the DNSP has de-energised a small customer's premises at the request of the retailer, the DNSP must re-energise the premises at the request of the retailer.⁶¹⁶ Where the DNSP has de-energised a small customer's premises other than at the request of a retailer, the DNSP must re-energise the premises if the customer has, within 10 business days of the de-energisation, rectified the matter that led to the de-energisation (if relevant), made a request for re-energisation and paid any charge for re-energisation.⁶¹⁷

Performing de-energisation and re-energisation services

The existing NERR permits DNSPs to perform de-energisation and re-energisation services,⁶¹⁸ and in practice it is the only party that does so.⁶¹⁹

When a DNSP decides to carry out a de-energisation or re-energisation service it must determine how to provide the service. Outside of Victoria, generally a DNSP (or its agent) will attend the premises to manually remove or replace the service fuse in order to de-energise or re-energise the premises.⁶²⁰ 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 de-energisation and re-energisation services. These fees are determined as part of the process of economic regulation by the AER. If a customer's premises is mistakenly de-energised by the DNSP, the DNSP is obliged to re-energise the premises at no cost to the customer.⁶²¹

Safety issues associated with de-energisation and re-energisation services

Obligations relating to the safe de-energisation of a customer's premises, whether manual or remote, primarily relate to confirming that the customer at the premises does not have life support equipment, as the de-energisation of such premises could be fatal. The existing NERR requires both DNSPs and retailers to maintain registers of

⁶¹⁵ An extreme weather event is defined in existing rule 108 of the NERR as an event declared by a local instrument as an extreme weather event in the jurisdiction in which the customer's premises are located.

⁶¹⁶ Existing rule 122(1) of the NERR.

⁶¹⁷ Existing rule 122(2) of the NERR.

⁶¹⁸ Existing rules 119 and 122 of the NERR.

⁶¹⁹ Existing rule 111 of the NERR states that a retailer "may arrange de-energisation of a customer's premises" but does not expressly state with whom it can arrange the de-energisation. Existing rule 121 of the NERR states that, where a retailer has arranged for a de-energisation of a small customer's premises, it must initiate a request to the distributor to re-energise the premises.

⁶²⁰ DNSPs can use different methods to manually de-energise or re-energise a customer's premises, such as removing the service fuse in the customer's meter box or a removing the pole top fuse. In each case it is a physical disconnection or reconnection of the supply that is performed manually at the premises.

⁶²¹ Clause 13.3 of the model terms and conditions for deemed standard connection contracts, Schedule 2 of the NERR.

premises with life support equipment, and they are not permitted to de-energise these premises.⁶²²

Where a customer has life support equipment at its premises, it is required to inform either the retailer⁶²³ or the DNSP.⁶²⁴ Where a customer informs the DNSP that a person residing at the customer's premises requires life support equipment, or the retailer advises the DNSP that this is the case, the DNSP must:

- register the premises as having life support equipment; and
- not arrange for de-energisation of these premises while the person continues to reside at the premises and requires life support equipment.⁶²⁵

Under the existing NERR, a DNSP is not required to inform the relevant retailer when the DNSP is notified by a customer that a person residing at the customer's premises requires life support equipment. However, the Commission understands that:

- while it is not a requirement under the existing NERR, some DNSPs do inform the customer's retailer when the customer advises the DNSP that a person residing at the customer's premises requires life support equipment; and
- the IEC⁶²⁶ 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.

The Commission understands that re-energisation of a customer's premises also has safety implications. Because of this, DNSPs typically:

- check that the customer has not left any appliances on while the premises was de-energised, which could impose a fire hazard when the supply is restored and the appliance turns on;⁶²⁷

⁶²² The existing NERR contains an exception to the restriction on a DNSP de-energising the premises in the case of an interruption under Division 6 of Part 4 of the NERR. See existing rule 125(2)(b) of the NERR.

⁶²³ Clause 6.3(b) of the model terms and conditions for standard retail contracts in schedule 1 of the NERR.

⁶²⁴ Clause 6.4(b) of the model terms and conditions for standard connection contracts in schedule 2 of the NERR.

⁶²⁵ Existing rule 125 of the NERR. This rule contains a number of exceptions and provisions regarding planned interruptions. These arrangements are explained in more detail in section A4.2.3.

⁶²⁶ The IEC is a body established under the NER to manage the ongoing development of B2B procedures. See existing clause 7.1.3 of the NER.

⁶²⁷ The Commission understands that when re-energisations are performed manually by DNSPs, they will confirm with the customer that all appliances are off. In Victoria, where remote re-energisation is possible, the DNSPs can rely on retailers to check the status of customers' appliances, provided that their processes for doing so are approved by Energy Safe Victoria, as required by legislation administered by Energy Safe Victoria.

- inspect the wiring at the premises following a prolonged period of de-energisation; and
- do not allow re-energisation during an emergency (such as flood or bush-fire), at the direction of the jurisdiction's emergency coordinators.

In addition to the requirements in the existing NERR, DNSPs are required to manage safety risks associated with de-energisation and re-energisation in accordance with the relevant jurisdiction's safety laws.

This may involve the DNSP performing de-energisation and re-energisation 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.⁶²⁸ The DNSP may also be required to liaise with the relevant jurisdictional emergency coordinators during emergencies 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.

A4.2.3 Requirements regarding supply interruptions

Under the existing NERR, a DNSP may, subject to and in accordance with any requirement of the energy laws, interrupt the supply of energy to a premises (including for a planned interruption or an unplanned interruption).⁶²⁹ In the case of a planned interruption, the DNSP must notify each affected customer of the interruption by any appropriate means at least four business days before the date of the interruption.⁶³⁰ The DNSP must also use its best endeavours to restore the customer's supply as soon as possible.⁶³¹

A4.2.4 Direct load control and network security management

The NER does not currently contain specific arrangements to manage the impact that the operation of direct load control via a meter with advanced functionality (or via any other means) may have on network security.

⁶²⁸ For example, in Victoria remote disconnection and reconnection services can only be provided in accordance with processes approved by Energy Safe Victoria.

⁶²⁹ See existing rule 89 of the NERR. Under the existing NERR, an *interruption* means "a temporary unavailability or temporary curtailment of the supply of energy to a customer's premises, but does not include unavailability or curtailment in accordance with the terms and conditions of a customer retail contract or customer connection contract, and any applicable tariff, agreed with the customer". See existing rule 88 of the NERR for the definitions of *planned interruption* and *unplanned interruption*.

⁶³⁰ See existing rule 90 of the NERR.

⁶³¹ See existing rules 90-91 of the NERR.

A4.3 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.

A4.4 Stakeholder views

A4.4.1 Consultation paper and initial workshops

At the first stakeholder workshop, DNSPs expressed concern that establishing a separate Metering Coordinator role may introduce a number of risks, particularly:

- consumer protection and safety risks, if parties are able to remotely de-energise or re-energise customers' premises; and
- network security risks, if one or more Metering Coordinators are able to switch 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 DNSPs under the NER and NERR, particularly in relation to network security and reliability of supply.

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.

A4.4.2 Draft determination and operational workshop

Responsibilities of a DNSP in relation to metering services

The draft rule required that the LNSP 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 (1 December 2017) must be appointed by the FRMP as the Metering Coordinator at that connection point.⁶³² It provided that, at least three months prior to the commencement of the new Chapter 7 of the NER, the LNSP for a type 5 or 6 metering installation must provide the FRMP with a standard set of terms and conditions on which it will agree to act as the Metering Coordinator for those connection points.⁶³³ Unless the LNSP and FRMP agree other terms and conditions, the LNSP would be deemed appointed as the Metering Coordinator by the FRMP on the LNSP's standard terms and conditions.⁶³⁴

⁶³² Clause 11.78.7(a) of the NER draft rule.

⁶³³ Clause 11.78.7(b) of the NER draft rule.

⁶³⁴ Clause 11.78.7(c) of the NER draft rule.

Under the draft rule, the LNSP's appointment (or deemed appointment) would continue until the earlier of:

1. the services provided with respect to the metering installation ceasing to be classified by the AER as direct control services; and
2. another Metering Coordinator being appointed with respect to that connection point.⁶³⁵

The AER considered that the requirement for retailers, as the FRMP, to appoint the LNSP as the initial Metering Coordinator would provide a smooth transition to competition by maintaining the terms and conditions including price of these services, as set in AER regulatory determinations, until such a time as a new metering installation is installed on a competitive basis.⁶³⁶ The AER also supported allowing the FRMP to terminate the LNSP's role as initial Metering Coordinator and appoint another party to this role, and requiring that LNSPs do not inhibit their ability to do so.⁶³⁷

The ENA submitted that there were a number of difficulties with the transitional provisions in the draft rule, which would create legal uncertainty for LNSPs, FRMPs and customers. In particular, it submitted that:

- The draft rule does not address the removal of a DNSP's type 5 and type 6 meters on termination of its appointment as the initial Metering Coordinator. It should be clear that the FRMP must not interfere with or remove the LNSP's meter without the LNSP's consent, if the FRMP does not wish to re-engage the LNSP as the Metering Coordinator.
- The LNSP's right to terminate its appointment as the initial Metering Coordinator under the transitional arrangements is unclear. The LNSP should have clear rights to terminate for unremedied defaults, particularly any unremedied payment defaults or where the meter is being interfered with or damaged in any way.⁶³⁸

The ENA noted that, under the draft rule, an LNSP is free to include clauses to the above effect in the terms and conditions offered to the FRMP. However, it submitted that the draft rule expressly provides that any such additional terms must be consistent with clause 11.78.7(d), which effectively requires that any terms so included must not "prevent, hinder or otherwise impede" the FRMP from appointing another Metering Coordinator. The ENA recommended that this clause be amended to make it clear that reasonable additional clauses will not be considered as "preventing, hindering or impeding" a change of Metering Coordinator.⁶³⁹

⁶³⁵ Clause 11.78.7(h) of the NER draft rule.

⁶³⁶ AER, submission on draft determination, p4.

⁶³⁷ Ibid.

⁶³⁸ ENA, submission on draft determination, pp30-31.

⁶³⁹ ENA, submission on draft determination, p31.

The NSW DNSPs noted that there was no specific process in the draft rule regarding the termination of the appointment of the LNSP in the event the AER reclassifies type 5 and 6 metering services.

Energex was of the view that the draft rule needed to be revised to make it clear that no Metering Coordinator and/or Metering Provider of last resort obligations would be placed on DNSPs, including at new connections in the event that there is no Metering Coordinator or Metering Provider willing to compete.⁶⁴⁰

Requirements regarding de-energisation and re-energisation

The draft rule provided retailers with an explicit ability to arrange remote de-energisation and re-energisation 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 provided for a number of changes to the NERR to require retailers and DNSPs to inform each other when they arrange the de-energisation or re-energisation of a premises, and to ensure issues related to consumers with life support equipment are managed.

A full description of submissions to the draft determination and views expressed in the operational workshop on this issue can be found in Appendix A3.

Requirements regarding supply interruptions

The draft rule provided for the introduction of a number of provisions to recognise that, under the new framework, parties other than the DNSP will be responsible for metering arrangements at small customer premises and will therefore need to arrange for supply to the premises to be interrupted in order to install, maintain, repair or replace metering equipment.⁶⁴¹

These provisions were drafted on the basis that it would be the DNSP who would effect an interruption that was required for a Metering Coordinator to install, maintain, repair or replace electricity metering equipment. The draft rule (consistent with the existing NERR) did not provide a retailer with the right to arrange supply interruptions independently of the DNSP. See section C2.5.2 of the draft determination for a more detailed description of the draft rule.

A full description of submissions to the draft determination and views expressed in the operational workshop on this issue can be found in Appendix A3.

⁶⁴⁰ Energex, submission on draft determination, Attachment A, p4.

⁶⁴¹ See Appendix A3 for a more detailed description of the draft rule regarding supply interruptions and the rationale behind it.

Direct load control and network security management

In its submission to the draft determination, the ENA noted that the potential impact of synchronised load switching on the network is generally widely recognised but expressed concern that no clear indication has been given on where and how any necessary remedial measures will be considered and put in place. It asked that the AEMC include a requirement in the final rule that Metering Coordinators can only switch load in accordance with jurisdictional requirements and procedures, in order to ensure network stability and maintain quality of supply to customers.⁶⁴²

A4.4.3 Additional consultation paper

The additional consultation paper proposed a number of amendments to the draft rule to address the issues raised by stakeholders in submissions to the draft determination in relation to supply interruptions. In summary, the Commission proposed to introduce a right for retailers to arrange an interruption to the supply of electricity to their customers' premises, without the involvement of the DNSP, for the purposes of installing, maintaining, repairing or replacing metering equipment.

The proposed approach also involved imposing obligations on the retailer to notify affected customers, consistent with those that currently apply to DNSPs when effecting planned interruptions, as well as requirements to notify the DNSP when arranging an interruption.⁶⁴³

A summary of submissions to the additional consultation paper on this issue can be found in Appendix A3.

A4.5 Commission's analysis

Changes between the draft and final rule

The final rule largely reflects the draft rule with regard to the role and responsibilities of DNSPs. A number of changes have been made to better implement the Commission's policy intent and resolve operational issues raised by stakeholders in their submissions to the draft determination.

The most significant change is that, in line with the approach set out in the additional consultation paper, the final rule introduces an ability for retailers to arrange an interruption to the supply of electricity to a customer for the purposes of installing, maintaining, repairing or replacing metering equipment. The final rule sets out the process retailers must follow when arranging such an interruption, defined as a "retailer planned interruption" in the final rule. To support this ability, the final rule:

⁶⁴² ENA, submission on draft determination, p33.

⁶⁴³ See section 3 of the additional consultation paper for more information.

- requires DNSPs to effect an interruption where the installation, maintenance, repair or replacement of metering equipment is to be undertaken by the Metering Coordinator and a retailer planned interruption cannot be undertaken, and requires Metering Coordinators and DNSPs to assist and cooperate with each other in these circumstances; and
- introduces a number of obligations on the retailer to notify the DNSP when arranging a retailer planned interruption.

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.

A4.5.1 Responsibilities of a DNSP in relation to metering services

Under the final rule, the role and responsibilities of the Responsible Person will be performed by the Metering Coordinator and the LNSP's exclusive role in providing metering services for type 5 and type 6 metering installations will cease. The final rule requires the LNSP to take on the Metering Coordinator role for type 7 metering installations, as discussed in Appendix D1.

The final rule does not require LNSPs to make an offer to act as the Metering Coordinator for type 1-4 metering installations at a distribution connection point if requested to do so by a Market Participant. Currently, LNSPs must make an offer to act as the Responsible Person in such circumstances.

Under the transitional arrangements in the final rule, the LNSP that is acting as the Responsible Person for a type 5 or 6 metering installation immediately before the effective date (1 December 2017) must be appointed as the Metering Coordinator at that connection point by the FRMP.⁶⁴⁴ As the initial Metering Coordinator for these connection points, the LNSP will be required to fulfil all the obligations of the Metering Coordinator role, e.g. meter reading and testing.⁶⁴⁵

⁶⁴⁴ Clause 11.86.7(a) of the NER final rule. Appendix A1 sets out the transitional arrangements for existing type 5 and 6 metering installations in more detail.

⁶⁴⁵ Note that clause 11.86.7(g) of the NER final rule contains a number of exceptions to the requirements of the Metering Coordinator role that apply to the LNSP where it has been appointed or deemed to have been appointed as the Metering Coordinator.

The final rule provides that, despite anything to the contrary in the terms and conditions on which a LNSP is appointed (or deemed to have been appointed) by the FRMP as initial Metering Coordinator under the transitional arrangements, that appointment will continue until the earlier of:

- the services provided with respect to the metering installation ceasing to be classified by the AER as direct control services; and
- a different Metering Coordinator being appointed at that connection point.⁶⁴⁶

The Commission's policy position is that, because the DNSP's role as initial Metering Coordinator for type 5 and 6 metering services is a regulated distribution service, the DNSP should not be able to decide to terminate its role as Metering Coordinator at these sites, as was proposed by the ENA in its submission to the draft determination. The DNSP's role as initial Metering Coordinator will only terminate under the scenarios provided for above.

The Commission expects that, in most cases, a new Metering Coordinator will only be appointed to a connection point where:

- the consumer takes up a product or service that requires a more advanced meter to be installed;
- the existing meter becomes faulty and needs to be replaced; or
- the retailer arranges a "new meter deployment" or "maintenance replacement".

Appendix C2 sets out these scenarios, and the transfer of responsibility between the LNSP (as the initial Metering Coordinator) to another Metering Coordinator, in more detail.

As under the draft rule, DNSPs have no obligation under the final rule to be the Metering Coordinator and/or Metering Provider of last resort, for example at new connections in the event that there is no evidence of competition to take on those roles, or a Metering Coordinator default event occurs. The FRMP will bear responsibility for ensuring that there is a Metering Coordinator at each connection point for which it is financially responsible.⁶⁴⁷

The final rule does not prevent a DNSP from taking on the Metering Coordinator, Metering Provider and/or Metering Data Provider roles to provide metering services on a contestable basis provided they are appropriately accredited by AEMO to do so and comply with any requirements of the AER's ring-fencing guideline. The final rule requires the AER to determine appropriate ring-fencing requirements for DNSPs and to set these out in a distribution ring-fencing guideline. This is discussed further in Appendix D3.

⁶⁴⁶ See clause 11.86.7(k) of the NER final rule.

⁶⁴⁷ Clause 7.2.1(a)(1) of the NER final rule.

If a DNSP does not wish to compete as a Metering Coordinator to provide advanced metering services, it may still be able to access network-related services enabled by advanced meters by negotiating access on a commercial basis with Metering Coordinators operating in its network area. 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. These issues are discussed in further detail in Appendix E.

The final rule also includes a number of provisions with regard to a DNSP's ability to retain existing network devices and install new network devices. Specifically, under the final rule DNSPs will be able to retain an existing network device (e.g. load control equipment or AMI meters) or install a new network device, provided that, amongst other things, both the metering installation and the network device can be accommodated within the metering facility. These provisions are discussed in more detail in Appendix D4.

New connections

As a consequence of establishing a separate Metering Coordinator role, DNSPs will not be responsible for installing and maintaining metering installations at new connection points unless appointed by the FRMP to do so subject to the requirements of the AER ring fencing guideline.⁶⁴⁸

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.

A4.5.2 Requirements regarding de-energisation and re-energisation

Consistent with the draft rule, the final rule allows both retailers and DNSPs (subject to negotiating access to the service with the Metering Coordinator) to arrange remote de-energisation and re-energisation services directly with the relevant Metering Coordinator at a connection point in certain circumstances. DNSPs will continue to be the only party that can provide manual de-energisation and re-energisation services.⁶⁴⁹

The Commission considers that allowing retailers to arrange remote de-energisation and re-energisation services directly with a Metering Coordinator will further the overall objectives of the rule change request and the long term interests of consumers.

In order to maintain the safety of the network and of consumers, including life support customers, under the new arrangements, the final rule includes the following obligations:

⁶⁴⁸ Ring fencing arrangements are discussion in Appendix D3.

⁶⁴⁹ Note that, under the final rule, retailers will be able to arrange an interruption to their customer's supply of electricity for the purposes of installing, maintaining, repairing or replacing an electricity meter. This is discussed further in Appendix A3.

- The DNSP must inform the retailer when it registers a retailer's customer's premises as having life support equipment and give the retailer relevant information about the premises to allow the retailer to update its records and registers.⁶⁵⁰
- A DNSP that de-energises a customer's premises must, as soon as practicable after the de-energisation, notify the retailer of the de-energisation, including providing reasons for the de-energisation and whether it was performed manually or remotely, except where the de-energisation is as a result of the retailer's request.⁶⁵¹
- A retailer that has arranged the remote de-energisation of a customer's premises must, as soon as practicable after the de-energisation, notify the DNSP of the remote de-energisation, including providing reasons for the de-energisation, except where the de-energisation was at the DNSP's request.⁶⁵²
- A retailer that arranges for a person other than the DNSP to re-energise a customer's premises must, as soon as practicable after the re-energisation, notify the DNSP of the re-energisation.⁶⁵³
- A DNSP that has re-energised a customer's premises must, as soon as practicable after the re-energisation, notify the retailer of the re-energisation.⁶⁵⁴
- A retailer must not arrange re-energisation of a customer's premises by a person other than the DNSP if the premises were de-energised by the DNSP.⁶⁵⁵
- A DNSP must not re-energise a customer's premises if a de-energisation of the premises was arranged by the retailer, unless the customer's retailer requests the DNSP to arrange the re-energisation.⁶⁵⁶

The final rule also introduces an explicit requirement that a Metering Coordinator must not arrange to disconnect or reconnect a premises except, amongst other things, in accordance with jurisdictional electricity legislation.⁶⁵⁷

⁶⁵⁰ Rule 125(2)(b)-(c) of the NERR final rule. 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 final rule.

⁶⁵¹ Rule 104(1) of the NERR final rule. 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 supply.

⁶⁵² Rule 104(2) of the NERR final rule. It is important for the retailer to inform the DNSP when it de-energises 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.

⁶⁵³ Rule 106A(2) of the NERR final rule.

⁶⁵⁴ Rule 106A(5) of the NERR final rule.

⁶⁵⁵ Rule 106A(3) of the NERR final rule.

⁶⁵⁶ Rule 106A(6) of the NERR final rule.

⁶⁵⁷ Clauses 7.3.2(i)(3)(iii) and 7.3.2(i)(4)(ii) of the NER final rule.

Jurisdictions will need to review their electrical safety laws and regulations to determine whether any amendments are necessary to support the ability for Metering Coordinators to arrange remote de-energisation and re-energisation of a premises in a safe manner. The Commission understands that DNSPs outside of Victoria do not currently de-energise or re-energise customer premises remotely. To the extent that jurisdictional safety laws do not already contemplate DNSPs effecting remote de-energisation and re-energisation of a premises (as is the case in Victoria), changes may need to be made to recognise DNSPs' ability to do so under the final rule via a network device.

A more detailed description of the final rule, the Commission's analysis and responses to issues raised by stakeholders on this issue are set out in Appendix A3.

A4.5.3 Requirements regarding supply interruptions

As discussed in Appendix A3, the final rule introduces an ability for retailers to arrange (e.g. with a Metering Coordinator) an interruption to their customer's supply of electricity without the involvement of the DNSP (termed a 'retailer planned interruption') in certain circumstances.

The final rule requires Metering Coordinators and DNSPs to assist and cooperate with each other where the installation, maintenance, repair or replacement of metering equipment is to be undertaken by the Metering Coordinator and:

- such installation, maintenance repair or replacement requires an interruption of supply to the customer's premises; and
- a retailer planned interruption cannot be undertaken.⁶⁵⁸

In these circumstances:

- the DNSP must effect the interruption and provide such assistance as the Metering Coordinator may reasonably require to enable the Metering Coordinator to carry out the installation, maintenance, repair or replacement of metering equipment;⁶⁵⁹
- the Metering Coordinator must provide such information and assistance as the DNSP may reasonably require to enable the DNSP to carry out reasonably require to enable it to carry out its obligations under rules 90 and 91 of the NERR in relation to the interruption;⁶⁶⁰and

⁶⁵⁸ See rule 91A(a)-(c) of the NERR final rule.

⁶⁵⁹ Rule 91A(d) of the NERR final rule.

⁶⁶⁰ Rule 91A(e) of the NERR final rule.

- the DNSP and the Metering Coordinator must give all other reasonable assistance to each other, and cooperate with each other, in relation to the interruption and their respective obligations under the NERR.⁶⁶¹

A more detailed description of the final rule, the Commission's analysis and responses to issues raised by stakeholders on this issue are set out in Appendix A3.

The final rule amends the model terms and conditions for deemed standard connection contracts to clarify that DNSPs are not responsible for retailer planned interruptions. As noted in Chapter 5, DNSPs will need to update their standard connection contracts by 1 July 2017.

A4.5.4 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 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.

The Commission 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.

⁶⁶¹ Rule 91A(f) of the NERR final rule.

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.⁶⁶² 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 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 final 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

⁶⁶² 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.

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.⁶⁶³”

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.⁶⁶⁴

The draft Load Management and Network Security Protocol, developed by the ENA, provides an example of a direct load control protocol.⁶⁶⁵ 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.

⁶⁶³ AEMC 2012, *Energy Market Arrangements for Electric and Natural Gas Vehicles*, Final Advice, 11 December 2012

⁶⁶⁴ 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 60 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.

⁶⁶⁵ 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.

Final rule

The final 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 in its work on new products and services in the electricity market.⁶⁶⁶

A4.5.5 AEMC response to other stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

⁶⁶⁶ <https://scer.govspace.gov.au/workstreams/energy-market-reform/demand-side-participation/new-products-and-services-in-the-electricity-market>

Table A4.1 AEMC response to other stakeholder views

Stakeholder	Issue	AEMC response
Provision of metering services		
<p>ENA</p>	<p>The draft rule is not clear on what is intended to happen if the LNSP's transitional appointment is terminated for any reason and the customer does not agree to a replacement type 4 meter being installed, for example if the FRMP was replaced by a new FRMP (i.e. retailer). This must necessarily bring an end to the LNSP's transitional appointment as Metering Coordinator. Presumably it would then be up to the FRMP to try to engage the LNSP to continue as the Metering Coordinator under a new appointment, which LNSPs are free to agree or not agree to.</p> <p>If the new FRMP does not wish to install a replacement type 4 meter (or the customer elects to opt out of a new meter deployment by the FRMP), the FRMP will have to negotiate a new appointment of the LNSP as Metering Coordinator for the existing type 5 or 6 meter.</p> <p>If the intention is to leave this as a matter for the new FRMP and the LNSP to negotiate and try to reach agreement on, then probably no further change is required.⁶⁶⁷</p>	<p>The ENA is correct in that a change in FRMP will require the new FRMP to appoint a new Metering Coordinator, or reappoint the LNSP as Metering Coordinator, at the relevant connection point.</p> <p>However, the ENA's understanding of who can be responsible for type 5 and 6 meters does not reflect the final rule. The final rule does not prevent the FRMP from appointing a party other than the LNSP to act as Metering Coordinator for an existing type 5 or 6 metering installation. Neither the retailer nor the incoming Metering Coordinator will acquire the existing meter at the premises as a consequence of the FRMP's appointment of another Metering Coordinator. Rather, 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 at the relevant connection point.</p> <p>The Commission is of the view that these issues do not need to be addressed in the transitional provisions and can be managed commercially.</p>

⁶⁶⁷ ENA, submission on draft determination, p31.

Stakeholder	Issue	AEMC response
AusNet Services	Clauses 7.8.2(d)-(e) of the NER draft rule do not reflect operational responsibilities and industry practice, even though they reflect existing provisions in the NER. The LNSP establishes a NMI and registers the NMI in MSATS as a result of the FRMP's request. The LNSP does not directly issue the NMI to the Responsible Person. ⁶⁶⁸	<p>The Commission supports making these changes to assign responsibility to the parties best able to undertake the tasks. The draft rule has therefore been amended to:⁶⁶⁹</p> <ul style="list-style-type: none"> • remove the requirement on the Metering Coordinator to apply for a NMI and register it with AEMO; • place an obligation on the FRMP to apply for a NMI from the LNSP; • require the FRMP to provide the Metering Coordinator with the NMI within five business days of receiving it from the LNSP; and • require the LNSP to issue the FRMP with a NMI for each metering installation and register the NMI with AEMO.
AGL	Clause 11.78.7(h)(2) of the NER should be amended to clearly allow the FRMP to appoint a new Metering Coordinator. ⁶⁷⁰	The Commission does not consider that the proposed drafting is necessary and therefore has not made this amendment.

⁶⁶⁸ AusNet Services, supplementary submission on draft determination, p10.

⁶⁶⁹ See clauses 7.8.2(c)-(e) and clause 7.2.1(a)(3) of the NER final rule.

⁶⁷⁰ AGL, supplementary submission on draft determination, pp23-25.

A5 Arrangements for accessing energy and metering data

Summary

This appendix sets out the arrangements under the final rule in relation to accessing energy data, metering data and certain other data under Chapter 7 of the NER. The NER currently contains restrictions on who can access energy data and access or receive metering data. The access to data provisions have been revised between the existing Chapter 7 of the NER and the final rule to be appropriate for a market led deployment of advanced meters and a competitive market for metering services.

The final rule sets out the parties who may access or receive certain kinds of data including energy data, metering data, settlements ready data, NMI Standing Data and data from the metering register for a metering installation. The list of parties who may access or receive metering data has been updated to, among other things, recognise the new role of the Metering Coordinator.

Consistent with the approach to clearly delineate provisions which give rise to regulatory obligations and provisions which relate to discretionary services that are provided under commercial arrangements, the final rule includes a clear obligation on the Metering Data Provider to provide certain parties with metering data as required by and in accordance with AEMO's procedures. This provision provides parties, such as LNSPs, clarity that they will continue to receive metering data which they require to meet their statutory obligations in accordance with AEMO procedures (including for billing and settlement).

The final rule also includes a clear obligation on the Metering Data Provider to provide certain parties with access to the metering data services database, but only if required to by procedures issued by AEMO under Chapter 7. The Commission is of the view that there may be limited circumstances where access to metering data in the metering data services database should be provided to certain parties and that the final rule should provide for this.

Parties that are authorised to access metering data services in the minimum services specification as a discretionary service, which includes the FRMP, the LNSP and parties with a small customer's prior consent, may do so subject to commercially agreed terms with the party providing the service. Allowing third parties to access metering data in respect of a small customer metering installation with the small customer's prior consent will help consumers access the products and services enabled by advanced meters. These arrangements will assist in facilitating the provision of services by energy service companies that allow consumers to better understand their electricity use, and to adjust their electricity use, if they choose to, in order to lower costs.

Similarly, the final rule also provides that a large customer or its authorised representative may receive data from a large customer's metering installation.

Under the final rule, AEMO must enable certain parties to access or receive data held in the metering database. AEMO will continue to have discretion to determine the appropriate means of enabling parties to access or receive data from the metering database, for example by providing direct access to the metering database or by way of providing a set of standard reports generated in MSATS.

A5.1 Introduction

This appendix sets out the arrangements for accessing and receiving energy data, metering data and certain other kinds of data under the new framework for a competitive market in metering services. The access to data provisions have been revised in the final rule to be suitable for a competitive framework for metering services. The final rule clearly sets out certain parties' rights to access or receive certain types of data and clarifies when this data is accessed or provided pursuant to regulatory obligations or as a discretionary service on a commercial basis. New provisions have also been introduced to facilitate the provision of services by energy service companies that assist consumers to better understand their electricity use and, if they choose to, change their consumption behaviour to lower costs.

This appendix covers:

- current arrangements for access to data under Chapter 7;
- the COAG Energy Council's proposal in relation to access to energy data and metering data;
- stakeholder views expressed in submissions on the consultation paper, draft determination and additional consultation paper and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and rationale for the final rule.

A5.2 Current arrangements

Current arrangements for accessing energy data and metering data have been established to enable parties to obtain the metrology related data they require to support their market and settlement functions. The current arrangements also provide rights to retail customers, or their authorised representative, to receive metering data, with the objective of providing retail customers the ability to make more informed decisions about their electricity consumption, including making decisions on switching retailers or energy plans.

Clause 7.7(a) of the NER sets out the only parties entitled to access energy data or to receive metering data, NMI Standing Data, settlements ready data or data from the metering register for a metering installation. These parties include (in summary):

- Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation;
- FRMPs in accordance with the meter churn procedures developed under clause 7.3.4(j);
- the Network Service Provider or providers associated with the connection point;
- AEMO and its authorised agents;
- the Ombudsman, the AER, and jurisdictional regulators in certain circumstances; and
- a retail customer of a retailer or DNSP, or their authorised representative, in certain circumstances.

Clause 7.7(c) of the NER provides that the Responsible Person must ensure that access is provided to metering data from the metering data services database to persons eligible to receive metering data.

The provisions in clause 7.7 of the NER operate in conjunction with the metrology procedures and service level procedures such that Metering Data Providers must provide certain parties metering data for the purpose of billing and settlement. We understand that current practice is that the Metering Data Provider provides metering data to AEMO and certain parties at no charge, with any costs recovered through the Metering Data Provider's contract with the Responsible Person (a cost ultimately borne by the FRMP under clause 7.3A of the existing NER).

In addition, certain parties listed in clause 7.7(a) may access energy data in the metering installation. The Metering Provider allocates passwords enabling access to energy data in the metering installation to market participants, the LNSP and AEMO.⁶⁷¹ A FRMP may also allocate read-only passwords to enable a retail customer to access energy data in the metering installation in certain circumstances.

Further, clause 7.7(a1) of the NER provides that a retailer (i.e. including a retailer that is not the FRMP at the connection point) is entitled to access or receive NMI Standing Data. AEMO manages retailers' access to NMI Standing Data according to the NMI Standing Data Schedule which it is obliged to establish under clauses 3.13.12 and 3.13.12A of the NER. Clause 7.2 of the NMI Standing Data Schedule sets out the purposes for which prospective retailers may access NMI Standing Data. Retailers currently access NMI Standing Data via MSATS for the purpose of providing customers timely and accurate quotes and initiating customer transfers.

Under clause 7.9.1 of the NER, AEMO has the responsibility to create, maintain and administer a metering database containing information for each metering installation registered with AEMO. The metering database must include metering data, settlements ready data, and information for each metering installation registered with AEMO.

⁶⁷¹ Clauses 7.7(b) and 7.8.2 of the existing NER.

Clause 7.7(a) of the NER refers to settlements ready data, which is held in the metering database. However, currently there is no explicit obligation on AEMO to provide the parties in clause 7.7 of the NER access to the data held within the metering database. AEMO currently provides settlements ready data and other data in the metering database predominantly via a set of standard reports generated in MSATS.

A5.3 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 to be appropriate for a market led roll out of advanced meters.⁶⁷²

A5.4 Stakeholder views

A5.4.1 Consultation paper

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.⁶⁷³

A5.4.2 Draft determination and operational workshop

The NER draft rule provided that only certain parties (as set out in clause 7.15.5(a)) may be granted access to energy data or may receive metering data, NMI Standing Data, settlements ready data or data from the metering register from a metering installation. This represented a change from the current approach to access to data in clause 7.7(a) of the NER, which provides that only certain parties are 'entitled' to access energy data or receive metering data, NMI Standing Data, settlements ready data or data from the metering register for a metering installation. The draft rule also expanded on the list of parties who may receive such data to include:

- the Metering Coordinator appointed with respect to the metering installation;
- a person who has the consent of a small customer, in respect of the metering data from the small customer's metering installation; and
- a large customer or a customer authorised representative, in relation to data from the large customer's metering installation.

Clause 7.15.5(d) of the NER draft rule restricted access to metering data from the metering data services database. That clause provided that the Metering Data Provider

⁶⁷² COAG Energy Council, rule change request, p18.

⁶⁷³ CALC, submission to the consultation paper, p1.

or AEMO (as the case may be) who is responsible for the provision of metering data services must ensure that access to metering data is provided from the metering data services database only to the parties referred to in clauses 7.15.5(a)(1) to (6) and (a)(11). The parties listed in clauses 7.15.5(a)(1) to (6) and (a)(11) were (in summary):

- the Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation;
- the relevant Metering Coordinator and Metering Provider;
- the FRMP in accordance with the meter churn procedures;
- the Network Service Provider or providers associated with the connection point;
- AEMO and its authorised agents; and
- the AER or jurisdictional regulators, upon request to AEMO.

In summary, the draft rule introduced the new role of a Metering Coordinator for purposes including facilitating the provision of services, including metering data services, to a broad range of parties on commercial terms.

Stakeholders commented extensively on the access to data arrangements in the NER draft rule, with the provisions raising particular concerns for distributors. The key concern raised by DNSPs was that the NER draft rule did not provide distributors with clear rights to the data that they require to:⁶⁷⁴

- meet their statutory obligations for billing and settlement under Chapter 6 of the NER;
- undertake tariff development in accordance with the tariff structure statement requirements in Chapter 6 of the NER;
- meet their statutory obligations for providing customers metering data under 7.14(c)(4) of the NER draft rule; and
- meet other jurisdictional based regulatory obligations.

Submissions from DNSPs considered there was a lack of clarity around whether the NER draft rule required the Metering Data Provider to provide access to metering data in the metering data services database to relevant Network Service Providers (and other parties listed in clauses 7.15.5(a)(1) to (6) and (a)(11)) 'free of charge'.⁶⁷⁵

Stakeholders also stated that the Metering Coordinator (or Metering Data Provider) should be required to provide metering data free of charge directly to relevant

⁶⁷⁴ See the following submissions to the draft determination: ENA, p26; Energex, p8; Ergon Energy, p3; NSW DNSPs, p6; SA Power Networks, p10; Victorian DNSPs, Appendix pp22,62- 65.

⁶⁷⁵ See the following submissions to the draft determination: Energex, p8; Ergon Energy, p3; Victorian DNSPs, p22.

Network Service Providers and other parties who require such data for regulatory purposes, as required under the Service Level Procedures.⁶⁷⁶

Submissions also commented on the inconsistent terminology used in the NER draft rule, which in different provisions used the terms access to data, receipt or provision of data, and entitlement to data.⁶⁷⁷

Comment was also made in the submissions around the amendments introduced in the NER draft rule which substituted the term 'financially responsible Market Participant' for 'retailer' in clause 7.13.3 of the NER draft rule. The amendments were said to be inconsistent with the purpose behind this provision, which was to enable incoming retailers access to NMI Standing Data in order to provide accurate quotes to customers.⁶⁷⁸

EWON supported clause 7.15.5 of the NER draft rule that allows AEMO to provide the energy ombudsman with metering data from a metering installation, the metering database or the metering register.⁶⁷⁹

A5.4.3 Additional consultation paper

The Commission agreed that the Metering Data Provider should be required to provide access to the metering data services database to LNSPs, and certain other parties, as part of its regulatory obligations under Chapter 7. We also agreed that the Metering Data Provider should provide metering data to LNSPs, and certain other parties, as required under AEMO procedures to enable such parties to perform their statutory obligations, including for billing and settlement.

In the additional consultation paper, the Commission proposed to address DNSPs' concerns that they would not receive metering data as required to meet their regulatory obligations by clarifying the obligations on the Metering Data Provider to:

- provide access to the metering data services database; and
- provide metering data as required under the procedures.

We also proposed to strengthen the distinction between discretionary services and regulatory obligations more generally.

In addition, the Commission considered that greater clarity was needed around parties' rights to access and to receive different types of data under the NER draft rule. Accordingly, we proposed further amendments to the access to data provisions (in particular, clause 7.15.5 of the NER draft rule) with the aim of improving the clarity of

⁶⁷⁶ AusNet Services, submission on draft determination, pp6-7.

⁶⁷⁷ Ibid.

⁶⁷⁸ Lumo Energy, submission on draft determination, p9.

⁶⁷⁹ EWON, submission on draft determination, p3.

the provisions, while preserving existing entitlements with respect to which parties may be granted access to, or receive, metering data and energy data under the NER.

Stakeholders provided detailed comments on a number of the indicative amendments to the NER draft rule in the additional consultation paper.

Parties that may access or receive data

A number of indicative amendments to the NER draft rule were proposed in the additional consultation paper to improve the clarity around which parties may access or receive certain kinds of data (for example, energy data, metering data and NMI Standing Data).

Settlements ready data

The indicative amendments proposed to clause 7.15.5 of the NER draft rule deleted reference to settlements ready data on the basis that it is included within the definition of metering data. The ERAA and Red Energy/Lumo raised a concern that settlements ready data, while a sub-set of metering data, should remain a distinct concept in the rules to ensure it continues to be provided to Local Retailers.⁶⁸⁰ These stakeholders commented that settlements ready data is a specific set of metering data that has been validated, and collated for the purpose of settlements which Local Retailers use for the sole purpose of validating consumption for AEMO settlements.⁶⁸¹

NMI Standing Data

The indicative amendments to clause 7.15.5(e)(1) of the NER draft rule removed the reference to a retailer's ability to "access" NMI Standing Data. This was done on the basis that providing retailers the right to receive NMI Standing Data provided sufficient certainty with respect to their entitlement to NMI Standing Data.

ERM Power raised a concern with respect to this entitlement to "access" NMI Standing Data being removed. Retailers emphasised the importance of being able to access NMI Standing Data in MSATS to facilitate timely quotes for prospective customers. ERM and the ERAA noted the Commission's final determination on the Access to NMI Standing Data rule change which clarified that retailers should have access to NMI Standing Data. ERM proposed that clause 7.15.5(e)(1) be amended to provide retailers with the right to access NMI Standing Data.

Calvin Capital raised the need for meter asset owners to access certain kinds of data on retailer churn, including the identity of the Metering Coordinator, Metering Provider and retailer, and the NMI. Calvin Capital argued that asset owners require access to data which will allow them to commercially interact with the retailer or Metering Coordinator associated with that metering installation, including when a customer switches retailer.

⁶⁸⁰ See the following submissions to the additional consultation paper: ERAA, p1; Red/Lumo, p2.

⁶⁸¹ Ibid.

Energy data

The ENA and Victorian DNSPs considered that it was unclear under the indicative amendments to the access to data provisions whether DNSPs and certain other persons are entitled to access energy data from the metering installation.⁶⁸²

Provision of metering data

To address DNSPs' concerns in relation to the provision of metering data, the indicative amendments proposed in the additional consultation paper required that the Metering Data Provider must provide metering data and relevant NMI Standing Data to the parties listed in clauses 7.15.5(c)(1) to 7.15.5(c)(5) as required by and in accordance with the rules and procedures.⁶⁸³

There were divergent views amongst stakeholders on introducing this requirement under a competitive framework.

DNSPs supported the proposed introduction of a requirement on the Metering Data Provider to provide metering data to the parties listed, but proposed that the Metering Data Provider should also be obliged to provide data and services necessary for the DNSP to meet its jurisdictional obligations free of charge such as voltage requirements and service standards.⁶⁸⁴ The Victorian DNSPs specifically proposed that Metering Providers should be required to provide data necessary to support DNSPs' network tariffs, including kVA data where any customers are on a kVA demand tariff.⁶⁸⁵

A range of other stakeholders also commented that they supported retaining the current practice of metering data being provided to certain parties, including LNSPs, free of charge on the basis that this data is critical to the operation to the operation of the market.⁶⁸⁶ However these stakeholders considered additional services should be provided subject to commercial arrangements. Metropolis was concerned that statements in the additional consultation paper in regard to providing data required for "tariff development" and "meeting jurisdictional obligations" may imply that voltage data must be provided under revised clause 7.10.3. Metropolis considered voltage data should be a discretionary service subject to commercial arrangements.⁶⁸⁷

Vector opposed any obligation on the Metering Data Provider to provide data. Vector considered the requirement would provide some parties with an unfair advantage and would increase compliance costs for Metering Data Providers who must determine

682 See the following submissions on the additional consultation paper: ENA, p7; Victorian DNSPs, p10.

683 See clause 7.10.3 of the NER final rule.

684 See the following submissions on the additional consultation paper: Active Stream, p3; AGL, p6; Metropolis, p3.

685 Victorian DNSPs, submission on additional consultation paper, pp8-9.

686 See the following submissions on additional consultation paper: Active Stream, p3; AGL, p6; Metropolis, p3.

687 Metropolis, submission on additional consultation paper, p3.

what information must be provided as a regulated versus discretionary service.⁶⁸⁸ Origin and the ERAA also commented that they were concerned that indicative amendments would provide DNSPs data they could use to provide contestable services to consumers.⁶⁸⁹

The ENA and Victorian DNSPs considered that the proposed amendments to the access to data provisions did not make it clear that DNSPs and certain other persons are entitled to access data from the metering register.⁶⁹⁰ Consequently, the ENA considered it is unclear whether data⁶⁹¹ which sits in the metering register, and which is required to allow tariffs to be correctly billed, will be provided by the Metering Data Provider. The ENA and the Victorian DNSPs considered the proposed clause 7.10.3(a) and 7.10.3(b) should reflect the entitlement to data afforded in the current NER and not be restrictive.

The Victorian DNSPs raised concerns that revised clause 7.10.3(b) restricts AEMO from making procedures that place an obligation on the Metering Data Provider to provide metering data that DNSPs may require to meet jurisdictional obligations. The Victorian DNSPs suggested the proposed drafting may be problematic where a jurisdiction has not adopted elements of the NER or NERR and AEMO is unable to make procedures consistent with the jurisdictional regulations (for example, as in the case of Victoria which has not adopted the NECF).⁶⁹²

Access to the metering data services database

The indicative amendments to the NER draft rule included introducing a requirement that the Metering Data Provider must provide access to metering data and relevant NMI Standing Data in the metering data services database to the parties listed in revised clauses 7.15.5(c)(1) to 7.15.5(c)(5).⁶⁹³

Stakeholders raised concerns that this drafting amended the responsibility of the Metering Data Provider from providing access to data held in the metering data services database by delivering the data to the relevant party in an industry agreed B2B format, to provision of access to the metering data services database itself. Stakeholders considered this was inappropriate and would impose significant costs associated with establishing or upgrading web portals to designate the level of access to each party listed in 7.17.5(c).⁶⁹⁴

688 Vector, submission on additional consultation paper, pp2-3.

689 See the following submissions to the additional consultation paper, ERAA, pp1-2; Origin, p2.

690 See the following submissions to the additional consultation paper: ENA, p7; Victorian DNSPs, p10.

691 For example, data stream and time-switch configurations.

692 Victorian DNSPs, submission to the additional consultation paper, pp8-9.

693 See revised clause 7.10.2(a)(2) of the NER draft rule.

694 See the following submissions on the additional consultation paper: Active Stream, p3; AGL p6; Ergon, p3; ERM, pp2-3; ENA, p7; Energex, p5; Metropolis, p3; Origin, p2; SA Power Networks submission, p1 (of Attachment); ENA, p7.

ERM was also concerned that the proposed amendments to the draft rule required the Metering Data Provider to provide certain parties “access to metering data and NMI Standing Data in the metering data services database” under revised clause 7.10.2(a)(2). ERM considered that MSATS remained the most appropriate approach to parties sourcing NMI Standing Data.⁶⁹⁵

Access to the metering database

The indicative amendments to the NER draft rule required that AEMO must:

- provide the parties listed in revised clauses 7.15.5(c)(1) to 7.15.5(c)(5) with access to the metering database; and
- ensure that no other person may access the metering database.⁶⁹⁶

The ENA raised a concern that under revised clause 7.11.1(d)(1) AEMO must provide relevant parties with access to the metering database. The ENA was concerned this amendment placed the onus on participants to extract data directly from AEMO’s metering database, rather than preserving the current practice of participants accessing a variety of reports generated from the database. Energex was also concerned about the obligation this amendment could be interpreted as placing on AEMO.⁶⁹⁷ Energex was concerned the requirement to provide participants with access to the metering database imposed a new obligation on AEMO could involve significant changes to market systems and processes.

ERM commented that AEMO should also be required to provide retailers that are not the FRMP access to NMI Standing Data in the metering database to support their market functions.⁶⁹⁸

⁶⁹⁵ ERM, submission on the additional consultation paper, pp2-3.

⁶⁹⁶ See revised clause 7.11.1(d) of the NER draft rule in the additional consultation paper.

⁶⁹⁷ Energex, submission to the additional consultation paper, p5.

⁶⁹⁸ ERM, submission on the additional consultation paper, p2.

A5.5 Commission's analysis

Changes between the draft and the final

Clause 7.15.5 of the NER final rule, which sets out the parties who may access or receive energy data, metering data, settlements ready data, NMI Standing Data and data from the metering register for a metering installation, has been amended since the draft rule to:

- clarify which party may receive which type of data;
- clarify that retailers (i.e. including retailers who are not the FRMP) may access and receive NMI Standing Data; and
- amend the list of parties who may access or receive metering data, NMI Standing Data and data from the metering register for a metering installation to:
 - remove reference to FRMPs in accordance with the meter churn procedures and the Network Service Provider or providers associated with the connection point, on the basis that these parties are included within paragraph (1) of revised clause 7.15.5(c) as 'Registered Participants with a financial interest in the metering installation or energy measured by that metering installation'; and
 - include a person who was previously the Metering Coordinator or Metering Data Provider at the relevant metering installation in certain circumstances.

The final rule introduces a clear obligation on the Metering Data Provider to provide metering data to certain persons. Under clause 7.10.3 of the final rule:

- The Metering Data Provider must provide metering data and relevant NMI Standing Data to the persons referred to in clauses 7.15.5(c)(1) to 7.15.5(c)(5) as required by and in accordance with the NER and procedures authorised by AEMO under Chapter 7 of the NER.⁶⁹⁹
- AEMO must not require the Metering Data Provider to provide metering data or relevant NMI Standing Data to a party except to the extent that such metering data or relevant NMI Standing Data is required by that party to perform its obligations under the NER, the National Energy Retail Rules or jurisdictional electricity legislation.⁷⁰⁰

In addition, if required in procedures authorised by AEMO, the Metering Data Provider must provide the persons referred to in clauses 7.15.5(c)(1) to

⁶⁹⁹ Clause 7.10.3(a) of the NER final rule.

⁷⁰⁰ Clause 7.10.3(b) of the NER final rule.

7.15.5(c)(5) with access to the metering data and NMI Standing Data in the metering data services database.⁷⁰¹ The Metering Data Provider must ensure that no other person has access to the metering data services database.⁷⁰²

Under clause 7.11.1(d)(1) of the NER final rule, AEMO must enable the parties listed in clauses 7.15.5(c)(1) to 7.15.5(c)(5) and clause 7.15.5(e) to access or receive data in the metering database.

Certain references to 'financially responsible Market Participant' introduced in the NER draft rule have been amended to 'retailer', consistent with the existing NER provisions.

In assessing the implications of revising the arrangements for accessing energy and metering data, the Commission has considered whether the final rule will:

- encourage consumer participation and increase choice of energy services and products that reflect consumer needs and preferences;
- provide a framework under which metering data services will be provided efficiently;
- support competition, innovation and efficient investment in metering services over time;
- maximise overall electricity system and market efficiency;
- 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 that may be passed on to consumers.

This section sets out the Commission's analysis and final decision on the arrangements for accessing energy data and metering data including:

- an overview of the new arrangements to access energy and metering data;
- which parties may access or receive which types of data;
- obligations on the Metering Data Provider to provide metering data and if, required by AEMO's procedures, access to the metering data services database to certain persons; and
- obligations on AEMO with respect to metering data.

⁷⁰¹ Clause 7.10.2(a)(3) of the NER final rule.

⁷⁰² Clause 7.10.2(a)(4) of the NER final rule.

A5.5.1 Overview of the new arrangements for accessing energy and metering data

The framework for a contestable market in metering introduced in the final rule differentiates between the regulatory obligations of Metering Coordinators, which are performed pursuant to the Metering Coordinator's appointment at a connection point under Chapter 7 of the NER, and services which the Metering Coordinator may offer on terms commercially agreed with the person requesting the service (the latter services being referred to as “discretionary services” in this appendix).

Similarly, the Metering Provider and Metering Data Provider perform their regulatory obligations under Chapter 7 of the NER final rule pursuant to the terms of their respective appointments by the Metering Coordinator, and may provide discretionary services on terms commercially agreed with the person requesting the service. The draft rule provided insufficient clarity around which provisions give rise to regulatory obligations, which must be performed by the Metering Coordinator, Metering Provider, Metering Data Provider (as applicable) in order to fulfil their obligations under the rules and procedures and pursuant to the terms of their primary appointment, and which provisions relate to discretionary services. This distinction has been clarified in the NER final rule.

The Commission has addressed the concern that DNSPs should receive metering data that they require to perform their obligations 'free of charge' by clarifying the obligations on the Metering Data Provider to provide metering data as required under procedures authorised by AEMO. We have also introduced an obligation on the Metering Data Provider to provide certain parties access to the metering database if required under procedures authorised by AEMO.

The Commission also considered that greater clarity was required around parties' rights to access and to receive different types of data under the NER draft rule. Accordingly, we have made amendments to the access to data provisions (in particular, draft clause 7.15.5) to improve the clarity of the provisions, while preserving existing entitlements with respect to which parties may be granted access to, or receive, metering data and energy data under the NER.

A5.5.2 Parties that may access or receive data

In the draft rule, draft clause 7.15.5(a) related to access to energy data, metering data, NMI Standing Data, settlements ready data or data from the metering register for a metering installation (consistent with the approach in clause 7.7(a) of the existing NER). However, in the context of other provisions of the draft rule, not every party listed in clause 7.15.5(a) in fact had a right to access each of the types of data listed in that clause (whether pursuant to a regulated obligation or as a discretionary service). The approach in clause 7.15.5 of the NER final rule clarifies the access to data arrangement by clearly setting out which parties may access which type of data.

Access to energy data is dealt with in clause 7.15.5(a) of the NER final rule, which provides that energy data recorded by a metering installation must only be provided where passwords are allocated.

The parties that may access or receive metering data, settlements ready data, NMI Standing Data and data from the metering register for a metering installation are set out in clause 7.15.5(c) of the NER final rule and are (in summary):

- Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation;
- the Metering Coordinator (or previous Metering Coordinator in certain circumstances);
- the Metering Provider;
- the Metering Data Provider (or previous Metering Data Provider in certain circumstances);
- AEMO and its authorised agents; and
- the AER or jurisdictional regulators in certain circumstances.

Certain additional parties may access or receive metering data, including:

- a retail customer or customer authorised representative in certain circumstances;
- a person with the small customer's consent;
- a large customer or a customer authorised representative; and
- the energy ombudsman in certain circumstances.⁷⁰³

In addition, the final rule (consistent with the existing NER) provides that a retailer (i.e. including a retailer who is not the FRMP) may access and receive NMI Standing Data.⁷⁰⁴

The list of parties who may access or receive different data types under clause 7.15.5 of the NER final rule has been amended from the list in the draft rule to:

- remove references to FRMPs in accordance with meter churn procedures and the Network Service Providers or providers associated with the connection point, on the basis that these parties are included in paragraph (1) of clause 7.15.5(c) as 'Registered Participants with a financial interest in the metering installation or energy measured by the metering installation'; and

⁷⁰³ See clause 7.15.5(d) of the NER final rule.

⁷⁰⁴ See clause 7.15.5(e) of the NER final rule.

- include a person who was previously the Metering Coordinator or Metering Data Provider at the relevant metering installation in certain circumstances.

The Commission agrees that the inconsistent terminology used in the NER draft rule contributed to a lack of clarity around the access to data arrangements. Accordingly, in the NER final rule consistent terminology has been adopted, i.e. the final rule refers to 'access', 'receipt' or 'provision' of data (and such terms are given their ordinary meaning). The term 'entitled' is not used in the NER final rule.

Access to data for consumer services

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 final rule amends the NER to add to the list of parties that may be granted access or receive metering data:

- in relation to metering data from a small customer metering installation, a person who has the small customer's prior consent;⁷⁰⁵ and
- in relation to metering data from a large customer's metering installation, a large customer or a customer authorised representative.⁷⁰⁶

NMI Standing Data

The final rule provides that a retailer (i.e. including a retailer who is not the FRMP at the connection point) may access and receive NMI Standing Data.⁷⁰⁷ The Commission agrees that retailers require NMI Standing Data for the purpose of customer acquisition and transfers and that being able to interrogate MSATS is the most efficient avenue for obtaining this information. AEMO will continue to manage participants' access to NMI Standing Data according to the NMI Standing Data Schedule which they are obliged to establish under clauses 3.13.12 and 3.13.12A of the NER. Clause 7.2 of the NMI Standing Data Schedule sets out the purposes for which prospective retailers may access NMI Standing Data.

In response to submissions from Calvin Capital, the Commission does not consider the final rule needs to be amended to provide asset owners' access to NMI Standing Data.

⁷⁰⁵ Clause 7.15.5(d)(2) of the NER final rule.

⁷⁰⁶ Clause 7.15.5(d)(3) of the NER final rule.

⁷⁰⁷ Clause 7.15.5(e) of the NER final rule.

The Access to NMI Standing Data rule change in 2013⁷⁰⁸ introduced clause 8.6.2(b1) of the NER, which provides that rule 8.6 (which sets out the confidentiality restrictions) does not prevent:

“the disclosure of *NMI Standing Data* or the provision of means to gain electronic access to that data by a *Customer* of the *Customer's Disclosees* to a person who requires the *NMI Standing Data* for the purposes of providing services in connection with the *Customer's* sale of electricity to end users.”

We consider that a person leasing a meter to a retailer, or otherwise providing metering services to a retailer, would be a service provider of the retailer under clause 8.6.2(b1).

We note the definition in the NER of NMI Standing Data does not expressly include information on the identity of the retailer, Metering Provider, Metering Data Provider or Metering Coordinator. However, the definition includes "such other categories of data as may be referred to in the MSATS Procedures as forming NMI Standing Data". NMI Standing Data currently includes information of the identity of the FRMP, which we understand is the key information that Calvin Capital is seeking to access. If additional information that is not currently contained in NMI Standing Data is required by asset owners, AEMO could consider whether to include that additional information when it undertakes revisions to the procedures (including MSATS Procedures) in connection with implementing the final rule.

Energy data

Energy data is data held in the metering installation.⁷⁰⁹ Once energy data is collected from the metering installation it becomes metering data.⁷¹⁰

Clause 7.15.5(a) of the NER final rule provides that access to energy data recorded by a metering installation must only be provided where passwords are allocated in accordance with clause 7.15. The allocation of passwords is set out in clause 7.15.3 and, in respect of small customer metering installations, clause 7.15.4 of the NER final rule.

In respect of small customer metering installations, the Metering Provider must ensure that:

- it forwards a copy of passwords allowing local and remote access to the metering installation to the Metering Coordinator, the Metering Data Provider and AEMO; and

⁷⁰⁸ See <http://www.aemc.gov.au/Rule-Changes/Access-to-NMI-standing-data>.

⁷⁰⁹ See the definitions of "energy data", "accumulated energy data" and "interval energy data" in Chapter 10 of the NER.

⁷¹⁰ See the definitions of "metering data", "accumulated metering data" and "interval metering data" in Chapter 10 of the NER.

- no other person receives or has access to a copy of passwords to that metering installation.

In respect of all other metering installations, the Metering Provider provides the following parties with access to passwords:

- Market Participants, LNSPs and AEMO, except if separate 'read only' and 'write' passwords are not available, in which case the Metering Provider must allocate a password to AEMO only;
- a retail customer in certain circumstances; and
- the Metering Data Provider.

Confidentiality of data

Clause 7.15.1 of the NER final rule provides that (among other things) energy data, metering data, NMI Standing Data and information in the metering register and passwords are confidential and must be treated as confidential information in accordance with the rules.

Clause 8.6 of the existing NER sets out the obligations of Registered Participants⁷¹¹ regarding confidentiality of information under the NER. Clause 8.6.2(c) of the existing NER provides that clause 8.6 does not prevent the 'disclosure, use or reproduction of information with the consent of the person or persons who provided the relevant information under the Rules'.

To address any uncertainty arising between the access to data arrangements in the NER final rule and the operation of clause 8.6.2(c) of the existing NER in the context of metering data from a retail customer's metering installation, the NER final rule provides that for the purposes of clause 8.6.2(c), metering data from a metering installation at a retail customer's connection point is deemed to have been provided by that retail customer.⁷¹² The effect of this provision is that the metering data may be disclosed, used or reproduced with the consent of the retail customer. The Commission considers this additional provision provides greater alignment between the confidentiality provisions in clause 8.6 of the existing NER and the access to data arrangements under the NER final rule.

A5.5.3 Provision of metering data

The Commission agrees that the Metering Data Provider should provide metering data to LNSPs, and certain other parties, as required under the rules and AEMO procedures to enable such parties to perform their statutory obligations, including for billing and settlement purposes. LNSPs and certain other parties require certainty that they will be

⁷¹¹ Clause 8.6.1A of the NER final rule has been introduced to deem Metering Providers and Metering Data Providers to be Registered Participants for the purposes of Part C.

⁷¹² Clause 7.15.1(b) of the NER final rule.

provided with metering data required to meet their statutory obligations that support market and settlements processes. As such, we considered it appropriate the NER final rule imposes a clear obligation on Metering Data Providers to provide metering data to relevant parties as required by and in accordance with procedures authorised by AEMO. The provision of such data forms part of the Metering Data Provider's regulatory obligations under Chapter 7 of the NER, which are to be provided pursuant to the terms of its appointment by the Metering Coordinator.

We do not consider it appropriate to mandate the provision of data other than metering data in order to assist DNSPs in meeting their obligations, such as voltage and reliability obligations, or in developing alternative tariff structures. Under the NER final rule DNSPs may negotiate with the Metering Coordinator to receive data other than metering data, for example voltage data, or any metering data which is not otherwise required in connection with the performance of its obligations under the rules or AEMO's procedures. Further, if the LNSP is unable to negotiate an agreement with the Metering Coordinator it may install a network device.⁷¹³ The Commission considers that businesses are more likely to make efficient investment decisions where these services are acquired on a commercial basis rather than provided under a regulatory obligation.

The final rule introduces requirements regarding the provision of metering data to certain parties:

- The Metering Data Provider must provide metering data and relevant NMI Standing Data to the persons referred to in clauses 7.15.5(c)(1) to 7.15.5(c)(5) as required by and in accordance with the rules and procedures authorised by AEMO under Chapter 7 of the NER.⁷¹⁴ The relevant persons are (in summary):
 - Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation;
 - the Metering Coordinator (or previous Metering Coordinator in certain circumstances);
 - the Metering Provider;
 - the Metering Data Provider (or previous Metering Data Provider in certain circumstances); and
 - AEMO and its authorised agents.
- AEMO must ensure that the procedures only require the Metering Data Provider to provide metering data or relevant NMI Standing Data to a party⁷¹⁵ where such metering data or relevant NMI Standing Data is required by that party to

⁷¹³ Provided there is sufficient space in the metering facility to accommodate both the network device and the metering installation. See Appendix D4.

⁷¹⁴ Clause 7.10.3(a) of the NER final rule.

⁷¹⁵ Under clause 7.10.3(a) of the NER final rule.

perform its obligations under the rules, the National Energy Retail Rules or jurisdictional electricity legislation.⁷¹⁶

LNSPs, and certain other parties, are also permitted to access data in the metering database (which includes data in the metering register), under alternative provisions in the NER final rule.⁷¹⁷ Access to the metering database is discussed in detail under section A5.5.5 below.

The Commission does not consider the provision of metering data to certain parties as provided for in the NER final rule will provide these parties with an unfair advantage in competing to provide contestable services to consumers. Under the final rule, AEMO (through the procedures) may only require the Metering Data Provider to provide metering data and relevant NMI Standing Data to a party to the extent such data is required by that party to perform its statutory obligations. Further, DNSPs that wish to provide contestable services to consumers will be required to comply with the national ring-fencing guideline to be developed by the AER.

A5.5.4 Access to the metering data services database

The indicative amendments to the NER draft rule in the additional consultation paper introduced an obligation on the Metering Data Provider to provide access to metering data and relevant NMI Standing Data in the metering data services database to the parties listed in revised clauses 7.15.5(c)(1) to 7.15.5(c)(5) as required by and in accordance with the rules and procedures.⁷¹⁸ Revised clause 7.10.2(a)(3) was intended to provide such persons with a right to access the metering data services database, by imposing a corresponding obligation on the Metering Data Provider to provide such access (i.e. as a regulated obligation and not as a discretionary service). This approach was adopted in response to submissions on the draft determination.

Having considered stakeholder responses to the additional consultation paper, the Commission is of the view that there may be limited circumstances where the Metering Data Provider should be required to provide access to the metering data services database as a regulated obligation on the Metering Data Provider. The Commission has therefore decided that the Metering Data Provider must provide certain persons with access to metering data and relevant NMI Standing Data in the metering data services database if required under procedures authorised by AEMO. The Metering Data provider may otherwise provide such access to certain persons as a discretionary service.

The final rule specifies that:

- the Metering Data Provider must, if required in procedures authorised by AEMO, provide the persons referred to in clauses 7.15.5(c)(1) to 7.15.5(c)(5) with access to the metering data and NMI Standing Data in the metering data services

⁷¹⁶ Clause 7.10.3(b) of the NER final rule.

⁷¹⁷ See clauses 7.11.1(d)(1) and S7.1.1(a) of the NER final rule.

⁷¹⁸ See revised clause 7.10.3 of the NER draft rule in the additional consultation paper.

database. Note this is the same list of persons who receive metering data under clause 7.10.3 (see section A5.5.3 above); and

- except for the persons referred to in clauses 7.15.5(c)(1) to 7.15.5(c)(5), the Metering Data Provider must ensure that no other person has access to the metering data services database.⁷¹⁹

A5.5.5 Access to the metering database

As noted in section A5.2, there is currently no explicit obligation on AEMO to provide the parties in clause 7.7 of the existing NER with access to the data held within the metering database. The Commission considers that it is appropriate to place an obligation on AEMO in the NER to enable certain parties to access or receive data in the metering database. The Commission agrees the list of parties that AEMO must enable to access or receive data held in the metering database should include retailers who are permitted to access or receive NMI Standing Data. This will support retailers who are not the FRMP in performing their market functions with respect to customer acquisition and transfers.

Further, the Commission considers that AEMO should continue to have the discretion to determine the most appropriate means of enabling parties to access or receive data from the metering database. As the party responsible for creating, maintaining and administering the metering database,⁷²⁰ AEMO is best placed to determine the most appropriate way of meeting its obligations with respect to providing access to data held in the metering database. The final rule allows AEMO to choose to continue providing reports generated in MSATS or alternatively to provide direct access to the metering database to certain parties.

The final rule requires AEMO to enable the parties listed in clauses 7.15.5(c)(1) to 7.15.5(c)(5) and clause 7.15.5(e) of the NER final rule to access or receive data in the metering database.⁷²¹ The parties that AEMO must enable to access or receive data in the metering database are:

- Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation;
- the Metering Coordinator (or the previous Metering Coordinator in certain circumstances);
- the Metering Provider;
- the Metering Data Provider (or the previous Metering Data Provider in certain circumstances);

⁷¹⁹ Clause 7.10.2(a)(3) and (4) of the NER final rule.

⁷²⁰ Under clause 7.11.1(a) of the NER final rule.

⁷²¹ Clause 7.11.1(d)(1) of the NER final rule.

- AEMO and its authorised agents; and
- a retailer who may access or receive NMI Standing Data.

As the metering register forms part of the metering database, these parties (other than a retailer) must also be enabled to access or receive data in the metering register.

AEMO may also provide an energy ombudsman with metering data relating to a Registered Participant from a metering installation, the metering database, or the metering register, if the energy ombudsman has received a complaint to which the data is relevant from a retail customer of the Registered Participant.⁷²²

A5.5.6 Role of AEMO in providing metering data services at transmission connection points

In response to submissions on the draft determination from Grid Australia and the ENA, the Commission agrees that there was insufficient clarity around the respective obligations of AEMO and a Metering Coordinator under clause 7.5.1 of the draft rule. The draft rule provided that where the FRMP has appointed a Metering Coordinator who is a TNSP who is the LNSP, the Metering Coordinator is responsible for the provision, installation and maintenance of the metering installation, and AEMO is responsible for the collection of metering data, processing of metering database and delivery to the metering database and to persons entitled to access the data.⁷²³

In the NER final rule, clause 7.5.1:

- refers to scenarios where the Metering Coordinator at a connection point or proposed connection point on a transmission network is the LNSP, for consistency with the approach to describing transmission connection points in clause 7.6.3; and
- provides that in such scenarios AEMO is responsible for:
 - the collection of metering data, processing of that data and delivery of the processed data to the metering database and the provision of metering data in accordance with the rules and procedures authorised under the rules; and
 - the appointment of the Metering Data Provider to provide the metering data services.

The clause does not expressly refer to the role of the Metering Coordinator in such scenarios. Rather, the approach carves-out the role of AEMO at such connection points, and accordingly the Metering Coordinator at the connection point will be required to perform all obligations under the NER which are not subject to the carve-out. The Commission considers that this approach clarifies the respective obligations of the

⁷²² Clause 7.11.1(i) of the NER final rule.

⁷²³ See clause 7.5.1 of the NER draft rule.

Metering Coordinator at AEMO at transmission connection points where the LNSP is the Metering Coordinator.

A5.5.7 Provision of metering data and access to the metering database and the metering data services database

The rights of each of the parties listed in clause 7.15.5(c), (d) and (e) of the final rule to access or receive metering data, and NMI Standing Data are set out in the table below:

Table A5.1 Provision of metering data and access to the metering data services database and metering database under the final rule

Reference	Party	Data in the metering database	Access to metering data and relevant NMI Standing Data in the metering data services database	Provision of metering data and relevant NMI Standing Data by the Metering Data Provider
7.15.5(c)(1)	Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation	AEMO must enable such parties to access or receive data in the metering database. (See clause 7.11.1(d) of the NER final rule).	The Metering Data Provider must, if required in procedures authorised by AEMO, provide such parties with access to the metering data and relevant NMI Standing Data in the metering data services database. (See clause 7.10.2(a)(3) of the NER final rule).	The Metering Data Provider must provide metering data and relevant NMI standing data to such parties as required by and in accordance with the rules and procedures authorised by AEMO (See clause 7.10.3(a) of the NER final rule).
7.15.5(c)(2)	The Metering Coordinator appointed in respect of the connection point for that metering installation, or a person who was previously appointed as the Metering Coordinator in respect of that connection point, as required in connection with a Metering Coordinator default event in accordance with procedures authorised under the Rules	AEMO must enable such parties to access or receive data in the metering database. (See clause 7.11.1(d) of the NER final rule).	The Metering Data Provider must, if required in procedures authorised by AEMO, provide such parties with access to the metering data and relevant NMI Standing Data in the metering data services database. (See clause 7.10.2(a)(3) of the NER final rule).	The Metering Data Provider must provide metering data and relevant NMI Standing Data to such parties as required by and in accordance with the rules and procedures authorised by AEMO (See clause 7.10.3(a) of the NER final rule).
7.15.5(c)(3)	The Metering Provider appointed with respect to that metering installation	AEMO must enable such parties to access or receive data in the metering database. (See clause	The Metering Data Provider must, if required in procedures authorised by AEMO, provide such parties with access to the	The Metering Data Provider must provide metering data and relevant NMI Standing Data to such parties as required by and in

Reference	Party	Data in the metering database	Access to metering data and relevant NMI Standing Data in the metering data services database	Provision of metering data and relevant NMI Standing Data by the Metering Data Provider
		7.11.1(d) of the NER final rule).	metering data and relevant NMI Standing Data in the metering data services database. (See clause 7.10.2(a)(3) of the NER final rule).	accordance with the rules and procedures authorised by AEMO (See clause 7.10.3(a) of the NER final rule).
7.15.5(c)(4)	The Metering Data Provider appointed with respect to that metering installation, or who was previously appointed with respect to a metering installation as required in accordance with the Rules and procedures authorised under the Rules	AEMO must enable such parties to access or receive data in the metering database. (See clause 7.11.1(d) of the NER final rule).	The Metering Data Provider must, if required in procedures authorised by AEMO, provide such parties with access to the metering data and relevant NMI Standing Data in the metering data services database. (See clause 7.10.2(a)(3) of the NER final rule).	The Metering Data Provider must provide metering data and relevant NMI Standing Data to such parties as required by and in accordance with the rules and procedures authorised by AEMO (See clause 7.10.3(a) of the NER final rule).
7.15.5(c)(5)	AEMO and its authorised agents	AEMO must enable such parties to access or receive data in the metering database. (See clause 7.11.1(d) of the NER final rule).	The Metering Data Provider must, if required in procedures authorised by AEMO, provide such parties with access to the metering data and relevant NMI Standing Data in the metering data services database. (See clause 7.10.2(a)(3) of the NER final rule).	The Metering Data Provider must provide metering data and relevant NMI Standing Data to such parties as required by and in accordance with the rules and procedures authorised by AEMO (See clause 7.10.3(a) of the NER final rule).
7.15.5(c)(6)	The AER or Jurisdictional Regulators upon request to AEMO	The NER final rule does not prescribe how such parties receive metering data from AEMO.	No	The AER or jurisdictional regulators obtain data on request to AEMO.

Reference	Party	Data in the metering database	Access to metering data and relevant NMI Standing Data in the metering data services database	Provision of metering data and relevant NMI Standing Data by the Metering Data Provider
7.15.5(d)(1)	A retail customer or customer authorised representative, upon request by that retail customer or its customer authorised representative to the retailer or DNSP in relation to that retail customer's metering installation in accordance with the metering data provision procedures	No	No	Such parties may request metering data from the retailer or DNSP under the National Energy Retail Rules and the metering data provision procedures established by AEMO under clause 7.14 of the NER final rule.
7.15.5(d)(2)	If a small customer has consented to a person accessing the metering data from its small customer metering installation in accordance with clause 7.15.4(b)(3), to that person	No	No	There is no obligation on any particular party to provide metering data to such persons under the rules. However, such persons may obtain metering data on terms commercially agreed with the Metering Coordinator or Metering Data Provider.
7.15.5(d)(3)	A large customer or a customer authorised representative, in relation to metering data from the metering installation in respect of the connection point of the large customer	No	No	There is no obligation on any particular party to provide metering data to such persons under the rules. However, such persons may obtain metering data on terms commercially agreed with the Metering Coordinator or Metering Data Provider.

Reference	Party	Data in the metering database	Access to metering data and relevant NMI Standing Data in the metering data services database	Provision of metering data and relevant NMI Standing Data by the Metering Data Provider
7.15.5(d)(4)	The energy ombudsman in accordance with paragraphs 7.11.1(i)-(k)	No	No	The energy ombudsman obtains metering data from AEMO under clause 7.11.1(i)-(k) of the NER final rule.
7.15.5(e)	A retailer	AEMO must enable such parties to access or receive NMI Standing Data in the metering database. (See clause 7.11.1(d) of the NER final rule).	No	There is no obligation on the Metering Data Provider to provide relevant NMI Standing Data to a retailer (ie who is not the FRMP). The final rule contemplates that the retailer will obtain such data from AEMO.

A5.6 AEMC response to stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

Table A5.2 Stakeholder views and AEMC Response

Stakeholder	Issue	AEMC response
CALC, submission on the draft determination, p7.	CALC commented that their understanding was that data access and provision for the consumer will be governed by the retailer's privacy policy, and therefore asked that the rule change require retailers' privacy policies be up to dated, in plain and understandable English, easily available on retailers' websites, and provided in hard copy with all communications regarding a new meter installation.	This is out of scope of this rule change.
Red Energy/Lumo, submission on the additional consultation paper, p2 and pp9-10.	Red Energy/Lumo raised a concern that the removal of references regarding who does, and does not, have access as a Registered Participant with a financial interest makes it unclear which Registered Participants are captured under this clause.	The concept of a 'Registered Participant with a financial interest in a metering installation or energy measured by the metering installation', as used in the NER final rule, is consistent with the concept in the existing NER. Nothing in either the draft rule or final rule has amended this concept. The final rule removes reference to Network Services Providers and FRMPs on the basis that these parties clearly fall within the concept of a 'Registered Participant with a financial interest in a metering installation or energy measured by the metering installation'.
Red Energy/Lumo, submission on the additional consultation paper, p9.	Red Energy/Lumo further proposed that the NER be further clarified to make it clear which roles are able to access which kinds of data at what points in time.	The Commission considers that the final rule provides further clarity around parties' rights to access and to receive different types of data under the NER. Clause 7.15.5 of the NER final rule sets out parties' rights to access and receive different types of data sufficiently that AEMO can establish procedures for the access and provision of different types of data.

Stakeholder	Issue	AEMC response
<p>Red Energy/Lumo, submission on the additional consultation paper, p9.</p>	<p>Red Energy/Lumo Energy raised a concern that settlement ready data must be treated confidentially and should only be used by Local Retailers for the purpose of settlements. Red/Lumo proposed that clause 7.15.5(e) specify that a local retailer may only receive settlements ready data for the purpose of settlements.⁷²⁴</p>	<p>'Settlements ready data' is a type of metering data. Under clause 7.15.1, settlements ready data is accordingly confidential information under the NER.</p> <p>Clause 7.15.5(c) and (d) prescribe who may receive metering data, and these provisions will apply to settlements ready data. A Local Retailer is a Registered Participant and subject to the confidentiality obligations under rule 8.6. Under those provisions, a Local Retailer:</p> <ul style="list-style-type: none"> - must not disclose confidential information to any person except as permitted by the NER; - must only use or reproduce such information for the purposes for which it was disclosed or another purpose contemplated by the NER; and - must not permit unauthorised persons to have access to such information. <p>The effect of these provisions is to restrict a Local Retailer from accessing settlements ready data except as allowed under the NER.</p>

⁷²⁴ Red Energy/Lumo, submission on the additional consultation paper, p9.

Stakeholder	Issue	AEMC response
See the following submissions to the additional consultation paper: Energy Australia, p4; Red Energy/Lumo, pp1-2.	Energy Australia did not consider that a retailer who is not the FRMP requires access to the metering data services database. This is because data not provided by the current retailer could be provided by the FRMP or the DNSP; and retailers can source this data, for which they are the previous FRMP, from their own systems. Red/Lumo noted that whilst access to this data would be useful they did not consider that this is within the scope of this rule change.	Having considered stakeholder responses, the Commission does not consider any changes to the NER are required to enable a retailer who is no longer the FRMP to access the metering data services database in connection with obligations to provide data to retail customers. The Commission understands that such retailers will be able to access the required metering data from their own systems.
NSW DNSPs, submission to the draft determination, p6.	The NSW DNSPs asked that the final rule clarify who will be responsible for providing customer access to data under 7.14(c)(4), and considered that the Metering Coordinator would be better suited to doing this.	The Commission does not consider the Metering Coordinator to be an appropriate party hold an obligation to provide a customer with metering data. Unlike the Metering Coordinator, the DNSP and the retailer have a relationship with the customer. Further, the continuity of this relationship between the DNSP and the customer makes the DNSP a useful source of metering data for customers.
NSW DNSPs, submission to the draft determination, p6.	The NSW DNSPs asked that AEMO be afforded additional time to develop its metering data provision procedures (regarding customer access to data under clause 7.16 of the NER) in order to reflect the new roles and obligations under this rule change.	AEMO has indicated that minimal changes will be required to metering data provision procedures to reflect the new roles and obligations under the final rule and that the time provided is sufficient.

B Consumer arrangements

Overview of Appendix B

Appendix B sets out the arrangements under the final 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.

B1 Consumer or generator appointment of a Metering Coordinator

Summary

This appendix addresses the ability of consumers and Non-Market and exempt Generators to appoint their own Metering Coordinator under new arrangements.

The Commission considers there will be benefits in allowing consumers and Non-Market and exempt Generators to appoint their own Metering Coordinator. First, it would enable them to choose products and services supported by advanced meters that are consistent with their preferences. Second, particularly for consumers, 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 and Non-Market and exempt Generators 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 and Non-Market and exempt Generators 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 final rule:

- Large customers and Non-Market and exempt Generators will be able to appoint their own Metering Coordinator, except where they share a connection point with a retail customer.
- Small customers will not 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 question of whether small customers should have the ability 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 and certain generators 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 draft determination, and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for the Commission's final 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.⁷²⁵

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.⁷²⁶

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 consumers a right 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;⁷²⁷
- 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;⁷²⁸

⁷²⁵ COAG Energy Council, rule change request, p8.

⁷²⁶ Ibid., p22.

⁷²⁷ Ibid., p30.

⁷²⁸ Ibid., p8.

- 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;⁷²⁹
- 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.⁷³⁰
- 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.⁷³¹

B1.3 Stakeholder views

B1.3.1 Consultation paper and initial workshops

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.⁷³² However, some stakeholders considered that additional consumer protections may be required if such a relationship was allowed.⁷³³

Other stakeholders did not support a direct relationship between small customers and Metering Coordinators at this time, given the magnitude of the regulatory burden

⁷²⁹ Ibid., p31.

⁷³⁰ Ibid., p32.

⁷³¹ Ibid.

⁷³² EnerNOC, submission on consultation paper, p4.

⁷³³ ATA and other consumer groups, submission on consultation paper, p4. For a contrary view, see Metropolis, submission on consultation paper, p6.

relative to the benefits for consumers.⁷³⁴ 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.⁷³⁵

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 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.⁷³⁶

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.⁷³⁷ 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.⁷³⁸

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'.⁷³⁹ 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.⁷⁴⁰

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.

B1.3.2 Draft determination and operational workshop

The majority of stakeholders supported the position in the draft determination that while large customers could appoint their own Metering Coordinator, small customers should not be able to do so at this time. The AER, CALC, EWON, Lumo, Red Energy and Origin all considered that the arrangements for small customers were

⁷³⁴ EnergyAustralia, submission on consultation paper, p2; Simply Energy, submission on consultation paper, p.8.

⁷³⁵ See for example: AGL, submission on consultation paper, p7; Origin, submission on consultation paper, p6.

⁷³⁶ Lumo Energy, submission on consultation paper, p4.

⁷³⁷ NSW DNSPs, submission on consultation paper, p9; Origin Energy, submission on consultation paper, p4; Vector, submission on consultation paper, p8.

⁷³⁸ Metropolis, submission on consultation paper, p4.

⁷³⁹ Ergon Energy, submission on consultation paper, p8.

⁷⁴⁰ Vector, submission on consultation paper, p8.

appropriate.⁷⁴¹ CALC noted that this would ensure metering is captured by Ombudsman schemes. EWON noted that allowing small customers to appoint their own Metering Coordinator would add a "level of complexity for little consumer benefit".⁷⁴²

In contrast to these views, the Electrical Trades Union considered that the inability of small customers to appoint their Metering Coordinator was inequitable, and that the rule change would not result in increased competition benefits for consumers if they could not do so.⁷⁴³

AGL also considered that Non-Market Generators⁷⁴⁴ and exempt Generators⁷⁴⁵ should be able to appoint their own Metering Coordinator at a generation connection point, similar to large customers.⁷⁴⁶

B1.4 Commission's analysis

Changes between the draft and final rule

The final rule permits Non-Market Generators and exempt Generators to appoint their own Metering Coordinator at a connection point, other than where there is a retail customer at the same connection point.

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. Similarly, Non-Market Generators and exempt Generators are also likely to benefit from being able to negotiate for bespoke services with their Metering Coordinator.

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

⁷⁴¹ AER, submission on draft determination, p3; CALC, submission on draft determination, p2; EWON, submission on draft determination, p1; Lumo, submission on draft determination, p3; Red Energy, submission on draft determination, p3; and Origin, submission on draft determination, p6.

⁷⁴² EWON, submission on draft determination, p1.

⁷⁴³ Electrical Trades Union, submission on draft determination, p7.

⁷⁴⁴ A Non-Market Generator is a generator with generating units from which the entire electricity output is purchased by a local retailer or customer at its connection point.

⁷⁴⁵ A standing exemption applies for generating systems with a capacity of less than 5MW. For generating units of systems of more than 5 MW but less than 30 MW, a person must apply to AEMO for an exemption from the requirement to register as a Generator. The generating unit or system must export less than 20 GWh annually and all sent out generation must be purchased entirely by a Local Retailer or by a customer located at the same connection point.

⁷⁴⁶ AGL, submission on Draft Determination, p5 and supplementary submission on Draft Determination, p10.

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 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. The ability to choose a Metering Coordinator therefore needs to be coupled 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 and certain generators 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 and certain generators 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; and
- 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.

These issues are discussed below. This is followed by a discussion on the ability of Non-Market and exempt Generators to appoint their own Metering Coordinator.

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 investigating whether the scope of existing energy consumer protections require change in light of consumers having an increasing range of electricity supply options.⁷⁴⁷ 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 that may be provided to small customers by parties other than retailers and DNSPs, 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

⁷⁴⁷ <https://scer.govspace.gov.au/workstreams/energy-market-reform/demand-side-participation/new-products-and-services-in-the-electricity-market/>.

- 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 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.⁷⁴⁸

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 designated 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 designated 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 Non-market and exempt Generators

Under both the draft and final rules, Market Generators and Market Small Generation Aggregators are responsible for appointing the Metering Coordinator for the connection points of their generating units as they are the Financially Responsible Market Participant at that connection point. However, under the draft rule, Non-Market Generators and exempt Generators were not permitted to do so, as they are not the Financially Responsible Market Participant at the connection point that connects their generating units to the distribution network.

As discussed above, the Commission considers that the ability for large customers to appoint their own Metering Coordinator is likely to place a competitive discipline on

⁷⁴⁸ Section 146(3) of the NERL.

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.

The consumer protection concerns that apply to small customers appointing their own Metering Coordinator do not apply to Non-Market Generators and exempt Generators, other than in situations where the exempt Generator is located at the same connection point as a small customer eg. a roof top solar generation unit that is automatically exempt from registration. Non-Market Generators and exempt Generators (that are not connected to a small customer connection point), like large customers, would be in a position to negotiate with a Metering Coordinator for metering services for terms and conditions that suit them. For these reasons the Commission considers that these generators should also be able to appoint their own Metering Coordinator.

Where a Non-Market or exempt Generator shares the same connection point with a large customer or Market Customer's load, it is appropriate that only the FRMP or the large customer is permitted to appoint the Metering Coordinator. However, there would be nothing preventing the customer and generator from coming to commercial arrangements with respect to metering arrangements.

For reasons discussed in Appendix A1, the Commission does not consider that the competitive framework should apply at transmission connection points. Therefore the ability for a Non-Market or exempt Generator to appoint its own Metering Coordinator will only apply where it is connected at a distribution connection point.

The requirement for a Financially Responsible Market Participant to appoint a Metering Coordinator in the event that the current Metering Coordinator is unable to perform its functions, as discussed in B1.4.2, would also need to apply where a Non-Market or exempt Generator has appointed the Metering Coordinator.

B1.4.4 Final decision

Based on the analysis set out above, the final rule enables large customers, Non-Market Generators and exempt Generators to appoint their own Metering Coordinator. For generators, this is limited to connection points other than the connection point of a retail customer.⁷⁴⁹

The Commission considers that large customers and Non-Market and exempt Generators are likely 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 and Non-Market and exempt Generators of having the option to appoint their own Metering Coordinator are likely to outweigh the regulatory costs involved.

⁷⁴⁹ Clause 7.6.2 of the NER final rule.

Under the final rule, if a large customer, Non-Market Generator or exempt Generator decides to appoint its own Metering Coordinator, the relationship between the Metering Coordinator and the person who appoints them will be a commercial arrangement with some supporting regulatory requirements.

To address the risk that a Metering Coordinator appointed by a large customer, Non-Market Generator or exempt Generator ceases to provide metering services and a replacement Metering Coordinator needs to be appointed, the final rule introduces the following Metering Coordinator default arrangements:⁷⁵⁰

- The Financially Responsible Market Participant (ie the large customer, Non-Market Generator or exempt Generator'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;⁷⁵¹ or
 - the contract under which a person appoints the existing Metering Coordinator terminates or expires and the relevant person 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 relevant person 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 relevant person relating to the appointment of the Metering Coordinator must be fair and reasonable.

The final rule also requires the Metering Coordinator to notify the relevant retailer, the person that appointed them 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.⁷⁵²

The final rule does not enable small customers to appoint their own Metering Coordinator. The Commission notes the views raised by the Electrical Trades Union that small customers should be able to engage their own Metering Coordinator. However, the Commission continues to consider that the costs of doing so would outweigh the benefits at this time. The development of the regulatory arrangements that would be needed to support this option for small customers, in 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.

⁷⁵⁰ Clause 7.7.1 of the NER final rule.

⁷⁵¹ See the new Chapter 10 definition of "Metering Coordinator default event" in the final rule. This definition includes events such as the Metering Coordinator ceasing to be registered by AEMO.

The Commission notes that the market is undergoing significant change. If the final 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 final 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 question of whether small customers should have the ability 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.

B1.4.5 AEMC response to other stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

Table B1.1 Stakeholder views and AEMC response

Stakeholder	Issue	AEMC response
AGL, submission on draft determination, p5 and supplementary submission on draft determination, p10.	Where a generator is the FRMP as part of an intermediary arrangement with a contracting party to operate a generator (eg a wind farm), the contracting party should be able to appoint the Metering Coordinator.	These metering arrangements can be managed through the contractual arrangements between the registered Generator who appoints the Metering Coordinator and the contracting party. There is no need to establish such arrangements in the NER.
AGL, submission on draft determination, p5 and supplementary submission on draft determination, p10.	AGL requests that for Small Generator Aggregators, the final rule establishes the Market Customer as the default party that appoints the Metering Coordinator as this will remove the complexity for small customer sites.	Small Generator Aggregators are able to appoint their own Metering Coordinator. Each generation unit of a Small Generator Aggregator's generation portfolio must have a separate connection point. As the Financially Responsible Market Participant at the connection point, the Market Small Generator Aggregator has existing responsibility for appointing a Responsible Person and under the new arrangements will be responsible for appointing a Metering Coordinator.

752 Clause 7.7.2 of the NER final rule.

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 small customer's electricity retail bill.

The final rule does not require retailers to unbundle metering charges from other charges on a small customer's retail bill.

As small customers cannot appoint their own Metering Coordinator under the final rule, specific information about metering charges is unlikely to be of 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 small customer, which includes metering charges, that will be relevant to a small customer's choice.

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 final determination in relation to whether metering charges should be identified separately from other energy charges on a small customer'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,, draft determination and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for the final rule.

B2.2 Rule proponent's view

In its rule change request, the COAG Energy Council proposed that a retailer must inform a small customer of the metering service charges for that small customer. The retailer must also notify a small customer of the retail tariff that would be offered if charges for metering services were removed as a result of the small customer appointing its own Metering Coordinator.⁷⁵³

⁷⁵³ COAG Energy Council, rule change request, p10.

The COAG Energy Council asked the AEMC to consider the best approach for a retailer to provide information about basic metering charges, including:⁷⁵⁴

- requiring metering services information to be provided on a small customer's retail bill;
- separately identifying this information from other tariffs and charges payable by a small 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

B2.3.1 Consultation paper and initial workshops

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.⁷⁵⁵ This was particularly the case if a small customer could engage their own Metering Coordinator.⁷⁵⁶
- Other stakeholders were concerned about requiring this information on a small customer's bill.⁷⁵⁷ 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.⁷⁵⁸

754 Ibid.

755 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.

756 Metropolis, submission on consultation paper, p6.

757 AER, submission on consultation paper, p10; AGL, submission on consultation paper, p6; Alinta Energy, submission on consultation paper, p3.

758 This view was reflected in discussions at the third stakeholder workshop.

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 to decide.⁷⁵⁹

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.

B2.3.2 Draft determination and operational workshop

In submissions to the draft rule determination, the Consumer Action Law Centre and the Electrical Trades Union considered that metering charges should be unbundled on a small customer's bill. These stakeholders consider that this would enable small customers to better understand the cost impact of a new meter.⁷⁶⁰

In contrast, retailers did not consider unbundling metering charges on a small customer's bill as necessary. EnergyAustralia noted research from the United Kingdom that suggested that more information on energy bills leads to impressions of complexity and 'small print' which lead to consumer disengagement. These stakeholders supported the Commission's decision as outlined in the draft rule determination that retailers should not be required to provide information with respect to metering charges.⁷⁶¹

B2.4 Commission's analysis

Changes between the draft and final rule

There are no changes to the Commission's policy on the itemisation of metering charges as set out in the draft determination.

The draft rule contained an amendment to rule 25 of the NERR in relation to the contents of bills to clarify that the "sale and supply of energy" includes the provision, installation and maintenance of meters. The final rule does not include this amendment. The Commission considers that metering services are an intrinsic part of the sale and supply of energy (as metering is required for market settlement and billing) and that therefore no changes are required to the existing requirements in the NERR in relation to the contents of bills.

⁷⁵⁹ 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.

⁷⁶⁰ CALC, submission on the draft rule determination, p.3; Electrical Trades Union, submission on the draft rule determination, p.8.

⁷⁶¹ EnergyAustralia, submission on the draft rule determination, p.4; Origin, submission on the draft rule determination, p.6.

In determining whether metering charges should be itemised separately from other energy charges on a small customer'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 final 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 small customer, which would include metering charges, that will be relevant to a small customer's choice. This is consistent with current arrangements where the components of energy charges, such as network costs, are not separately identified on small customers' bills.

In addition, providing specific information about metering service charges, particularly on a small customer'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 small customers currently pay for metering services as part of the network charges included in the amounts retailers bill customers for the sale and supply of energy.

For these reasons, the Commission has determined that retailers should not be required to provide specific information about metering charges to small customers.

The Commission does not consider any changes to the NERR are required to reflect this policy position. The draft rule contained an amendment to rule 25 of the NERR in relation to the contents of bills to clarify that the "sale and supply of energy" includes the provision, installation and maintenance of meters. However, the final rule does not include this amendment as the Commission considers that metering services are an intrinsic part of the sale and supply of energy to customers (as metering is required for market settlement and billing). Including a reference to metering in this provision could also cause uncertainty regarding the interpretation of other provisions in the NERR and NERL that refer to the sale and supply of energy. This means that under existing rule 25 of the NERR a retailer will not be required to itemise amounts billed for the provision, installation and maintenance of meters separately from other amounts billed for the sale and supply of energy.

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.⁷⁶²

⁷⁶² As noted in Appendix B1, the Commission recommends that this review occurs three years after the new Chapter 7 of the NER commences.

C Application of the minimum services specification

Overview of Appendix C

This appendix sets out the arrangements under the final 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 final rule all new and replacement meters installed at small customer connection points must meet a new minimum services specification except in two defined circumstances. This means that the metering installation must be capable of providing certain minimum services specified in the NER and be connected to a telecommunications network which enables it to be accessed remotely. The minimum services specification requires metering installations to be capable of providing the minimum services, rather than requiring the metering installation to have particular additional technical functionality. 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 final rule includes a description of the services that the metering installation must be capable of providing in order to meet the minimum services specification. AEMO must establish, maintain and publish procedures that set out the minimum service levels and standards for the minimum services and may include technical requirements for those services.

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;
- metering installation inquiry service;⁷⁶³ and
- advanced meter reconfiguration service.

The Commission considers that a relatively low minimum services specification allows the market to determine the services that consumers want at a price they are willing to pay. Over-specifying the minimum services that new and replacement meters for small customers must be capable of providing 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

⁷⁶³ 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.

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.

In practice, the Commission expects that most metering installations will include services in addition to those required by 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 meeting the minimum services specification (except in the two circumstances specified below), there will be no obligation on Metering Coordinators to provide the minimum 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 two circumstances in which a Metering Coordinator may arrange for a the installation of a new or replacement metering installation at a small customer connection point that does not meet the minimum services specification because the metering installation is not required to be connected to a telecommunications network to enable remote access. These two circumstances are:

- where 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; and
- where the customer has communicated its refusal to have a meter that meets the minimum services specification (ie a meter that is capable of remote access) installed.

In both cases, while a Metering Coordinator must install a metering installation that is capable of providing the minimum services set out in the minimum services specification, the metering installation is not required to be connected to a telecommunications network to enable remote access. These metering installations will be classified as type 4A metering installations.

There are a number of services that advanced meters may provide and that are expected to be commonly used but which have not been included in the minimum services specification, such as load control. If Metering Coordinators agree to the provision of these services on commercially agreed terms, the means of sending communications in relation to these services may be covered by a shared market protocol on which the Commission and AEMO have recently provided advice for the COAG Energy Council.

C1.1 Introduction

This appendix explains the governance, content and application of a minimum services specification for new and replacement metering installations for small customers under the final rule.

The final rule does not mandate a minimum services specification for metering installations installed at the connection points of large customers or metering installations where there is no retail customer, eg at transmission connection points.

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 and draft determination, and outcomes of stakeholder workshops held by the AEMC;
- 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 final rule.

C1.2 Current arrangements

The NER currently contains minimum functionality requirements for metering installations and requirements related to metering data services.⁷⁶⁴ These requirements are primarily metrology related and were established to ensure the accurate measurement of energy flows and to facilitate settlement of the NEM and billing of customers. For example, Chapter 7 includes a number of provisions that relate to the components of a metering installation, accuracy requirements, and the collection, storage and delivery of metering data.

The NER does not contain minimum functionality requirements for advanced meters. In Victoria, advanced meters deployed under the Victorian Government mandated

⁷⁶⁴ Existing clause 7.3.1 of the NER.

rollout (the AMI program) must comply with the AMI Specifications Order, which sets out the minimum functionality and the associated service requirements that AMI meters must satisfy.⁷⁶⁵

AEMO is responsible for establishing and maintaining the procedures relating to the required components of metering installations and the collection, storage and delivery of metering data. These are specified in Chapter 7 of the NER and include the metrology and service level procedure.⁷⁶⁶ The NER sets out the material which the metrology and service level procedures must include. Although the NER does not include specific criteria that must be considered in establishing these procedures, AEMO must have regard to the National Electricity Objective in carrying out its statutory functions.⁷⁶⁷

These existing arrangements in the NER 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.⁷⁶⁸ 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.

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.⁷⁶⁹

⁷⁶⁵ This Order in Council was made on 12 November 2007.

⁷⁶⁶ Existing clauses 7.1.3 and 7.1.4 of the NER.

⁷⁶⁷ Clause 49(3) of the National Electricity Law Act (South Australia) 1996.

⁷⁶⁸ COAG Energy Council, rule change request, October 2013, p15.

⁷⁶⁹ *Ibid.*, p15.

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.⁷⁷⁰

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.⁷⁷¹ 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.⁷⁷²

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:⁷⁷³

- support billing and settlement in the market;
- support efficient business practices;
- enable the efficient, reliable and safe operation of the national grid; and
- 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 final rule. This is discussed in section C1.5.3.

770 Ibid., p15.

771 The provision for a jurisdiction to mandate a roll out of advanced meters has subsequently been removed from the NEL.

772 COAG Energy Council, rule change request, October 2013, pp17-18.

773 COAG Energy Council, terms of reference, AEMO advice on smart meter functionality and a shared market protocol, p4.

C1.4 Stakeholder views

C1.4.1 Consultation paper and initial workshops

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.

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.⁷⁷⁴ However, several stakeholders considered that the IEC should either have full responsibility for determining the minimum services specification or should provide advice to AEMO.⁷⁷⁵ 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.⁷⁷⁶

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.

One stakeholder expressed concern with AEMO being the ultimate decision maker. Another suggested that there be a more democratic approach to determining and

⁷⁷⁴ 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.

⁷⁷⁵ Energex, submission on consultation paper, p7; ENA, submission on consultation paper, p31; SA Power Networks, submission on consultation paper, p11.

⁷⁷⁶ Simply Energy, submission on consultation paper, p9.

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 therefore the likely costs of the services, are certain.

Consumer groups advocated for a role in the ongoing governance of the minimum services specification.

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.

C1.4.2 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.⁷⁷⁷ 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;

⁷⁷⁷ 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 inquiry (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)		

C1.4.3 Draft determination and operational workshop

This section sets out stakeholder comments provided in submissions on the draft determination and at the operational workshop in relation to:

- the governance of the minimum services specification;
- the minimum services specification, including the list of services to be included, safety requirements for reconnection services and access parties for certain services; and
- meeting the minimum services specification.

Governance of the minimum services specification

The draft determination and draft rule provided a list of services to be included in the minimum services specification, with AEMO to develop procedures on minimum service levels and standards for the minimum specification services.

There were a number of comments from stakeholders on the level of guidance that should be provided to AEMO in the NER and during the development of service level procedures and performance standards in relation to the minimum services specification.

In their submissions to the draft determination, the ENA and Energex considered that further guidance should be provided in the final determination and final rule in relation to the minimum services levels that should be established in procedures by AEMO.⁷⁷⁸ The ENA considered adequate service levels to be critical to delivering effective network related advanced metering services. There were also suggestions from stakeholders that the AEMC should provide oversight during the development of AEMO's procedures in order to monitor that the procedures implement the intent of the rules.⁷⁷⁹

⁷⁷⁸ See the following submissions to the draft determination: ENA, p16; Energex Attachment A, p10, Victorian DNSPs, pp46-47.

⁷⁷⁹ Origin, p6.

Stakeholders also commented on the draft decision that jurisdictions would not have an ability to vary the minimum services specification. The Victorian DNSPs recommended that, where there is a clear case for higher meter functionality (ie incorporating secondary or value added services), that the rules allow a jurisdiction to approve a location-specific services/functionality specification that must be met by all Metering Coordinators in that location. On the other hand, ERM strongly supported consistency across the NEM with respect to the minimum services specification and new and replacement policies which it considers will support the development of streamlined systems and processes for participants and lower the cost of operating in multiple jurisdictions.⁷⁸⁰

The minimum services specification

List of services

The minimum services specification set out in the draft rule included those services identified by AEMO as 'primary' services. Stakeholders held a wide range of views on this scope of services.

A significant number of stakeholders, broadly including retailers, most metering providers, the AER and EWON, supported the list of services included in the draft rule.⁷⁸¹ These stakeholders commented that it was appropriate to focus on the set of services which is most likely to deliver benefits for all consumers, promote innovation and reduce transaction costs of commercial negotiations.

Simply Energy considered the minimum services specification set out in Schedule 7.5 of the draft rule is appropriate for the a market-led deployment of advanced meters given the ultimate intention of the competitive metering framework is that consumer demand and industry innovation will drive the capabilities and uptake of metering technologies. EWON also supported the specification of minimum services to allow for flexibility and innovation in the provision of new energy services.⁷⁸²

Retailers considered the competitive market will determine the additional services retailers and energy service providers offer, as these businesses strive to differentiate themselves. Under competitive arrangements for the provision of metering services, retailers considered that additional and alternative services can be expected to be provided that will be tailored to consumer need and demand.⁷⁸³

780 ERM, submission on the draft determination, p2.

781 See the following submissions to the draft determination: Active Stream, p1; AGL, p52; AER, pp5-6; EDML, p2; ERAA,p3; ERM, p3; EWON, p2;Vector, p2; Lumo/Red Energy, p2; Metropolis, pp6-7; Origin, p6; Simply Energy, p4.

782 EWON, submission to the draft determination, p2.

783 See the following submissions to the draft determination: ERAA,p3;Red Energy/Lumo, p2Simply Energy, p4.

Vector noted that most metering providers would install meters that exceeded the minimum services specification so that they could provide improved services to their customers and attract new ones.⁷⁸⁴

The AER considers a minimum services specification will provide a broad platform to guide commercial negotiations and from which parties can compete with customised offerings over and above those that are most likely to deliver benefits for consumers. Simply Energy considered this will increase the dynamic efficiency over time as investment is made in the capabilities that consumers have proven they have demand for.⁷⁸⁵

Additionally, some retailers, metering providers and the AER commented that they supported focus on services rather than meter functionality which would avoid technological obsolescence and promote innovation.⁷⁸⁶ Vector commented that mandating functionality specifications could lock out parties not using those specifications from the market, therefore limiting competition.

DNSPs, however, widely considered the minimum services specification was too narrow in scope and should match the Victorian Minimum Functionality Specification.⁷⁸⁷ The Victorian DNSPs expressed concern that a lower specification would lead to lower service delivery and higher costs in greenfield sites in Victoria, and could lead to the loss of access to network benefits already being delivered or planned to be delivered. The ENA did not consider that either the AEMC or AEMO had undertaken adequate analysis of the costs and benefits of the proposed minimum services specification compared to a wider definition more consistent with the Victorian Minimum Functionality Specification.

CALC also concluded that the minimum services specification should match the Victorian AMI specification, as a minimum. CALC considered that the list of services is greatly reduced from the functionality required under the AMI program, which increases the likelihood of meter churn as consumers would have to pay to upgrade their meter to access what may be quite basic benefits of smart meters.⁷⁸⁸

It was of particular concern to some stakeholders that load control had not been included in the minimum services specification. A number of stakeholders, including SA Power Networks, Queensland Consumer's Association and the (CALC) considered that not including load control in the minimum services specification was counterproductive and inefficient.⁷⁸⁹ The Queensland Consumers Association was of

⁷⁸⁴ Vector, submission to the draft submission, p2.

⁷⁸⁵ Simply Energy, submission on the draft determination, p4.

⁷⁸⁶ See the following submissions to the draft determination: AER p5; EDM I p2; Lumo/ Red Energy, p2, Vector, p2..

⁷⁸⁷ See the following submissions to the draft determination: ENA, p15; SA Power Networks, p8; Victorian DNSPs, p14 and p28.

⁷⁸⁸ CALC, submission to the draft determination, p6.

⁷⁸⁹ See the following submissions to the draft determination: CALC, p5; Queensland Consumers Association, p2; SA Power Networks, p5.

the view that direct load control should be included in the specification, due to the importance of this functionality in Queensland and NSW, and growing importance in other states. The Queensland Consumers Association proposed that, if direct load control is not included in the specification, that whenever a consumer in Queensland is offered an advanced meter that the retailer is required to have available and offer a meter that does include direct load control.⁷⁹⁰

Landis+Gyr were similarly concerned that the retailer does not have commercial incentives to embed distribution network services in the meter. Landis+Gyr considered the retailer will be focussed on services that are of direct benefit to the customer and can be marketed to the customer rather than distribution services that benefit the network as a whole. On that basis, Landis+Gyr recommended that the minimum services specification should include distribution services like load control, outage management and power quality management.⁷⁹¹

Embertec also suggested that the minimum services specification should include functionality requirements such as the ability to connect to a HAN. Embertec considered a common basic communication protocol should require specific functionality in the meter such as Zigbee. Embertec considered the cost of including Zigbee is low at around \$2-\$4 and would and provide certainty to product developers to develop new services based on this technology. Including Zigbee, considered Embertec, would also ensure a customer can access third party energy monitoring devices without having to churn the meter.⁷⁹²

The ENA was concerned that the low minimum services specification undermines the establishment of sufficient service capability standardisation to provide the necessary basis for commercial contracting.⁷⁹³ Embertec was similarly concerned that there will be no consistency with the services available in new meters. A customer may be required to churn in order to take up third party services, or a particular service that requires particular functionality.⁷⁹⁴

SA Power Networks also expressed concern that the very high level service descriptions in S7.5.1.1 leave considerable room for interpretation, and omit details that are fundamental to achieving benefits from the services proposed.⁷⁹⁵

Safety concerns relating to remote reconnection services

SA Power Networks proposed that safety requirements should be incorporated into the service description of the remote reconnection services. They proposed that the draft service description in table S7.5.1.1(b) of the NER draft rule for the remote reconnection service be amended as follows:

⁷⁹⁰ Queensland Consumers Association, submission to the draft determination, p2.

⁷⁹¹ Landis&Gyr, submission to the draft determination, pp3-5.

⁷⁹² Embertec, submission to the draft determination, pp2-5.

⁷⁹³ ENA, submission to the draft determination, p15.

⁷⁹⁴ Embertec, submission to the draft determination, p2.

⁷⁹⁵ SA Power Networks, submission to the draft determination, p8.

“The remote reconnection of a small customer's premises via the metering installation in accordance with jurisdictional safety requirements. For safety, this service must support an auto-disconnect function if load is detected flowing through the meter immediately following the remote reconnection. The metering installation must provide a clear local visual indication of the status of the switch used to effect the reconnection service.⁷⁹⁶”

AusNet services also considered that there is a strong argument for including the associated auto-disconnect service in the remote meter reconnection service. AusNet Services noted this service element would require a number of current and time settings, on which AusNet made recommendations.

Access parties for services set out in the minimum services specification

Ren Energy/Lumo queried why all parties listed in clause 7.15.5(a) of the NER draft rule should have access to the remote on-demand and scheduled meter read services as provided for in Table S7.5.1.1. of the NER draft rule.⁷⁹⁷ Red Energy/Lumo noted that parties that require metering data for billing and settlement purposes will have access to this data under other provisions in the NER. The only parties Lumo considered should have access to the remote on demand and scheduled meter services were as follows: the Local Network Service Provider; the FRMP; the Metering Coordinator; the Metering Provider and the Metering Data Provider.

Red Energy/Lumo also raised a concern that under the draft rule a retailer that has won a move-in customer, but is not yet the designated FRMP in MSATS, will not be able to arrange a remote reconnection of the premises.⁷⁹⁸ Red Energy/Lumo recommended changing the access party for the reconnection service in table S7.5.1.1 of the NER draft rule from ‘FRMP’ to ‘retailer’ which includes a retailer that has won a move-in customer and organised a reconnection but is not yet the FRMP in MSATS. Similarly, Red Energy/Lumo suggested that the access parties for the metering installation inquiry service be defined as ‘retailer’, which includes a retailer that has won a move-in customer and organised a reconnection but is not yet the FRMP in MSATS.

Meeting the minimum services specification

New Connections

The AER suggested in its submission on the draft determination that clarification is required in relation to new property developments and who appoints the Metering Coordinator in these circumstances. The AER considered it was not clear who would provide a meter that meets the minimum services specification to such customers when

⁷⁹⁶ SA Power Networks, submission to the draft determination, p5.

⁷⁹⁷ Red Energy/Lumo, submission on the draft determination, p.10

⁷⁹⁸ Ibid.

DNSPs no longer have exclusive responsibility for the provision of certain meter types.⁷⁹⁹

During the operational workshop stakeholders considered the cascading obligations on a Metering Provider, who is appointed by a Metering Coordinator, who is in turn appointed by the FRMP, in Chapter 7 would operate to ensure meters that meet the minimum services specification would be installed at new connections. However, some stakeholders noted that there are scenarios now where property developers arrange for meters to be installed at new apartment complexes but a sole metering installation is used for the entire complex until occupants move in or a retailer is assigned in respect of each apartment.

Capability of end to end metering system including the telecommunications network

Some DNSPs were concerned that it was not sufficient that the minimum services specification only include:

- a list of services a metering installation must be capable of; and
- a requirement that the metering installation be connected to a telecommunications network which enables remote access.

The Victorian DNSPs and AusNet proposed that there be a requirement for end to end metering systems to be capable of providing the services listed in the minimum services specification (and to allow for the evolution of services).⁸⁰⁰ This would require the metering installation, the telecommunications connection and back end IT systems to be capable of providing the services listed in the minimum services specification. The ENA also recommended clarifying communications requirements to support remote reading.⁸⁰¹

Metering installations connected to a current transformer

Several stakeholders raised concerns with respect to the technical and economic feasibility of providing remote disconnection and reconnection services at premises with a metering installation connected to a current transformer (CT).⁸⁰² Stakeholders commented it would be costly to install CT connected meters that are capable of providing remote disconnection and reconnection services and that the premises which require CT connected meters are typically business premises where remote disconnection and reconnection services may not be utilised.

799 AER, submission on the draft determination, p5.

800 AusNet Services, Supplementary submission on the draft determination, 1 July 2015, p7; Victorian DNSPs, Submission on the draft determination, 21 May 2015, p68.

801 ENA, Submission on the draft determination, 26 May 2015, p16.

802 See the following submissions to the draft determination: ERM, p3; Metropolis, p6; Origin, p11.

Links to a shared market protocol

The ENA considers that for the full benefit of advanced metering infrastructure to be realised, it is essential that the shared market protocol has the capacity to deliver the range of AEMO documented primary and secondary/value added services, including network services. If this is not enabled, it is likely to result in the development of varying transactional arrangements that increase the overall costs and restrict the long term benefits to customers. The ENA recommended providing sufficient guidance in the final determination and the NER to put beyond doubt the policy intent of the AEMC that the shared market protocol has the capacity to deliver the range of proposed primary and secondary services, including network services.⁸⁰³

C1.4.4 Additional consultation paper

Metering Coordinator obligations where a customer refuses to have an advanced meter installed

In response to the draft determination, several jurisdictions expressed concern that, under the draft rule, customers would not be able to opt out of the installation of a meter that meets the minimum services specification in fault, maintenance replacement and new connection scenarios, and asked that further consideration be given to consumers who refuse to have an advanced meter installed.⁸⁰⁴

Some consumer groups shared this concern. The Ethnic Communities' Council of NSW considered that not providing an ability to opt out in all scenarios would place considerable strain on consumer-retailer relations unless the rationale of why the replacement is necessary is explained and comprehended by the consumer.⁸⁰⁵ CALC was of the view that the rules should require retailers to proactively communicate with consumers well in advance of any meter replacement and again immediately prior, including (among other things) the right of the consumer to opt out.⁸⁰⁶

Several retailers interpreted that the draft rule provisions relating to special sites and type 4A metering installations would operate to manage sites where the customer refuses the installation of a meter that meets the minimum services specification. However, we note that this interpretation is not consistent with the obligation on the Metering Coordinator to install a meter that meets the minimum services specification.⁸⁰⁷

In its additional consultation paper, the Commission sought feedback from stakeholders on indicative amendments to clause 7.8.4 of the NER draft rule that

⁸⁰³ ENA, submission on the draft determination, p22.

⁸⁰⁴ Department of State Development (SA) submission to the draft determination, p2; Department of State Growth (Tas) submission to the draft determination, p6.

⁸⁰⁵ Ethnic Communities Council of NSW submission to the draft determination, p 2

⁸⁰⁶ CALC, submission to the draft determination, p 3.

⁸⁰⁷ ERAA submission to the draft determination, p 4; Lumo and Red Energy submission to the draft determination, pp 4-5.

would to allow a Metering Coordinator to install a type 4A meter if the customer has communicated its refusal to have a meter that meets the minimum services specification (ie a type 4 meter that is capable of remote access) installed.⁸⁰⁸

The NER draft rule did not specify what a Metering Coordinator was required do in new and replacement situations if a customer refuses the installation of a metering installation that meets the minimum services specification.⁸⁰⁹ If there is no working meter at the site and the customer refuses the installation of a metering installation that meets the minimum services specification, the retailer may be in a position where it is required to estimate the customer's energy consumption for the purposes of billing and settlement, and eventually de-energise the customer's premises if access to the meter continues to be denied.⁸¹⁰

The Commission sought feedback from stakeholders on indicative amendments to clause 7.8.4 of the NER draft rule that would to allow a Metering Coordinator or Metering Provider (in the case of a new connection) to install a type 4A meter if the customer has communicated its refusal to have a meter that meets the minimum services specification (ie a meter that is capable of remote access) installed .

Stakeholders broadly supported the proposed amendments.⁸¹¹ However, a number of stakeholders proposed refinements to the proposal.

The Victorian DNSPs recommended tightening the requirements for type 4A metering installations to ensure customers receive the maximum benefits from advanced meters. The Victorian DNSPs considered that the proposed amendment enables a Metering Coordinator to install a type 4A metering installation where in its 'reasonable opinion' the small customer has refused the installation of a type 4 meter. In the view of the Victorian DNSPs, the term 'reasonable opinion' is very broad, , particularly in the context of the types of conduct by a customer that can be relied on to establish refusal.

The Victorian DNSPs considered this could lead to the adoption of type 4A metering installations as the norm rather than the exception and the evolution of a two tier metering system. Inefficiencies would arise from servicing a two tier system, including the costs of manual readings for type 4A metering installations and the cross subsidisation of benefits of remote reading from customers with type 4 metering installations to those with type 4A metering installations.⁸¹²

808 AEMC, Expanding competition in metering and related services, Additional consultation on specific issues, p 32, 17 September 2015.

809 If the provision in the rules that all new and replacement metering installations at small customer connection points meet the minimum services specification is classified as a civil penalty provision (as recommended by the Commission), the breach of the provision will give rise to potential monetary penalties.

810 Under Rule 113 of the NERR.

811 See the following submissions to the additional consultation paper; Calvin Capital, p4; Metropolis, p9; Red Energy, p8; Energy Australia ,p4; Origin p5; ERAA p3; The South Australian Department of State Development, p1) SACOSS, p1.

812 Victorian DNSPs, submission to the additional consultation paper, p15.

Energex considered that providing retailers with an ability to install a 4A metering installation where a customer refuses installation of a metering installation that meets the minimum services specification does not address situations where the customer's refusal is based on perceived health and safety issues associated with electronic devices. Therefore, customers who refuse a type 4 metering installation may also refuse a type 4A metering installation. Energex suggested the rules should take this scenario into account.⁸¹³

C1.5 Commission's analysis

Changes between the draft and final rule

The Commission has maintained the policy position that a relatively low minimum services specification is appropriate in a market led deployment of advanced meters. However, a number of minor drafting amendments have been made to the descriptions of two services. These include:

- The definition of remote on demand and scheduled meter read services (items (c) and (d) of table S7.5.1.1 of the NER final rule) has been amended to include "quality flags", in recognition that quality information is required to interpret metering data.
- The definition of the metering installation inquiry service (item (e) of table S7.5.1.1 of the NER final rule) has been amended to clarify that the relevant information that is to be provided from the meter log is data regarding 'events' recorded in the meter log.

There have been a number of amendments to the list of access parties for some services in the minimum services specification:

- access parties for the remote on demand and scheduled meter read services (items (a) and (b) of table S7.5.1.1 of the NER final rule) have been limited to:
 - Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation; and
 - a person to whom a small customer has given its prior consent under clause 7.15.4(b)(3) of the NER final rule; and
- an Incoming Retailer⁸¹⁴ is included in the list of access parties for the remote reconnection service.

Two additional qualifications to the Metering Coordinator's obligation to ensure

⁸¹³ Energex, submission to the additional consultation paper, p11.

⁸¹⁴ A new definition of "Incoming Retailer" has been added to Chapter 10 in the NER final rule - see section C1.5.3 below.

new and replacement metering installations meet the minimum services specification at the connection point of a small customer have been introduced in the NER final rule:

- under clause S7.5.1(d), metering installations that are connected to a current transformer must only be capable of providing the services listed in items (c) to (f) in table S7.5.1.1 in accordance with procedures made under clause 7.8.3, meaning these metering installations will not be required to be capable of remote disconnection and reconnection services; and
- clause 7.8.4(d) of the NER allows a Metering Coordinator to install a type 4A meter if the customer has communicated its refusal to have a meter that meets the minimum services specification (ie a type 4 meter) installed.

This section sets out:

- the Commission's rationale for introducing a minimum services specification rather than a minimum functionality specification;
- the Commission's final rule and rationale for including provisions for the minimum services specification in the NER, with any minimum service levels, standards and technical requirements to be developed by AEMO in procedures;
- the Commission's final rule and rationale for deciding which services to include in the minimum services specification: including its view on safety outcomes; and amendments to the list of access parties for some services;
- the conditions under which the minimum services specification will be required to be satisfied;
- exceptions to the obligation that all new and replacement metering installations comply with the minimum services specification where there is no existing telecommunications network which enables remote access or where a customer has refused to have a meter that meets the minimum services specification installed; 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 services specification for small customer metering installations should be based on the services that the metering installation must be capable of supporting rather than the functional components that must be included in the metering installation.

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 final rule.⁸¹⁵ The existing metering installation component requirements⁸¹⁶ specify 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.

C1.5.2 Governance of the minimum services specification

This section sets out the Commission's analysis and final decision on:

- the governance framework for the minimum services specification which sets out the list of services in the NER, with any minimum service levels, standards and technical requirements to be developed by AEMO in procedures;
- the Commission's rationale for the governance framework for the minimum services specification; and
- a consistent, NEM wide minimum services specification.

Governance framework for 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 final rule. This list of services is discussed in the next section. The Commission considers 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. However, the Commission does not agree that additional technical prescription should be included in the description of services. The final rule sets out detailed definitions of each of the services (see Schedule 7.5 of the NER final rule).

AEMO will be required to establish, maintain and publish procedures by 1 September 2016 that set out, for each service specified in the minimum service specification:⁸¹⁷

- minimum service levels, including service availability (eg at what times the service can 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

815 This clause is renumbered as clause 7.8.2 of the NER final rule.

816 Clause 7.8.2 of the NER final rule.

817 Clause 7.8.3(c) of the NER final rule.

- 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 metering installation inquiry and advanced meter reconfiguration services. For example, the final rule sets out at a relatively high-level the two operational parameters that, as a minimum, must be capable of being set under the advanced meter reconfiguration service. There is likely to be benefit in AEMO specifying further technical requirements for those parameters in the procedures.

Rationale for the governance framework for the minimum services specification

The purpose of the minimum service levels and standards is to provide greater certainty to metering manufacturers and others regarding the specifications that a small customer 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 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 and consultative approach whereby any changes to the minimum services specification must satisfy the NEO.

However, AEMO is better placed to develop the detailed service levels and standards. AEMO must follow the rules consultation procedures under clause 8.9 of the NER when developing and consulting on these procedures and is also required to have regard to the NEO in performing its functions. The Commission considers that it is unwarranted to provide further details in the NER on appropriate service levels for delivering the services in the minimum services specification. 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.⁸¹⁸ 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.

Any amendments to the minimum services specification set out in the NER would require subsequent amendments to AEMO's minimum 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 considered and that any change will contribute to the achievement of the NEO, thereby minimising uncertainty for participants in the metering services market.

While the Commission considers the development of detailed minimum service levels and standards should be undertaken by AEMO, the Commission agrees that it is important that the AEMC remain involved in the implementation process. The AEMC has been attending AEMO procedures workshops during the rule change process and will continue to do so following the final rule being made.

Ability of jurisdictions to modify the minimum services specification

The final rule does not provide jurisdictions with a mechanism by which they can vary the minimum services specification. The Commission considers a consistent NEM-wide minimum services specification has the potential to generate economies of scale and lower regulatory and transaction costs for businesses operating across jurisdictional boundaries and that this can be expected to place downward pressure on prices for consumers.

⁸¹⁸ See existing clause 7.1.1(a) of the NER for a complete list of provisions that Chapter 7 covers.

C1.5.3 The minimum services specification

This section sets out the Commission's analysis and final decision on:

- the services to be included in the minimum services specification;
- incorporating safety requirements in relation to remote disconnection and reconnection services; and
- the parties that are permitted to access the services set out in the minimum services specification.

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 final rule. The purpose of minimum services specification is to set minimum capability requirements for the metering installation with respect to delivering certain services. Under the final 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. The parties that are able to request a remote disconnection will be limited to the LNSP and the FRMP.
- *Remote reconnection service:* This service is the remote reconnection of a small customer's premises via the metering installation. The parties that are able to request a remote reconnection service will be limited to the LNSP, FRMP and Incoming Retailer.⁸¹⁹
- *Remote on-demand meter read service:* This service is the remote retrieval of metering data (including quality flags) 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 on-demand meter read service are Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation and a person to whom a small customer has given its prior consent under clause 7.15.4(b)(3) of the NER final rule.

⁸¹⁹ The Incoming Retailer is defined as "A retailer that: (a) has a contract with a customer at a connection point; and (b) has initiated the customer transfer process in accordance with the Market Settlement and Transfer Solution Procedures, but which is not yet designated the financially responsible Market Participant for that connection point." Incoming Retailers have been included in the list of access parties for remote reconnection services to enable a retailer that wins a move in customer at a connection point and has commenced the customer transfer process to reconnect that customer prior to being designated the FRMP.

- *Remote scheduled meter read service:* This service is the remote retrieval of metering data (including quality flags) 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 Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation and a person to whom a small customer has given its prior consent under clause 7.15.4(b)(3) of the NER final rule.
- *Metering 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 final 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 events that have been recorded in the meter log including information on alarms. The parties that are able to request a remote metering installation inquiry service are the LNSP and the FRMP, and any person to whom a small customer has given its prior consent under clause 7.15.4(b)(3) of the NER final 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 final rule sets out the two operational parameters that, as a minimum, must be capable of being set: the activation or deactivation of a data stream or data streams; and altering the method of presenting energy data and associated information on the meter display. The parties that are able to request an advanced meter reconfiguration service are the LNSP and the FRMP.

The language used in the descriptions of services in the minimum services specification is intentionally general where possible. Procedural terminology has been avoided since this may potentially predetermine or limit the way in which services are provided. The descriptions of the minimum services does not prevent AEMO and industry continuing to use terms currently defined in procedures where they consider this to be appropriate. However, the descriptions also provide AEMO with the discretion to develop procedures in consultation with industry which will be appropriate for the provision of advanced metering services under a market led approach¹.

Also, the minimum services specification is not intended to limit the types of services that can be negotiated, and the transactions requested, by participants. We note that in a competitive market for metering services, parties may wish to define and negotiate services which vary from the services defined in the minimum services specification and procedures.

Mandating that new and replacement meters are capable of providing 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 required of advanced meters. 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. The Commission has considered these trade-offs in determining the list of services in the minimum services specification.

Having a relatively low minimum services specification will 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.

The likely benefits of these services are set out in Table C1.2.

Table C1.2 Potential benefits to consumers of the minimum services

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.
Metering 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.
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In practice, the Commission expects that most new and replacement 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. Most meters that are available on the market today have at least the same functionality as the Victorian specification. While one metering provider has suggested that meters may be adjusted for the NEM minimum services specification, no other metering providers have suggested this is a likely outcome.

Metering Coordinators are expected to have an incentive to install metering installations that are capable of providing services additional to those in the minimum services specification to reduce the risk of meter churn. 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. Therefore we would expect that Metering Coordinators would seek to have the flexibility to offer many different services, such as load control, over the life of their meters.

Further, 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. Although there have been concerns raised about the willingness of Metering Coordinators to engage with DNSPs, there is no evidence that Metering Coordinators will not negotiate with DNSPs to understand the services that DNSPs are interested in purchasing. In contrast, potential metering providers made it clear at several of the workshops held by the AEMC that they are hoping to negotiate with DNSPs to ensure their meters have the functionality desired by DNSPs, including load control.⁸²⁰

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.

Many services that can be provided through the meter can already be provided through alternative technologies. 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. Over-specifying the minimum services that new and replacement metering installations must be capable of providing could risk stifling innovation and development in these services. Providing a relatively low minimum services specification therefore avoids the risks of locking in outdated, and potentially more expensive, technology.

Achieving safety outcomes

The Commission does not consider that the minimum services specification should regulate safety requirements relating to the remote reconnection of customers.

As described in section C1.5.3 above, the minimum specification relates to the services that small customer metering installations must be capable of providing and not the manner in which those services are provided or the technical functionality of the metering installation itself.

In addition, electrical safety regulation is currently undertaken by jurisdictional safety regulators who have specialist expertise and generally regulate electrical safety across a range of industries in order to achieve consistency of safe practices of electrical contractors in many types of work.

The Commission therefore considers safety outcomes would be best achieved by placing an obligation in the NER that disconnections and reconnections arranged by the Metering Coordinator should only be undertaken in accordance with jurisdictional electricity legislation.⁸²¹ It would then be the role of jurisdictional safety regulators to determine whether safety outcomes should be process or technology driven or a combination of the two. This is an issue on which the AEMC has been engaging with jurisdictional regulators and the Electricity Regulatory Authorities Council. We also note that Standards Australia is considering initiating a project to develop safety standards for advanced metering installations.

Appendices A3 and A4 set out the arrangements for the remote disconnection and reconnection of customers in further detail.

⁸²⁰ See Appendix E for further detail on the Commission's views on access to Metering Coordinator services.

⁸²¹ Clause 7.3.2(i)(3)(iii) and clause 7.3.2(i)(4)(ii) of the NER final rule.

Access parties for services set out in the minimum services specification

The final rule provides that only certain parties are permitted to request access to services set out in the minimum services specification. These parties are listed as "access parties" in Table S7.5.1.1 of the NER final rule. The final rule includes some amendments compared to the draft rule to the parties that are permitted to access:

- the on demand and scheduled meter read services; and
- the remote reconnection service.

On demand and scheduled meter read services

As discussed in Appendix A1 and A5 a number of amendments have been made to Chapter 7, including the access to data provisions to strengthen the distinction between regulatory obligations and discretionary services. Under the final rule metering data may be provided in accordance with a regulated obligation under the NER⁸²² or, in certain circumstances, through a commercial arrangement with the Metering Coordinator. More specifically, some parties will receive metering data as a result of obligations being imposed on the Metering Data Provider to provide such data, whilst other parties (referred to as 'access parties' in the final rule) are permitted to enter into commercial arrangements with the Metering Coordinator to receive metering data through the remote on-demand or remote scheduled meter read services from the list of minimum services in Table S7.5.1.1.

As noted by Red/Energy Lumo, there were some inconsistencies that arose in listing all parties referred to in clause 7.15.5(a) as an access party for the remote on demand and scheduled meter read services as certain of these parties may not be entitled to enter into arrangements directly with the Metering Coordinator to receive such data under the rules.

The Commission considers that the only parties that should be listed as access parties for the remote on-demand and scheduled meter read services should be:

- Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation; and
- a person to whom a small customer has given its prior consent under clause 7.15.4(b)(3) of the NER final rule.

Other parties that were captured under clause 7.15.5(a) of the NER draft rule have been excluded in the list of access parties for the remote on demand and scheduled meter read services in the NER final rule on the basis these parties have access to metering data under other provisions in the NER and would not be commercially negotiating access to these services.

⁸²² See Appendix A5 which sets out the arrangements for accessing energy and metering data.

Remote reconnection service

The rights and obligations that arise in the process of customers switching retailers are largely dealt with in AEMO and B2B procedures rather than in the NER. While the role of an incoming retailer is not defined in the existing NER, AEMO and B2B procedures recognise this role so as to provide an incoming retailer⁸²³ certain rights and obligations during the retail transfer process. With respect to a move-in customer, the B2B Procedures permit an incoming retailer which is not the designated FRMP in MSATS to reconnect the customer.⁸²⁴

Under the NER draft rule, only the FRMP registered in MSATS and the LNSP could request a reconnection at a small customer metering installation. Consequently, an incoming retailer would be prevented from arranging a remote reconnection of a move-in customer until the customer transfer process is completed in MSATS. This places a limitation on incoming retailers which effectively requires them to negotiate directly with an incumbent FRMP to reconnect a move in customer or risk losing the customer due to delays in being able to reconnect the premises.

Requiring retailers to negotiate reconnection services with one another may impose a high transaction cost on retailers. Not only would each retailer need to have agreements in place with Metering Coordinators, but with any retailer it wins a customer from. Also, while Metering Coordinators will have an incentive to contract with many retailers, competition issues may arise in requiring retailers to directly negotiate switching arrangements.

The Commission agrees that a retailer that wins a move-in customer should be permitted to access the remote reconnection service if it comes to a commercial agreement with the Metering Coordinator. Under the final rule:

- a new definition of Incoming Retailer has been included in Schedule 4; and
- an Incoming Retailer has been included in the list of access parties for the remote reconnection service.⁸²⁵

Metering installation inquiry service

Incoming Retailers will be able to access the metering installation inquiry service as a party with customer consent⁸²⁶ where the contact between the Incoming Retailer and customer expressly provides the Incoming Retailer with permission to access information via a metering installation inquiry service.

⁸²³ Referred to as a "Prospective Retailer" in the procedures, for example see the B2B Procedure Service Order Process.

⁸²⁴ Clause 2.2.1 of the B2B Procedure Service Order Process.

⁸²⁵ Table S7.5.1.1 of the NER final rule.

⁸²⁶ Under clause 7.15.4(b)(3)(iii) of the NER final rule.

C1.5.4 Meeting the minimum services specification

Under the final 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 exceptions noted below.⁸²⁷ A metering installation meets the minimum services specification if it is capable of providing the services listed in Table S7.5.1.1⁸²⁸ of the NER final rule, and it is connected to a telecommunications network⁸²⁹ that enables remote access to the metering installation.⁸³⁰

The final 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 final rule.

The minimum services specification does not apply to metering installations at connection points for large customers or those that do not have a retail customer (eg transmission connection points). The Commission considers that large customers are in a better position to negotiate for the advanced metering services 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.

New Connections

The Commission has considered whether the framework places clear obligations on the correct parties to ensure metering installations that meet the minimum services specification will be installed at new connections. Where a new connection is established, a cascade of obligations will be triggered when a property developer arranges for a metering installation to be installed through the retailer as part of its entry into the contract with the retailer (ie, the FRMP) for the supply of electricity at the connection point. Chapter 7 clearly requires that a metering installation is to be installed by a Metering Provider.⁸³¹ The Metering Provider at the connection point in turn is appointed by the Metering Coordinator, who is appointed by the FRMP.

The Commission considers that this framework sufficiently addresses compliance risks with respect to the requirement that all metering installations at new connections of small customers must be a type 4 metering installation that meets the minimum

⁸²⁷ Clause 7.8.3 of the NER final rule.

⁸²⁸ A CT connected metering installation is only required to be capable of providing the services listed in items (c) to (f) in table S7.5.1.1 in accordance with procedures made under clause 7.8.3, meaning these metering installations will not be required to be capable of remote disconnection and reconnection service.

⁸²⁹ 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".

⁸³⁰ Clause S7.5.1 of the NER final rule.

⁸³¹ Clause 7.8.1(c) of the NER final rule

services specification. This includes where a property developer arranges for meters to be installed at a new multi-dwelling complex.

Capability of end to end metering system including the telecommunications network

The final rule requires that new and replacement metering installations must meet the minimum services specification. This will require the metering installation to have certain minimum capability, which will require the inclusion of components such as the communications interface to enable remote retrieval of metering data and electronic data transfer facilities. However, the minimum services specification does not specify requirements relating to the telecommunications network or back-end IT systems.

The Commission considers it would be inappropriate to require the Metering Coordinator's entire end to end system to be capable of providing all the services in the minimum services specification under a market-led roll out. The only obligation on the Metering Coordinator, with respect to advanced services, is that energy data must be retrieved by remote access for each small customer metering installation for which it is responsible.⁸³²

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. If Metering Coordinators were required to have end to end systems in place to deliver all of the minimum services specification services on the date that the new Chapter 7 commences, this could impose significant costs with no benefit if the Metering Coordinator does not intend to offer all of the services.

DNSPs, retailers and others will need to negotiate for the provision of the services set out in the minimum services specification. If the Metering Coordinator does come to a commercial arrangement to provide services from the list of minimum services, it will be required to provide these services in accordance with the AEMO's procedures relating to the minimum services specification. The failure to have sufficient capability in its telecommunications network would mean it was either not compliant with:

- the AEMO metrology or service level procedures; or
- its contract with the FRMP or other parties for the delivery of services.

As such, the Commission considers that it would be inappropriate to prescribe that the Metering Coordinator's telecommunication and back end systems should meet a minimum capability. The Metering Coordinator will be incentivised, through its commercial arrangements, to design its telecommunications and IT systems to be

⁸³² Clause 7.3.2(f) of the NER final rule.

proportionate to the services it provides so that costs are not imposed on consumers for system capability that is not used.

Metering installations connected to a current transformer

The Commission agrees that the costs of providing remote disconnection and reconnection services where there is a metering installation connected via a current transformer (CT) may potentially outweigh the market benefits. An additional supply contactor external to the meter must be installed to make a metering installation connected via a CT capable of remote disconnection and reconnection.

As set out in Table C1.2, remote disconnection and reconnection services provide retailers, in particular, the ability to manage customers moving in and out of premises. However, given the types of customers that are likely to require CT-connected metering installation, such as large residential and small commercial customers, the benefits of remote disconnection and reconnection services may not outweigh the additional costs of installing the external supply contactor.

The final rule therefore does not require CT connected metering installations to be capable of providing remote disconnection and reconnection services. Under clause S7.5.1(d) of the NER final rule, a metering installation that is connected via a CT meets the minimum services specification if it is capable of providing the services listed in items (c) to (f) in table S7.5.1.1 in accordance with procedures under clause 7.8.3.

C1.5.5 Exceptions to the obligation to comply with the minimum services specification

There are two circumstances in which a Metering Coordinator may arrange for a new and replacement metering installation at a small customer connection point to be installed that does not meet the minimum services specification. These two circumstances are where:

- 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; or
- where the customer has communicated its refusal to have a meter that meets the minimum services specification (ie a remotely read meter) installed.

In both cases, while a Metering Coordinator must install a metering installation that is capable of providing the services set out in the minimum services specification, the metering installation is not required to be connected to a telecommunications network to enable remote access. These metering installations will be classified as type 4A metering installations. A type 4A metering installation is not a "small customer metering installation" for the purposes of the rules.

Exemption from complying with the minimum services specification where there is no telecommunications network

Several stakeholders noted during the first round of consultation on the rule change request 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), Metering Coordinators in this situation will be able to apply to AEMO for an exemption from the requirement that the metering installation be connected to a telecommunications network to enable remote access.

Several stakeholders noted during the first round of consultation on the rule change request 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), Metering Coordinators in this situation will be able to apply to AEMO for an exemption from the requirement that the metering installation be connected to a telecommunications network to enable remote access.

The final 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.⁸³³ AEMO is not required to consider any other criteria other than the availability of a telecommunications network. An exemption may be for a period of up to five years and may be granted more than once.

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.

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.

Under the final 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.⁸³⁴ This compares to at least 35 days for a type 4 metering installation (which is remotely read and so less memory is required). Other

⁸³³ Clause 7.8.4 (a) of the NER final rule.

⁸³⁴ Clause 7.8.2(a)(10) of the NER final rule.

consequential changes are made to the schedules to Chapter 7 to incorporate type 4A metering installations.⁸³⁵

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.

Metering Coordinator obligations where a customer refuses to have an advanced meter installed

For the reasons set out in Appendix C2, the Commission's position is that it is not practical or appropriate to extend the ability under the draft rule for small customers to opt out of the installation of a meter that meets the minimum specification (which applies in new meter deployment scenarios) to faults, maintenance replacements or where there is no metering installation at the site (such as new connections).

However, the Commission acknowledges that it is likely that a minority of small customers will seek to prevent or refuse the installation of a meter that meets the minimum services specification, or have one removed (eg because of concerns that some consumers have about the meter's ability to be read/managed remotely via a telecommunications network).

Under the NER draft rule, a Metering Coordinator would be in breach of the rules if it installs any meter other than one that meets the minimum services specification in these scenarios.⁸³⁶ The only recourse available to the retailer would be to estimate the customer's energy consumption for the purposes of billing and settlement, and eventually de-energise the customer's premises if access to the meter continues to be denied.⁸³⁷

We understand from discussions with stakeholders that the majority of concerns that some consumers have about advanced meters lie in the meter's ability to be read/managed remotely via a telecommunications network. We also note that one of the key benefits of advanced meters to efficient market operation lies in interval metering, a capability that will still be supported by a type 4A metering installation. Further, type 4A metering installations would require only a small change to enable them to provide remote services (ie to render them a type 4 metering installation).

The final rule provides that the Metering Coordinator is not in breach of the NER if it installs a type 4A meter where a customer refuses the installation of a type 4 meter that meets the minimum services specification. Rather than providing customers with an express right to opt out of the installation of a meter that meets the minimum services specification in the case of faults, maintenance replacements or new connections, clause 7.8.4 of the final rule operates as a qualification to the Metering Coordinator's

⁸³⁵ See for example the amendments to Schedule 7.4 of the NER in the final rule.

⁸³⁶ In the draft determination, the provision was classified as a civil penalty provision. The breach of a civil penalty provision gives rise to potential monetary penalties.

⁸³⁷ Under Rule 113 of the NERR.

obligation to install a meter that meets the minimum services specification at the relevant site.

The final rule sets out how a customer may communicate a refusal, notification requirements, and a requirement for the Metering Coordinator to maintain a written record of refusals for a period of at least seven years.

The Commission does not anticipate that this provision will be used frequently. Nor does the Commission consider the provision provides Metering Coordinators with an incentive to install type 4A metering installations, leading to the evolution of a two tier system. The efficiencies gained from being able to remotely read meters and the additional services that a Metering Coordinator can sell to the FRMP and other parties provide it with an incentive to install a remotely read meter wherever possible.

C1.5.6 Links to a shared market protocol

There are a number of services that advanced meters may provide and that are expected to be commonly used but which have not been included in the minimum services specification, such as load control. If Metering Coordinators agree to the provision of these services on commercially agreed terms, the means of sending communications in relation to these services may be covered by a shared market protocol on which the Commission and AEMO have recently provided to COAG Energy Council.

AEMO provided technical advice on potential design requirements of a shared market protocol to the COAG Energy Council on 11 March 2015 and 14 May 2015.⁸³⁸ In addition, the AEMC provided its final advice to the COAG Energy Council on the governance and implementation of the shared market protocol on 8 October 2015.⁸³⁹

A shared market protocol is a standard for the communications sent between parties accessing the services available through advanced metering infrastructure. The concept also includes the electronic platform used to send the messages between parties.

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.

⁸³⁸ AEMO 2015, Shared market protocol: part one - advice to the COAG Energy Council, 11 March 2015; AEMO 2015, Shared market protocol: part two - advice to the COAG Energy Council, 15 May 2015. Available on the COAG Energy Council website.

⁸³⁹ AEMC 2015, Implementation advice on the shared market protocol, Final advice, 8 October 2015. Available on the AEMC website

The Commission's advice on the governance and implementation of a shared market protocol recommended that a shared market protocol be implemented by way of updating the B2B arrangements in the NER.⁸⁴⁰

Given the range of parties with an interest in B2B procedures is likely to increase, the Commission recommended that the body responsible for maintaining the B2B procedures should be the IEC with an expanded membership. As such, under the Commission's recommended approach the existing IEC framework in the NER would be amended to reflect a wider range of parties interested in B2B procedures.

The Commission recommended that B2B procedures be required to support each of the services set out in the minimum services specification. This was on the basis that these services should be supported as a minimum as they are the services most likely to be accessed by parties and would be defined in the NER.⁸⁴¹ The IEC may include communications for further services in the B2B procedures, and the Commission expects that the IEC would consider whether to also include other commonly used services such as load control in the B2B procedures.⁸⁴² The updated IEC will include representatives from DNSPs, retailers and metering businesses. As a result, the industry representatives on the IEC will be involved in determining which additional services will be supported by the shared market protocol.

The Commission considered that the IEC is the most appropriate body to decide what additional services should be included in B2B procedures.

As discussed in Appendix A1, the final rule only makes minor changes to the current B2B provisions. If the shared market protocol rule change is submitted and made in the form proposed in our final advice to the COAG Energy Council, the IEC will need to make two amendments to the B2B procedures:

- the current IEC and AEMO will need to amend the B2B procedures to reflect the competition in metering rule change by 1 September 2016; and
- the new IEC and AEMO will need to amend the B2B procedures again to reflect the Shared Market Protocol rule by 1 April 2017.

C1.5.7 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:

⁸⁴⁰ As discussed in Appendix A1, the approach to the B2B arrangements has been revised in the final rule in response to stakeholders' comments on the draft determination seeking clarification on the intended effect of the changes in the draft rule. The final rule retains the scope of the B2B arrangements as under the current rules and only make minor changes to the current B2B provisions. The intended effect of these changes is that the current scope of the B2B arrangements will remain unchanged.

⁸⁴¹ AEMC 2015, Implementation advice on the shared market protocol, Final advice, 8 October 2015, p40. Available on the AEMC website

⁸⁴² *ibid.*

- 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 final rule.

Under the final 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 final rule.

C1.5.8 AEMC response to stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

Table C1.3 Stakeholder views and AEMC response

Stakeholder	Issue	AEMC response
AGL, submission on the additional consultation paper, p13-14	AGL considered it is not necessary at this stage of a market led rollout for the AEMC to mandate the installation of a type 4A meter where the customer refuses a digital meter. Customer refusal of a meter is unlikely to occur frequently if the benefits of meters are sufficiently communicated to customers and suitable notification is provided by retailers.	Under the draft rule, Metering Coordinators could be in breach of the NER if a customer prevented them from installing a minimum specifications meter. The proposed amendment provides retailers with an alternative in these scenarios. We anticipate that this provision will not be used frequently – only where a customer prevents the installation of a minimum specification meter.
AusNet Services, supplementary submission on the draft determination, item 47 (i)	AusNet Services considered that the minimum services specification should specify that the remote meter read services should require active energy data to be provided and reactive energy and/or generation only when requested.	The Commission does not consider an amendment to the draft rule is required. The purpose of the minimum services specification is to define the capability of the services to be available from small customer meters, thus it includes both active and reactive power as well as generation from the premises. This capability is over and above the access to data requirements from all metering installations under the NER. Parties can negotiate for the data they require and would not be obliged to accept additional data over and above their requirements. Therefore it is unnecessary to specify that some data would only be provided on request.
AusNet Services, supplementary submission on the draft determination, item 47, (ii)	In regards to the remote meter read service, AusNet Services noted that the term “cumulative total energy measurement” is not defined in the NER. Subsequently by email, it proposed this be replaced by “index read” which is defined in the Meter Data File Format (MDFF) as “total accumulated energy for a data stream”.	<p>The purpose of minimum services specification is to set minimum capability requirements for the metering installation with respect to delivering certain services.</p> <p>The language used in the descriptions of services is intentionally general where possible. Procedural terminology has been avoided since this may potentially predetermine or limit the way in which services are provided. The descriptions of the minimum services specification does not prevent AEMO and industry continuing to use terms currently defined in</p>

Stakeholder	Issue	AEMC response
		<p>procedures where they consider this to be appropriate. However, the descriptions also provide AEMO discretion to develop procedures in consultation with industry which will be appropriate for the provision of advanced metering services under a market led approach.</p> <p>Also, the minimum services specification is not intended to restrict the services negotiated, and the transactions requested by participants. We note that in a competitive market for metering services, parties may wish to define and negotiate services which vary from the services defined in the minimum services specification and procedures.</p> <p>Further, the term "cumulative total energy" is used in the existing NER.</p>
<p>AusNet Services, supplementary submission on the draft determination, item 47, (iii)</p>	<p>In regards to the remote meter read services, AusNet Services considered that the term "accumulated metering data at the start and end of the period specified" needs further definition as it is not a clearly accepted industry term. If this is the index read then the standard practice in Victoria is for this to be stored at midnight and be available with every set of daily interval data.</p>	<p>See above response to item 47(ii) in AusNet Services supplementary submission on the draft determination.</p>
<p>AusNet Services, supplementary submission on the draft determination, item 49(i)</p>	<p>AusNet services suggested the phrase "The remote retrieval of information from, and related to, a specified metering installation..." in the description of the metering installation inquiry service should be used in relation to other services.</p>	<p>We do not consider this drafting amendment is warranted given that the different nature of the information requested in the metering installation inquiry services as compared to other services.</p>

Stakeholder	Issue	AEMC response
AusNet Services, supplementary submission on the draft determination, item 49(ii)	AusNet Services commented that the AEMO's advice on smart meter minimum functionality for COAG Energy Council clearly identified the metering installation inquiry service as both an instant service but also as a scheduled service ie "set and forget". AusNet Services considered access to this data on a scheduled basis is a key driver of networks benefits and queried its omission.	See above response to item 47(ii) in AusNet Services supplementary submission on the draft determination.
AusNet Services, supplementary submission on the draft determination, item 50(i)	AusNet Services commented that AEMO's advice on smart meter minimum functionality for COAG Energy Council included power factor in the definition of the metering installation inquiry services. AusNet Services queried whether the omission of this in the draft rule signalled a departure from the AEMO Service Advice.	The AEMO document "Minimum functionality of advanced meters", November 2014, does not include a reference to power factor.
AusNet Services, supplementary submission on the draft determination, item 50(ii)	AusNet services considered that the voltage, current, power, frequency should be specified as instantaneous and coincidental across all these quantities in the description of the metering installation service inquiry.	The minimum service levels and standards will be included in the AEMO procedures related to the minimum services specification. In addition, this requirement could be negotiated by the party seeking the service
AusNet Services, supplementary submission on the draft determination, item 50(iii)	AusNet services considered the term "metering device temperature alarm" needs defining as it is not an industry accepted term in the description of the metering installation service inquiry.	The term metering device temperature alarm is not explicitly defined in the final rule but the service levels and performance requirements will be included in the AEMO procedures related to the minimum services specification. In the future, Australian Standards are likely to further define the requirements for meter temperature alarms.

Stakeholder	Issue	AEMC response
AusNet Services, supplementary submission on the draft determination, item 52(ii)	AusNet Services considered there are more operational parameters than listed in the metering installation inquiry service which will have a need to be configured. AusNet services also commented that the access to power quality data (volts, amps, etc) on a scheduled basis will likely have a series of parameters which require to be set to enable the service.	The definition includes a general description of the services and parameters of that can be configured. The AEMO procedures related to the minimum services specification will include more details of the service levels and standards associated with the parameters and how they can be configured. Additionally, with respect to the fourth dot point regarding parameters required for power quality data (volts, amps, etc) this requirement could be negotiated by the party seeking the advice.
Department of State Growth (Tasmania), p5	The Department of State Growth (Tasmania) considered that it was unclear what criteria AEMO would apply in assessing exemption requests to install a type 4A metering installation.	AEMO is not required to consider any other criteria other than the availability of a telecommunications network.
Ergon Energy,p5	Recommended that S7.4.3.1 be changed so that type 4 and 4A meters have a maximum overall reactive error rate of 3.0%. Ergon Energy submitted that clause 7.8.2(a) provides that reactive measurement is only needed if called for in Schedule 7.4, and this is shown as not applicable for type 4 and 4A metering. This fails to recognise the current trend to develop kVA type tariffs. All new and replacement type 4 and 4A metering should have four quadrant functionality so as to future proof these meters to support demand side (kVA) tariffs. Ergon Energy also noted that S7.4.3.1 has not changed significantly since when electromechanical metering was being used, and recommended that it be updated to support apparent power measurement.	Amending requirements for existing type 4 metering installations is out of scope of this rule change request. However, the NER needs to specify the accuracy requirements for small customer metering installations and type 4A metering installations. S7.5.1(c) provides a maximum overall error rate of 3% for small customer metering installations. Table S7.4.3.4 has also been amended to include these metering installations.

Stakeholder	Issue	AEMC response
<p>See the following submissions to the draft determination: ENA, 28; Energex, Attachment p6; ERM, p4; NSW DNSPs, p11; Victorian DNSPs, p28.</p>	<p>A number of stakeholders, particularly DNSPs, were concerned that it would difficult to distinguish between existing type 4 metering installations for small customers (ie type 4 metering installations that do not meet the minimum services specification), type 4A metering installations (ie metering installations that are capable of providing the services set out in the minimum services specification but are exempt from the requirement to be connected to a telecommunications network to enable remote access) and new type 4 metering installations (ie type 4 metering installations that meet the minimum services specification). These stakeholders were concerned that it would be difficult for industry to ascertain the capabilities of the metering installation and will complicate the design and implementation of systems and procedures. ERM was concerned that the proposed naming conventions would make compliance and enforcement problematic.</p> <p>At the operational workshop held on 16 July 2015, AEMO noted that currently there is not a one to one relationship between meter types in Chapter 7 and MSATS. AEMO suggested that MSATS is sufficiently flexible and could be updated and configured to make the relevant information discoverable without the need to create new meter types in the NER. AEMO provided the example that Victorian AMI installations are identified in MSATS as being read wirelessly daily ("Remote Wireless Daily"). Some stakeholders commented that while this may be the case, a requirement should be placed on AEMO in the NER to amend procedures so that the necessary information is made accessible through MSATS.</p>	<p>The Commission does not consider it necessary to include a new meter type in the NER for small customer metering installations. MSATS is sufficiently flexible and can be used to provide information to participants on the services that are available from a particular metering installation without the need to create new meter types in the NER.</p>

Stakeholder	Issue	AEMC response
See the following submissions on the additional consultation paper, Energy Australia, p4; Red Energy, p8; ERAA, p3	The rules should consider how a refusal notification is transferred to a new FRMP upon customer transfer and how this refusal can be discoverable by new retailers should they seek to supply the customer. These stakeholders questioned whether written notice of a customer's refusal needs to be passed from Metering Coordinator to any future Metering Coordinator and whether it should be discoverable to all market participants in a central repository (ie. MSATS) to provide transparency on the customer's choice?	Under the final rule, the Metering Coordinator must keep a record of refusals for seven years. The issue of providing information to participants on a customer's refusal of an advanced meter at a connection point is more appropriately addressed in MSATS procedures. MSATS is sufficiently flexible and can be used to provide information to participants on whether a type 4A metering installation has been installed as a result of there being no telecommunications or a customer that has refused an advanced meter.
Grid Australia, submission on the draft determination, p3	Confirm there is no intention to apply the requirements of the minimum services specification to Type 4 metering installations that do not service small customers.	Correct, the minimum services specification only applies to metering installations in respect of the connection point of a small customer.
Metropolis, submission on the draft determination, p7	<p>Two of the operational parameters that must be capable of being set under the advanced meter reconfiguration service in item (f) of Table S7.5.1.1 are unsuitable to list as services. These parameters should be removed:</p> <ul style="list-style-type: none"> • thresholds for the tamper detection alarm, reverse energy flow alarm, and metering device temperature alarm referred to in the metering installation inquiry service • the parameters that specify how the voltage, current, power, supply frequency, average voltage and average current measurements are calculated 	The parties interested in acquiring these capabilities are the same parties that will be investing and deploying the advanced metering systems. As such, the Commission agrees that it is not necessary or appropriate to characterise the capability to set these parameters and thresholds as a service. These operational parameters have been removed from the list that must be capable of being set under the advanced meter reconfiguration service.
Metropolis, submission on the draft determination pp6-7	3 phase meters should be excluded from the requirement to provide remote disconnection and reconnection services as it could add up to \$100 per meter and could be damaging if large sites (like small factories) were suddenly disconnected.	It is not as costly to include disconnection/reconnection contactors for three phase meters as compared to CT-connected meters and there are still significant benefits associated with remote disconnection and reconnection services to the residential customers that use 3-phase meters to accommodate appliances such as large air conditioners

Stakeholder	Issue	AEMC response
		and pool pumps. As such, 3-phase metering installations have not been exempted from being required to be capable providing remote disconnection and re-connection services. With respect to being disconnected, small business customers are covered by customer protections under the NERR, and the minimum services specification does not apply to large customers.
NSW DNSPs, submission on the draft determination, p11	The suitability of the definition of 'telecommunications network', was questioned and, in particular, what is meant by the phrase 'provides access for public use'. The following definition was proposed to be more in line with the definition in the Telecommunications Act 1997 (Cth): 'A telecommunications network is a system, or series of systems, that carries, or is capable of carrying, communications by means of guided and/or unguided electromagnetic energy, or an alternate telecommunications network that has been approved by the AEMO for the remote acquisition of energy data'.	The draft rule only changed the definition of a 'telecommunications network' by replacing the reference to "metering data" with "energy data". The fundamental use of a communication network is unchanged from current requirements for type 1- 4 metering installation. Telecommunications networks providing access for public use include for example the 3G network, whereas there are radio mesh telecommunications networks in Victoria that have been established by DNSPs and approved by AEMO for the remote acquisition of metering data. There appears to be no basis to consider that the current definition is no longer appropriate.
SA Power Networks, submission on the draft determination, p8	The definitions of the remote on demand and scheduled meter read services include a requirement to retrieve metering data alarms in addition to metering data and that this information be stored in the metering data services database.	The definition of remote on demand and scheduled meter read services (items (c) and (d) of table D5.5.1.1 of the NER final rule) has been amended to include "quality flags", in recognition that quality information is required to interpret metering data. The description of the service does not need to include a reference to the storage of metering data. The Metering Data Provider already has obligations in the NER in relation to the storage of data.

Stakeholder	Issue	AEMC response
SA Power Networks, submission on the draft determination, p9	Remote on-demand and scheduled meter read services should include the retrieval and provision of meter alarms recorded in the meter log including over- and under-voltage alarms, power failure alarms, tamper detection alarms, reverse energy flow alarms, meter temperature alarms and other alarms as required by the procedures made under draft clause 7.8.3 of the NER.	It is not the intent of the minimum services specification to prescribe this level of technical detail. It is also not intended that the services negotiated, and the transactions requested by participants will be restricted by the descriptions in the minimum services specification. If a participant wishes to incorporate certain alarms into a regular meter read, they can negotiate this service and it is expected that AEMO's procedures will accommodate this flexibility.
SA Power Networks, submission on the draft determination, p9	Over- and under-voltage alarms and power failure alarms should be added to the list of alarms the metering installation must be capable of providing information on as a minimum to the requesting party under the metering installation inquiry service.	The intent of the metering installation inquiry service in the draft rule was to specify that the metering installation must be capable of remotely retrieving and providing the contents of the meter log. The alarms listed in the draft rule were provided by way of example. To avoid confusion, Schedule 7.5.1.1(e) has been amended to reflect that the information from the meter log that is to be provided is data regarding 'events' in the meter log.
SA Power Networks, submission on the draft determination, p9	The description for the metering installation inquiry service should be amended to make it clear that the voltage, current, power and frequency measurements referred to in the description must be available separately for each phase for a multi-phase metering installation.	We consider that the NER should remain silent on whether voltage, current, power and frequency measurements should be provided separately for each phase for a multi-phase metering installation and that this level of technical detail is considered by AEMO during the development of procedures for the minimum services specification.
The Victorian DNSPs, p28	The type 4A upper limit should be a new z factor (the jurisdictional upper limit to apply to a type 4A metering installation (ie 160MWh) set by the jurisdiction in Table S7.4.3.1. Ideally this would be set in a consistent manner or level to the x and y, ie the same threshold, so that the impact on settlement accuracy and integrity remains unchanged.	The threshold for a type 4A metering installation is the same as the threshold for the minimum services specification. This is because such a metering installation should be able to convert to a type 4 metering installation that meets the minimum services specification. For clarification Table S7.4.3.1 in the final Rule has been amended for type 4A meters to incorporate a threshold of x MWh, ie the existing jurisdictional threshold for type 5 metering installations.

Stakeholder	Issue	AEMC response
The Victorian DNSPs, p28	The AEMO exemption procedure should clearly only apply to metering arrangements below the upper limit of x, y or z so that manually read meters are not allowed in the above 160MWh per annum segment of the market and this should be clear in the Rules.	See above response. A connection point with a volume limit of above 160 MWh per annum could not have a manually read interval metering installation under the current small customer thresholds and the values of x and y. A type 4A metering installation can only be installed for a connection point of a small customer. Above the threshold for a small customer a type 4 metering installation would be required, with the exception of where the x value set by the jurisdiction is lower than 160MWh.
The Victorian DNSPs, p28	The Victorian DNSPs consider that the Rules should guide procedure and protocol amendments, to ensure that all type 5 obligations apply to type 4A meters.	The requirements that apply to type 4A and 5 metering installations are specified in the various AEMO metrology and Service Level procedures. No additional guidance is required.
The Victorian DNSPs, p28	The Victorian DNSPs consider that the AEMC should correct the missing clock error note for type 5 meters, and provide a similar note for type 4A meters.	This has been addressed. See Table S7.4.3.1 of the NER final rule.

C2 Opt out arrangements

Summary

This appendix outlines the opt out arrangements under the final rule.

Under the final 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.⁸⁴³

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 final rule) and retain their existing metering installation.

The final 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 for small customers in all other scenarios, including for "maintenance replacements" (as defined in the final rule), faults and where no existing meter is in place (e.g. at new connections), will need to meet the minimum services specification. The Commission is of the view that providing an ability for small customers to opt out in these scenarios, where one does not currently exist, is neither practical nor appropriate, and is not in the long term interests of consumers. Accordingly, the final 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 final rule.

There are five potential scenarios where a small customer would have a new meter installed:

1. The customer chooses a product or service that their existing meter cannot support, e.g. a time of use tariff or load control.

⁸⁴³ This rule has two exceptions, which are set out in Appendix C1.

2. A retailer and its appointed Metering Coordinator (possibly in coordination with the LNSP or another party) deploys advanced meters to its customers as part of a "new meter deployment", e.g. 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 meter needs to be installed because no existing meter is in place, e.g. at a new connection.

A small customer may also have a new meter installed under section 59(2) of the NERL. This section applies where a small customer with a prepayment meter notifies the retailer that a person at the premises requires life support equipment. In those circumstances, the retailer must make immediate arrangements for the removal of the prepayment meter and the installation of a standard meter at no cost to the customer.

In scenario 1, the customer 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 customer 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 customer 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 customers;
- the relevant elements of the COAG Energy Council's rule change request;
- stakeholder views expressed in submissions to the consultation paper and draft determination, and in stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasoning for the final rule.

C2.2 Existing 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;⁸⁴⁴ and

⁸⁴⁴ Existing clause 7.2.5(d)(1) of the NER.

- the components, accuracy and testing of the metering installation complies with the requirements of the NER, metrology procedure and other procedures authorised under the NER.⁸⁴⁵

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 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

If a small customer takes up a new product or service that requires a new meter to be installed, it will need to make arrangements for the installation of a new meter under a contract with its retailer. The existing NER and NERR do not contemplate customers being able to opt out of the installation of a new meter to enable the product or service.⁸⁴⁶

C2.2.2 Scenario 2: New meter deployment⁸⁴⁷

The NER does not 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 meters⁸⁴⁸ 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.⁸⁴⁹

⁸⁴⁵ Existing clause 7.2.5(d)(2) of the NER.

⁸⁴⁶ Specifically, small customers do not currently have an ability to opt out in the way that they will be able to under a 'new meter deployment'.

⁸⁴⁷ Note that the term 'new meter deployment' is not defined in the current rules.

⁸⁴⁸ 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.

⁸⁴⁹ Specifically, small customers do not currently have an ability to opt out in the way that they will be able to under a 'new meter deployment'.

C2.2.3 Scenario 3: Maintenance replacement⁸⁵⁰

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 existing 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.⁸⁵¹ 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.⁸⁵²

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.⁸⁵³ In some cases, the entire population or sub-population of meters will be replaced. DNSPs, as the Responsible Person for the majority of small customer metering installations, currently replace, on average, around 0.3-3 per cent of their total meter fleets each year under a maintenance replacement.⁸⁵⁴

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, the Commission understands that the replacement of a meter will require 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".⁸⁵⁵

850 Note that the term 'maintenance replacement' is not defined in the current rules.

851 Existing clause S7.3.1(c)(1)-(2) of the NER.

852 Existing clause S7.3.1(c)(3) of the NER.

853 Existing clause 7.6.2 of the NER.

854 This is an approximate figure based on information provided by several DNSPs.

855 See existing rule 88 of the NERR.

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.⁸⁵⁶

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.⁸⁵⁷

The NER currently requires the Responsible Person to arrange for repairs to be made to:

- 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.⁸⁵⁸

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.⁸⁵⁹

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.

⁸⁵⁶ Existing rule 90 of the NERR. This rule is a civil penalty provision.

⁸⁵⁷ See Chapter 10 of the NER.

⁸⁵⁸ Existing 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 existing clause 7.3.7 of the NER.

As noted in scenario 3, the Commission understands that the replacement of a meter 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, 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.⁸⁶⁰ In this case, the DNSP is required to make information about the interruption available to the consumer within 30 minutes 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.⁸⁶¹

C2.2.5 Scenario 5: New connection

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.⁸⁶² 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 LNSP 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.⁸⁶³ 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.⁸⁶⁴

A meter installed in a new house or development must meet the requirements in the NER and any additional regulatory requirements established by jurisdictions.

859 This is an approximate figure based on information provided by several DNSPs.

860 See existing rule 88 of the NERR.

861 Existing rule 91 of the NERR. The requirement to use best endeavours to restore supply as soon as possible is a civil penalty provision.

862 Existing clause 7.1.2(a)(1) of the NER.

863 Schedule 2 of the NERR. This applies in NECF jurisdictions only.

864 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.

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.⁸⁶⁵

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.⁸⁶⁶

C2.3.3 Scenarios 3-5

The rule change request proposed that jurisdictions should be able to define the functions of meters that are installed in 'new and replacement'⁸⁶⁷ situations and whether these meters must meet, or be capable of meeting, the national smart meter functionality specification.⁸⁶⁸

The rule change request proposed 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.

⁸⁶⁵ COAG Energy Council, rule change request, October 2013, p29.

⁸⁶⁶ Ibid.

⁸⁶⁷ The Commission's interpretation of the rule change request is that 'new and replacement' situations cover scenarios 3-5 in this final determination.

⁸⁶⁸ COAG Energy Council, rule change request, October 2013, p16.

C2.4 Stakeholder views

C2.4.1 Consultation paper and initial workshops

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.

Scenario 2: New meter deployment

In submissions to the consultation paper, several stakeholders expressed support for the COAG Energy Council's proposed approach.⁸⁶⁹ These stakeholders indicated support for there being a requirement on retailers to obtain the consumer's explicit informed consent⁸⁷⁰ 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.⁸⁷¹

However, other stakeholders considered that a requirement to obtain explicit informed consent, or 'opt in'⁸⁷² arrangements more broadly, would be costly and onerous for both retailers and consumers.⁸⁷³

Several stakeholders supported there being an ability for consumers to 'opt out'⁸⁷⁴ of receiving an advanced meter under a new meter deployment.⁸⁷⁵ These stakeholders considered that an opt out arrangement is more appropriate than an opt in

869 EnerNOC, submission on consultation paper, p2; SA Power Networks, submission on consultation paper, p6; CUAC, submission on consultation paper, p1.

870 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.

871 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.

872 '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

873 EDML, 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.

874 '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.

875 EDML, 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.

arrangement where there is no change to the consumer's metering costs or services available to them.⁸⁷⁶

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.⁸⁷⁷ 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.⁸⁷⁸

Secure Australasia did not favour opt in or opt out arrangements, considering that this would inhibit the uptake of more advanced metering.⁸⁷⁹

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.⁸⁸⁰

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.⁸⁸¹ Alinta Energy was of the view that the objective and costs of jurisdictional differences need to be justified and only permitted

⁸⁷⁶ 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.

⁸⁷⁷ EWON, submission on consultation paper, p2.

⁸⁷⁸ ERM Power, submission on consultation paper, p13.

⁸⁷⁹ Secure Australasia, submission on consultation paper, p2.

⁸⁸⁰ Vector, submission on consultation paper, p19; EDML, 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.

⁸⁸¹ ATA and other consumer groups, submission on consultation paper, p3.

where there is a demonstrable need or market failure.⁸⁸² Vector proposed that jurisdictions should be able to mandate service outcomes, but not the technical specifications of meters.⁸⁸³ EDML recognised that multiple minimum specifications would lead to multiple compliance standards, but suggested that jurisdictions should not be required to apply the national specification.⁸⁸⁴

Several DNSPs expressed support for jurisdictional provisions on new and replacement meters.⁸⁸⁵ 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.⁸⁸⁶ The NSW DNSPs also supported the proposal, provided that essential network services were included in the jurisdictional specifications.⁸⁸⁷

Landis+Gyr was of the view that advanced meters should be installed in 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.⁸⁸⁸

Metropolis considered that DNSPs should be required to provide advance notice of required meter replacements to support competition.⁸⁸⁹

C2.4.2 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.

882 Alinta Energy, submission on consultation paper, p2.

883 Vector, submission on consultation paper, p19.

884 EDML, submission on consultation paper, p15.

885 Energex, submission on consultation paper, p7; Victorian DNSPs, submission on consultation paper, p23; SA Power Networks, submission on consultation paper, p11.

886 ENA, submission on consultation paper, p32.

887 NSW DNSPs, submission on consultation paper, p16.

888 Landis+Gyr, submission on consultation paper, p2.

889 Metropolis, submission on consultation paper, p9.

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 customers 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.

C2.4.3 Draft determination

This section provides a summary of the key issues raised by stakeholders in submissions to the draft determination. Table C2.2 provides a list of other issues raised by stakeholders that are not explicitly addressed in section C2.5, and the Commission's response to each.

Scenario 1: Consumer takes up a product or service that requires a new meter to be installed

Under the draft NERR no opt out right was provided to customers in this scenario.

Stakeholders did not comment on this scenario in submissions to the draft determination.

Scenario 2: New meter deployment

The draft rule provided that small customers would be able to opt out of a new meter deployment and retain their existing, working meter. The draft rule introduced the definition of new meter deployment and set out a number of minimum notification requirements for retailers to comply with to give effect to the customer's ability to opt out.⁸⁹⁰

A number of stakeholders supported the proposed opt out provisions for new meter deployments.⁸⁹¹ However several stakeholders, particularly consumer groups, noted concerns with this aspect of the rule.

⁸⁹⁰ See section C2.5.2 of the draft determination.

⁸⁹¹ AER, submission on draft determination, p11; CALC, submission on draft determination, p2; Department of State Development (SA), submission on draft determination, p2; EDMI, submission on draft determination, p3; EWON, submission on draft determination, p2; Landis+Gyr, submission on draft determination, p6; Lumo and Red Energy, submission on draft determination, p2; SACOSS, submission on draft determination, p1; Vector, submission on draft determination, p2.

QCOSS was concerned that low income and/or low literacy consumers would not understand the notification and may end up with an unexpected additional cost or new tariff arrangement. It was of the view that the proposed opt out arrangements do not constitute explicit informed consent, and considered that explicit informed consent should be essential where meters come with new tariffs or costs (including upfront charges or exit fees imposed in future).⁸⁹²

The Ethnic Communities Council of NSW and the Queensland Consumers' Association were of the view that an 'opt in' approach would more fairly place the onus of communicating the benefits of the deployment on those proposing it (i.e. retailers), rather than the expectation that consumers, including culturally and linguistically diverse consumers, will understand those benefits and act on them.⁸⁹³

Several consumer groups expressed concern about the costs to consumers of advanced meters. QCOSS considered that the notification should provide information about all relevant costs and charges, not just upfront ones.⁸⁹⁴ Engineroom considered that upfront payments for new meters may be unfair for tenants (in which case the landlord should have to pay) or those who cannot afford it (in which case they should be able to make payments over time).⁸⁹⁵ The Electrical Trades Union of Australia was of the view that the opt out provisions should be at no financial impost to consumers.⁸⁹⁶

A number of stakeholders raised operational issues with the draft rule.

Several stakeholders noted that, under the draft rule, the final date for a consumer to opt out of a new meter deployment is three days before installation, but that DNSPs are required to give notification for a planned interruption four business days before the interruption. The AER submitted that a lack of clarity around this provision could lead to compliance issues for retailers.⁸⁹⁷ Energex recommended that the final date for opting out be extended (e.g. to 14 business days before the proposed deployment) to resolve this, and also to provide DNSPs, retailers, Metering Coordinators and Metering Providers sufficient time to assess whether the deployment should proceed.⁸⁹⁸

AGL submitted that a single notification, followed by a supply interruption notification, would be more appropriate than the two notifications required under the draft rule and a subsequent notification regarding the supply interruption.⁸⁹⁹

EnergyAustralia and Origin Energy considered that the cut off for customers to opt out should be extended to five business days prior to the expected deployment to adjust

⁸⁹² QCOSS, submission on draft determination, p3-4.

⁸⁹³ Ethnic Communities Council of NSW, submission on draft determination, p2; Queensland Consumers' Association, submission on draft determination, p2.

⁸⁹⁴ QCOSS, submission on draft determination, p8.

⁸⁹⁵ Engineroom, submission on draft determination, p11.

⁸⁹⁶ Electrical Trades Union of Australia, submission on draft determination, p8.

⁸⁹⁷ AER, submission on draft determination, p11.

⁸⁹⁸ Energex, submission on draft determination, p10.

⁸⁹⁹ AGL, supplementary submission on draft determination, p29.

contractor schedules accordingly and maintain an efficient rollout.⁹⁰⁰ Landis + Gyr echoed this view and proposed that the final date for consumers to opt out be extended to 14-21 days before installation.⁹⁰¹

AGL expressed concern about timing when a customer opts out in writing, proposing that the rule make it clear that the retailer needs to have received the communication three days prior to the deployment.⁹⁰² It also proposed that the rule provide more certainty that the retailer can proceed with the deployment if the customer has not opted out by the specified date.

The AER asked that the AEMC consider the exact definition of 'authorised' regarding rule 59A(6) of the draft NERR, which provided that retailers do not need to follow the opt out notification process if they are authorised under a market retail contract to undertake a new meter deployment. It queried how retailers will be required to disclose information about new meter deployments under market retail contracts and whether it is intended that customers under these contracts will be provided with an ability to opt out. The AER commented that a lack of specific requirements in the draft rule around new meter deployments under market retail contracts could lead to compliance issues for retailers. It pointed out that retailers are subject to broader requirements under Division 5 of the NERL to ensure that customers are fully informed and that all matters relevant to a customer are adequately disclosed.⁹⁰³

AGL submitted that the intention of rule 59A(6) of the draft NERR was unclear,⁹⁰⁴ and considered that consumer protections may be lost if retailers are able to include deployment terms in a market retail contract.⁹⁰⁵ It asked that the intention of this provision be made clear in the final rule.

Scenario 3: Maintenance replacement

The draft rule introduced the definition of maintenance replacement. It did not introduce an ability for small customers to opt out of a maintenance replacement. The draft rule required that, if the LNSP is the initial Metering Coordinator under the transitional arrangements and the existing meter was signalled as needing replacement, the FRMP would need to appoint a new Metering Coordinator (i.e. on a competitive basis) to carry out the maintenance replacement.

The ENA noted that Chapter 7 of the NER does not refer to sample testing as explicitly as implied in the definition of maintenance replacement. It recommended that the NERR use the terms in the NER, noting that DNSPs, as the initial Metering

900 EnergyAustralia, submission on draft determination, p3; Origin Energy, submission on draft determination, p7.

901 Landis+Gyr, submission on draft determination, p6.

902 AGL, supplementary submission on draft determination, p27.

903 AER, submission on draft determination, p11.

904 AGL, supplementary submission on draft determination, p28.

905 AGL, submission on draft determination, p7.

Coordinator, will need to be able to meet the requirements of their meter asset management plan for sample testing and requirements under the National Measurement Act.⁹⁰⁶

A number of DNSPs commented on the impact the draft rule would have on their responsibility for supply interruptions under the NERR. These comments, and the Commission's response, are set out in Appendices A3 and A4.

Scenario 4: Replacement due to fault

The draft rule did not introduce an ability for small customers to opt out of the replacement of their meter if it was found to be faulty. It maintained the existing timeframes within which a faulty meter must be replaced. Under the draft rule, a new Metering Coordinator would need to be appointed to install a new meter if the existing Metering Coordinator is the LNSP.

Several retailers supported the continuation of current arrangements for fault scenarios, i.e. not providing consumers with the ability to opt out.⁹⁰⁷ However, a number of stakeholders raised concerns with the draft rule.

The Department of State Development (SA) was of the view that the process requiring the DNSP, as the incumbent Metering Coordinator, to notify the retailer of a fault and for the retailer to appoint a new Metering Coordinator would not be efficient and may delay the installation of a new meter. The department noted that the draft rule placed no obligation on the retailer to make arrangements for this scenario, and asked that the AEMC further consider this process.⁹⁰⁸

The NSW DNSPs were of the view that the draft rule was not clear that the initial Metering Coordinator is not responsible for the replacement of type 5 or 6 meters with type 4 meters, and is only responsible for notifying the FRMP of the required replacement. They noted that DNSPs, as the initial Metering Coordinator, would continue to have obligations under the rules until a new Metering Coordinator is appointed to replace the faulty meter, and that there may be compliance and cost risks if the FRMP fails to appoint a new Metering Coordinator within the 10 day period. The NSW DNSPs proposed that the LNSP's appointment be terminated when it notifies the FRMP of the fault and/or a civil penalty imposed if the FRMP fails to meet this obligation. In the case of a population of meters failing, the NSW DNSPs proposed that the FRMP be required to appoint a Metering Coordinator within a reasonable time period determined by AEMO. It also proposed that the rules provide for a reactive, like for like replacement if there is a delay in the FRMP appointing a Metering Coordinator.⁹⁰⁹

906 ENA, submission on draft determination, p29.

907 Lumo and Red Energy, submission on draft determination, p2; Origin Energy, submission on draft determination, p8.

908 Department of State Development (SA), submission on draft determination, p4.

909 NSW DNSPs, submission on draft determination, pp3-4.

Energex recommended that clause 7.8.10 of the NER be amended to require AEMO to establish, maintain and publish a procedure that sets out the process for managing metering installation malfunctions. It was of the view that this would establish a clear process for all involved parties to minimise disruption to consumers when an existing type 5/6 meter malfunctions, particularly as a result of storms or other emergency situations.⁹¹⁰

AusNet Services noted that, under the draft rule, a metering installation malfunction would not be triggered if the advanced meter's communications capability failed. It submitted that the obligation to return meters to service, or seek exemption, should be explicitly extended to meter communications.⁹¹¹

Scenario 5: New connection

The draft rule did not introduce an ability for small customers to opt out of the installation of a meter that meets the minimum services specification at a new connection.

Stakeholders did not comment specifically on the opt out arrangements for new connections under the draft rule.

The draft rule introduced an obligation on the Metering Provider to ensure that the metering installation installed at a new connection is a type 4 metering installation that meets the minimum services specification. Stakeholder comments on this issue are set out in Appendix A2.

All scenarios

The Department of State Growth (Tasmania) expressed concern that consumers would not be able to opt out of having an advanced meter installed in maintenance replacement, fault and new connection scenarios. It proposed that consumers be given a right to opt out to a smart-ready meter in all situations.⁹¹² The Department of State Development (SA) shared this view, and submitted that further consideration be given to consumers who refuse to have an advanced meter installed.⁹¹³

The Ethnic Communities Council of NSW considered that not providing an ability to opt out in all scenarios would place considerable strain on consumer-retailer relations unless the rationale of why the replacement is necessary is explained and comprehended by the consumer.⁹¹⁴

⁹¹⁰ Energex, submission on draft determination, Attachment A, p8.

⁹¹¹ AusNet Services, submission on draft determination, p16.

⁹¹² Department of State Growth (Tas), submission on draft determination, p6.

⁹¹³ Department of State Development (SA), submission on draft determination, p2.

⁹¹⁴ Ethnic Communities Council of NSW, submission on draft determination, p2.

CALC was of the view that the rules should require retailers to proactively communicate with consumers well in advance of any meter replacement and again immediately prior, including why the replacement is required, the services that the new meter will enable, the services the meter will not enable, the total cost of the meter and cost per bill, the right of the consumer to opt out, the date it will be replaced, responsibility for rewiring (if needed) and access to dispute resolution procedures.⁹¹⁵

The Energy and Water Ombudsman of Victoria acknowledged that the opt out framework in the draft rule is significantly different from the rollout of advanced meters in Victoria under the AMI program, but gave an overview of the common complaints and concerns from consumers in Victoria about: the process of having an existing meter exchanged for an advanced meter, post-installation of an advanced meter, and advanced meters themselves.⁹¹⁶

C2.5 Commission's analysis

Changes between the draft and final rule

The final rule maintains the policy position set out in the draft determination that customers are able to opt out of a new meter deployment, but not:

- under a maintenance replacement;
- where the existing meter is faulty; or
- where no existing meter is in place (e.g. at a new connection).

The Commission has made a number of changes between the draft and final rules to clarify this policy position, enhance consumer protections and address operational issues raised by stakeholders in submissions.

The final rule amends the definition of 'new meter deployment' to exclude replacing a meter under section 59(2) of the NERL, which requires the retailer to replace a prepayment meter with a standard meter where the customer notifies the retailer that a customer at the premises requires life support equipment.

The final rule also clarifies a Metering Coordinator's obligations where a customer refuses to have an advanced meter installed in a fault, maintenance replacement or new connection scenario. These arrangements are set out in Appendix C1.

The final rule makes a number of amendments to the rights and obligations of retailers and DNSPs with regard to supply interruptions for the installation or maintenance of a metering installation. These arrangements are set out in detail in Appendices A3 (retailers) and A4 (DNSPs).

⁹¹⁵ CALC, submission on draft determination, p3.

⁹¹⁶ EWOV, submission on draft determination, pp1-5.

The Commission's final 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 or no existing meter is in place. Under the final rule:

- Small customers are able to opt out of a new meter deployment (scenario 2) and retain their existing, working meter.
- Small customers are not able to opt out of receiving a meter that meets the minimum services specification in maintenance replacement, fault and new connection scenarios (scenarios 3-5), or where the customer has a prepayment meter and advises their retailer that a customer at the premises requires life support equipment.⁹¹⁷

Providing an ability for small customers 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. 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. 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.⁹¹⁸ The benefits of advanced metering to consumers are set out in more detail in Chapter 3.

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, e.g. a flat tariff, to small customers with an interval meter.⁹¹⁹ The COAG Energy Council is also considering changes to the NERR to provide additional consumer protections on the use of load control and supply capacity control.⁹²⁰

We acknowledge the comments made by several consumer groups that the draft determination did not fully address the possible costs of installing advanced meters and how these would be recovered. While there may be costs associated with the

⁹¹⁷ In this scenario, the retailer must replace the meter under section 59(2) of the NERL.

⁹¹⁸ See AEMC, National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014, rule determination, 27 November 2014.

⁹¹⁹ Section 22 of the NERL.

⁹²⁰ <http://www.scer.gov.au/workstreams/energy-market-reform/demand-side-participation/smart-meters/consumer-protections> and

installation of meters under each scenario set out below, it is not possible to know for certain how these will be recovered. This is because retailers will have discretion to decide how much, if any, of the costs associated with the installation of a new meter will be passed on to the retail customer to the extent permitted under the customer's contract with its retailer. The nature of the competitive framework that will be established by this rule change encourages parties to compete to provide metering services. Retailers therefore have an incentive to carry out new meter deployments at low or no additional cost to the customer.

As discussed in Chapter 3, advanced meters allow retailers to realise a number of efficiencies from being able to read meters remotely and carry out other advanced services. These cost savings may outweigh the costs of installing the advanced meter. The nature of the retailer's and Metering Coordinator's business model will also influence how costs are recovered, for example whether the capital costs of new meters are paid upfront or over time through a leasing arrangement.

The final 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.

The Commission's analysis of each scenario and the approach to each scenario under the final rule is set out in detail below.

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 takes up a new product or service that requires a new meter to be installed, it will need to make arrangements for the installation of a new meter under a contract with its retailer. The existing NER and NERR do not contemplate customers being able to opt out of the installation of a new meter to enable the product or service.⁹²¹ Consequently, no changes to the NERR have been made.

C2.5.2 Scenario 2: New meter deployment

The Commission considers that the 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

⁹²¹ Specifically, small customers do not currently have the ability to opt out in the way they will under a 'new meter deployment'.

- minimise regulatory costs.

The Commission considers that a retailer should be able to deploy advanced metering to its customers where it sees a business case to do so, but that these customers 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 NERL 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.

The final 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 arranged 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 from the retailer or any other person;
- (b) a *maintenance replacement*;
- (c) as a result of a *metering installation malfunction*; or
- (d) required under section 59(2) of *the Law*.”

The definition has been amended from that in the draft rule in the following ways:

- Item (a) of the definition has been amended to expressly capture circumstances where the 'product or service' is provided by a party other than the retailer, for example a solar PV system installed by an energy services company.
- Item (d) of the definition has been introduced to capture a requirement under section 59(2) of the NERL for the retailer to replace a prepayment meter with a new meter where there is a life support customer at the relevant premises.⁹²²

The "new meter deployment" definition will cover situations where a retailer seeks to replace a small customer's existing meter with a meter that meets the minimum services specification (subject to the exceptions listed in the definition above). For clarity, this includes where a retailer proposes to replace a small customer's 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.

⁹²² Section 59(2) of the NERL applies where a small customer with a prepayment meter notifies the retailer that a person at the premises requires life support equipment. In those circumstances, the retailer must make immediate arrangements for the removal of the prepayment meter and the installation of a standard meter at no cost to the customer.

Notification process

The final rule requires retailers to give their small customers notification of a proposed new meter deployment and provide them with the ability to opt out of having a meter that meets the minimum services specification installed.⁹²³

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 25 business days before the proposed installation; and • the second no earlier than 10 business days after the first notice and no later than 15 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. The latest dates for the retailer to send the first and second notices have been increased from that in the draft rule from no later than 20 to no later than 25 business days (for the first notice) and from no later than 10 to no later than 15 business days (for the second notice) to give customers sufficient time to respond to the notice by the last opt out date.</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 seven 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 the first notification up until the last opt out date maximises the opportunity they have to opt out. In response to submissions from stakeholders, the last opt out date has been increased from three business days under the draft rule to seven business days under the final rule to allow retailers sufficient time to fulfil their obligations under the NERR with regard to notifying the customer of the supply interruption needed to install the new meter. The Commission considers that this increase also addresses the concerns raised by some stakeholders that the time period under the draft rule would not be sufficient to adjust contractor schedules and maintain an efficient rollout if some customers opt out close to the last opt out date.</p>
<p>Each written notice must contain at least the following content:</p>	<p>Regulating the minimum content of the notices will ensure that consumers are informed of their right to opt out and how to</p>

⁹²³ Rule 59A of the NERR final rule.

Requirement	Reasoning
<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 (or 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 notify the retailer of their decision 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; • the retailer's contact details; and • contact details of interpreter services in community languages. 	<p>exercise this right.</p> <p>The requirement for the notice to contain details of interpreter services responds to stakeholder concerns raised in submissions to the draft determination that culturally and linguistically diverse consumers may not be able to understand the notices about the new meter deployment and exercise their right to opt out. This amendment reflects the wording of an existing requirement in NERR that retail bills contain contact details of interpreter services in community languages.⁹²⁴</p>

This notification process provides a consistent and enforceable mechanism for retailers to notify consumers of a proposed new meter deployment and their ability to opt out, and for consumers to make an informed decision.

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.⁹²⁵

Providing consumers with information about the ongoing 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 final 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.
- 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

⁹²⁴ Existing rule 25(1)(w) of the NERR.

⁹²⁵ Smart Grid, Smart City, National cost benefit assessment, July 2014, p196.

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.⁹²⁶ 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).⁹²⁷ It is therefore unclear whether providing consumers with this information at the time of the proposed deployment will help them make a decision.

A number of minor changes have been made between the draft and final rules to address operational issues raised by stakeholders in submissions to the draft determination and to clarify aspects of the draft rule. These are set out below.

- The final rule clarifies that the customer who is given notice under a new meter deployment must be a customer of the retailer undertaking the new meter deployment.⁹²⁸ This additional drafting has been included to address a concern that, under the draft rule, a new retail customer at a connection point would receive a meter under a new meter deployment as a result of the previous customer not opting out. Under the final rule, where a customer moves into a premises where an opt out notice has been provided to the previous resident, that customer still has a right to opt out of the proposed new meter deployment.
- The final rule clarifies that the retailer may proceed with a new meter deployment if it has not received a request from the customer to opt out by the specified date.⁹²⁹ This amendment was made in response to AGL's request for more clarity in the final rule that there would be no obligation on the retailer to cancel the new meter deployment if the customer opts out after the opt out period has elapsed.
- The final rule defines when a customer's right to opt out of the new meter deployment has been properly exercised. This amendment has been made to address AGL's concern that the draft rule did not provide sufficient clarity about timing when a customer opts out in writing. The final rule makes it clear that a customer's request to opt out must be *received* by the retailer by the last opt out date.⁹³⁰

⁹²⁶ 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.

⁹²⁷ For example, under rule 46A of the NER, retailers must, as part of seeking a customer's explicitly informed consent to a market retail contract, bring to the customer's attention any term or condition of the contract that allows them to vary tariffs, charges or benefits under the contract.

⁹²⁸ See rules 59A(1) and (7) of the NERR final rule.

⁹²⁹ Rule 59A(5)-(6) of the NERR final rule.

⁹³⁰ Rule 59A(6) of the NERR final rule.

- The final rule permits a retailer to combine the notification to the customer of a retailer planned interruption with the second notice regarding the new meter deployment, in response to AGL's submission on this issue.⁹³¹ The Commission agrees that this amendment reduces administrative burden on retailers and, where utilised, may reduce the complexity of the meter replacement process from the customer's perspective.

Authorisation under a market retail contract

The final rule provides that the retailer is not required to comply with the notification and opt out process set out above if the retailer is authorised to undertake the new meter deployment under the terms of the customer's market retail contract. In response to the concerns put forward by the AER and AGL in their submissions to the draft determination, the final rule introduces the following definition of 'authorised' to make clear what terms will be required to be included in a market retail contract for the customer to be taken to have authorised a new meter deployment:⁹³²

“authorised means that under the terms and conditions of the customer's market retail contract the customer has expressly:

- (a) consented to its meter being replaced as part of a new meter deployment; and
- (b) waived its rights under this rule to opt out of having its meter replaced.”

Entry into a market retail contract requires a customer's explicit informed consent,⁹³³ which, in turn, requires clear, full and adequate disclosure to a customer of all matters relevant to the customer's consent.⁹³⁴ The NERR identifies, without limitation, certain matters that must be disclosed to a customer in obtaining consent to enter into a market retail contract.⁹³⁵ The Commission is of the view that these existing requirements, and the additional prescription provided by the definition of 'authorised' under rule 59A(9) of the NERR final rule, impose sufficient obligations on retailers to disclose to customers all matters relevant to the new meter deployment.

For clarity, the final rule requires retailers to comply with the opt out obligations set out above if a small customer with an existing working meter changes retailer. As such, the incoming retailer will need to either:

⁹³¹ Rule 59C(3) of the NERR final rule. See Appendix A3 for further information on retailer planned interruptions.

⁹³² Rule 59A(9) of the NERR final rule.

⁹³³ Section 38(b) of the NERL.

⁹³⁴ Section 39(1)(a) of the NERL.

⁹³⁵ Existing rule 46A of the NERR.

- enter into an agreement with the incumbent Metering Coordinator (e.g. the LNSP as initial Metering Coordinator) for the continued provision of metering services using the existing meter at that connection point; or
- include provisions in its market retail contract with the customer authorising the retailer to undertake a new meter deployment, and appoint a different Metering Coordinator to install a new meter that meets the minimum services specification.

The Commission expects that retailers will have incentives to enter into agreements with the incumbent Metering Coordinator for the provision of metering services using the existing meter before entering into a market retail contract with the customer.

Arrangements for Victoria

The ability for small customers to opt out under a 'new meter deployment' is contained in amendments to the NERR in the final rule. The NERR does not currently apply in Victoria because Victoria has not adopted the NERL as a law of that jurisdiction.

Accordingly, this opt out right will not automatically apply in Victoria unless it adopts the NERL 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 final 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.

C2.5.3 Scenario 3: Maintenance replacement

The final rule introduces the following definition into the NERR:

“maintenance replacement means the replacement of a small customer’s existing electricity *meter* arranged 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.”

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 definition has been amended slightly from

that in the draft rule to recognise that the retailer will be arranging the maintenance replacement, rather than carrying it out itself. Consistent with the approach taken in the NERR, it does not need to be clarified that it will be the Metering Coordinator or Metering Provider that will undertake the maintenance replacement. This is because the NERR only governs the direct relationship between the retailer, DNSP and small customer. The relationship between the retailer, Metering Coordinator and Metering Provider will be governed by contractual arrangements, not the NERR.

The Commission is of the view 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.⁹³⁶

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 a meter that meets the minimum services specification.⁹³⁷

Opting out of a maintenance replacement would also be likely to result in more meters failing. If small customers were given the ability to opt out of having their meter replaced under a maintenance replacement, they would be choosing to retain their existing meter, i.e. they would be opting out of a replacement meter altogether. The existing meter would subsequently fail and would be replaced with a meter that meets the minimum services specification. Allowing an ability to opt out would therefore be likely to result in more meters needing to be replaced under a fault scenario because the customer chose not to have it replaced when it was signalled as needing replacement. The efficiency benefits of replacing meter populations when they are signalled as needing replacement may be lost if some customers opt out and require a site visit at a later date when the meter eventually fails, which would increase costs for Market Participants and consumers. This may also result in poorer service outcomes for consumers, who would be without a working meter and billed on an estimate of their electricity consumption until the failed meter was replaced.

⁹³⁶ Specifically, small customers do not currently have ability to opt out in the way that they will under a new meter deployment.

⁹³⁷ The requirement that 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 has two exceptions. These are explained in Appendix C1.

Meter testing

Under the final 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.⁹³⁸ This responsibility will remain with the DNSP where it becomes the initial Metering Coordinator under the transitional arrangements.

Where the Metering Coordinator has arranged, or AEMO has undertaken, testing of a metering installation under clause 7.9.1 and Schedule 7.6 of the NER final rule, the Metering Coordinator or AEMO (as the case may be) must:

- inform the FRMP that testing has been undertaken; and
- make the test results available in accordance with clauses 7.9.1(h) and (i) and, on request of the FRMP, to the FRMP.⁹³⁹

If the test results indicate deviation from the technical requirements for that metering installation, the Metering Coordinator or AEMO (as the case may be) must ensure that the test results are provided as soon as practicable to the persons who receive that metering data under clause 7.10.3(a),⁹⁴⁰ which includes the FRMP.

The final rule does not specify the form in which the testing results are to be provided or require the DNSP to present any view on whether a maintenance replacement is necessary. The AEMC's position is that retailers would determine whether to carry out a maintenance replacement based on the testing results provided to them by the DNSP as the initial Metering Coordinator, or any subsequent Metering Coordinator.

In its submission to the draft determination, the ENA noted that Chapter 7 of the NER does not refer to sample testing as explicitly as implied in the definition of maintenance replacement. The ENA asked that the provisions regarding maintenance replacement in the NERR utilise terms used in Chapter 7 of the NER so that the distinction between a maintenance replacement and a new meter deployment, and therefore the customer's right to opt out under the latter, is clear.

Schedule 7 of the NER does not refer to the concepts of 'sample testing' or 'sample size', nor does it prescribe a size for the sample of populations to be tested. The Commission understands that these concepts are contained in an LNSP's test plan, which is registered with AEMO. The final rule maintains the existing arrangements for testing as currently set out in the NER so that Metering Coordinators continue to have flexibility in how they test meter populations to comply with NER requirements.

The definition of maintenance replacement contains a number of restrictions on when a maintenance replacement can occur, specifically that:

⁹³⁸ Note that AEMO may change aspects of the procedures to accommodate the introduction of the Metering Coordinator role.

⁹³⁹ See clause 7.9.1(g) of the NER final rule.

⁹⁴⁰ Clause 7.9.1(h) of the NER final rule.

- the testing of the actual sample population has to satisfy Chapter 7 testing requirements; and
- the testing of the actual sample has to indicate, in accordance with good electricity industry practice, that it is necessary or appropriate to replace the meter.

The Commission is of the view that this drafting and the existing testing requirements set out in the NER are sufficient to clearly distinguish the obligations of parties, and the rights of customers, under a maintenance replacement and a new meter deployment. The Commission has therefore concluded that it is not necessary to introduce provisions in Schedule 7 of the NER to govern populations of sample testing solely for the purposes of defining a maintenance replacement.

C2.5.4 Scenario 4: Replacement due to a fault

The Commission is of the view 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.⁹⁴¹

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.⁹⁴²

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 25 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.

⁹⁴¹ Specifically, small customers do not currently have ability to opt out in the way that they will under a new meter deployment.

⁹⁴² Existing clause 7.3.7(a) of the NER.

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 decided that this is not a practical solution because:

- 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;⁹⁴³
- it would be difficult for consumers to make an informed decision about whether to exercise their opt out right in these circumstances; and
- it would be difficult to implement and enforce.

The Commission is of the view that a requirement on the retailer to provide an ability for the customer to 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.

Transfer of Metering Coordinator responsibility

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.⁹⁴⁴ The arrangements outlined below refer only to fault scenarios where the meter needs to be replaced rather than repaired.

As noted in scenario 3 above, the Metering Coordinator has certain obligations under the final rule in relation to notifying other parties of test results, including whether a meter is found to be faulty. The LNSP, as initial Metering Coordinator, may also become aware of a metering installation malfunction via its Metering Provider or Metering Data Provider when carrying out work onsite, e.g. reading the meter. Where the LNSP is the Metering Coordinator for a type 5 or 6 metering installation and the meter is found to be faulty, it is required to notify the FRMP. The FRMP is then required to appoint a new Metering Coordinator to arrange the installation of a new meter.⁹⁴⁵

⁹⁴³ 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.

⁹⁴⁴ Provided that the services for these meters continue to be classified by the AER as direct control services.

⁹⁴⁵ 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 final 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

In submissions to the draft determination, a number of stakeholders raised concerns about the respective rights and obligations of the FRMP and LNSP (as the initial Metering Coordinator), particularly in the event that test results provided by the LNSP show that the meter needs to be replaced, but the FRMP does not arrange the appointment of a new Metering Coordinator to replace the meter at the connection point. Several DNSPs asked that clause 11.78.7(h) of the NER draft rule be amended so that the LNSP's obligations as initial Metering Coordinator cease when the FRMP has been advised that the meter is faulty, not when a new Metering Coordinator is appointed. However, if the LNSP's obligations were to end as soon as the FRMP is notified of the faulty meter, there would be a period in which there is no Metering Coordinator in respect of the relevant metering installation. To ensure continuity, the Commission's approach is that the LNSP's appointment, or deemed appointment as the case may be, will continue until a new Metering Coordinator is appointed.

We agree, however, that in order to give effect to the policy intention that the new Metering Coordinator should be responsible for installing a new metering installation, amendments to the transitional arrangements in the draft rule were required. The final rule therefore:

- requires the LNSP, as the initial Metering Coordinator, to promptly notify the FRMP of the faulty meter that needs to be replaced;⁹⁴⁶
- requires the FRMP to promptly appoint a new Metering Coordinator;⁹⁴⁷
- clarifies that the initial Metering Coordinator will not need to comply with the obligation to cause repairs to be made to the meter on the occasion of a metering installation malfunction within 10 business days;⁹⁴⁸ and
- requires the new Metering Coordinator, following its appointment by the FRMP, to cause repairs to be made to the metering installation within 10 business days after its appointment.⁹⁴⁹

The Commission is of the view that the arrangements above clarify the process for the transition of responsibility between the LNSP, as the initial Metering Coordinator, and the new Metering Coordinator in fault scenarios. The Commission therefore sees no reason to require AEMO to develop a procedure for managing metering installation malfunctions, as was suggested by Energex in its submission to the draft determination.

The final rule retains the existing timeframes within which the Metering Coordinator (previously the Responsible Person) must arrange for repair or replacement of a faulty

rule 6.17.2 of the NER final rule, this may be a Metering Coordinator business of the DNSP or another party.

⁹⁴⁶ Clause 11.86.7(g)(3) of the NER final rule.

⁹⁴⁷ Clause 11.86.7(h) of the NER final rule.

⁹⁴⁸ Clause 11.86.7(g)(2) of the NER final rule.

⁹⁴⁹ Clause 11.86.7(i) of the NER final rule.

metering installation.⁹⁵⁰ 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 delay into the process for the installation of a new meter. 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 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.

Definition of metering installation malfunction

Under the draft rule, a type 4A meter that ceased to be capable of providing the services set out in the minimum services specification would be considered a 'metering installation malfunction', while a small customer metering installation that failed in the same way would not. To address the issue raised by AusNet Services in its submission to the draft determination, the final rule amends the definition of 'metering installation malfunction' (as below) so that a 'metering installation malfunction' is triggered when a small customer metering installation is not capable of providing the services set out in the minimum services specification. This gives effect to the Commission's policy intention that all new small customer metering installations are capable of providing the services set out in the minimum services specification.

“metering installation malfunction The full or partial failure of the metering installation in which the metering installation does not:

- meet the requirements of schedule 7.4; or
- record, or incorrectly records, energy data; or
- allow, or provides for, collection of energy data; or
- in the case of a *small customer metering installation*, meet the requirements of schedule 7.5.”

C2.5.5 Scenario 5: New connection

The Commission is of the view that metering installations for small customers at new connections must meet the minimum services specification.

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, e.g. accumulation meters, which are unlikely to provide benefits to consumers over the long term.

⁹⁵⁰ See clause 7.8.10(a) of the NER final rule.

Similarly, the Commission considers that small customers should not be able opt out of the installation of a meter that meets the minimum services specification in any other circumstance where there is no existing meter at a connection point. This situation, although unlikely, could arise where a FRMP appoints a new Metering Coordinator and the previous Metering Coordinator arranges for the removal of its meter prior to a new meter being installed.

The final rule therefore requires the Metering Coordinator to ensure that the metering installation installed for a small customer at a new connection, or other circumstances where no meter is in place, is a type 4 metering installation that meets the minimum services specification.

C2.5.6 Other issues

Customers who refuse or prevent the installation of an advanced meter

The Commission acknowledges that a small minority of consumers may refuse or prevent the installation of a meter that meets the minimum services specification in maintenance replacement, fault and new connection scenarios. Appendix C1 sets out the arrangements under the final rule to address this situation.

Supply interruptions for the purposes of installing or maintaining a metering installation

The Commission understands that the installation of a new meter under any of the above scenarios will require an interruption to the consumer's electricity supply. The final rule makes a number of amendments to existing supply interruption provisions in the NERR. Retailer and distributor rights and obligations with regard to supply interruptions under the final rule are set out in Appendices A3 and A4 respectively.

C2.5.7 AEMC response to other stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

Table C2.2 AEMC response to other stakeholder views

Stakeholder	Issue	AEMC response
Scenario 2: New meter deployment		
AGL	The method of communication allowed to notify customers of a new meter deployment should be more flexible to account for customer preferences, e.g. an email or phone call. ⁹⁵¹	The final rule requires that the retailer, at a minimum, provide two written notices to the customer. These are minimum requirements only. The rules do not prevent a retailer from also communicating information about the new meter deployment via other means, e.g. email or text message. The final rule also provides the customer flexibility in how they communicate their decision to opt out of a new meter deployment, including in writing, electronically or by telephone, or by any other means specified by the retailer in the written notice. ⁹⁵² The Commission is of the view that these arrangements are sufficiently flexible and therefore no additional rule requirements are needed.
AGL	Rule 59A(4) of the NERR draft rule duplicates 59A(3) and should be tidied up. ⁹⁵³	We have not adopted AGL's suggestion to delete subclause (3)(a). This subclause serves to outline the content of the notice, while subclause (4) serves to outline how the customer can exercise its right to opt out.
Energy and Water Ombudsman (NSW)	Retailers should be required to use their best endeavours to make personal contact so that customers who have not read or understood the notices about the new meter deployment would still be able to opt out. ⁹⁵⁴	<p>The Commission is of the view that the requirements in the final rule are sufficient to inform and protect consumers in the new meter deployment process, and therefore a requirement on the retailer to also make an attempt at personal contact is not necessary. Specifically:</p> <ul style="list-style-type: none"> • The final rule requires the retailer to, at a minimum, provide two

⁹⁵¹ AGL, submission on draft determination, pp6-7.

⁹⁵² See rule 59A(4) of the NERR final rule.

⁹⁵³ Ibid., p28.

⁹⁵⁴ EWON, submission on draft determination, p2.

Stakeholder	Issue	AEMC response
		<p>written notices to the customer about a new meter deployment, which may or may not also include the required notification to the customer about the supply interruption to install the new meter. The final rule does not prevent a retailer from also communicating information about the new meter deployment to its customers via other means, e.g. phone, email or text message. It is in retailers' interests to maintain a good relationship with their customers and to communicate all relevant information about the new meter deployment to them.</p> <ul style="list-style-type: none"> • The requirement for the written notices about the new meter deployment to contain details of interpreter services provides culturally and linguistically diverse consumers a means to better understand the new meter deployment process and their right to opt out. <p>A requirement for the retailer to make personal contact is likely to be costly and complex for retailers to comply with. It may also be overly burdensome for customers, who would have already received at least two notices about the new meter deployment, in addition to any other communication about it by the retailer. The requirement may also not entirely address the concerns raised by EWON, e.g. if the customer is on holiday or cannot be contacted. Further, a number of retailers have indicated that they would not seek to force the installation of a new meter on customers who objected in person when the Metering Provider arrives to install it, given that the customer's existing meter is still fully functional.</p>
Scenario 3: Maintenance replacement		
Victorian DNSPs	It is not clear whether the DNSP must coordinate with the retailer's Metering Coordinator to generate an efficient program of meter replacement work. ⁹⁵⁵	The final rule introduces a number of provisions regarding the transfer of responsibility of the Metering Coordinator role once a metering installation has been signalled as needing replacement (see section C2.5.3). Once a new Metering Coordinator has been appointed by the

⁹⁵⁵ Victorian DNSPs, submission on draft determination, p60.

Stakeholder	Issue	AEMC response
		FRMP to replace a meter signalled as needing replacement, the DNSP no longer has a role in metering arrangements at that connection point. The DNSP is therefore not responsible for coordinating the new Metering Coordinator's replacement program.
Victorian DNSPs	Large customers should be afforded the same level of customer protections and notifications in writing for planned or routine maintenance of metering equipment. ⁹⁵⁶	Under the existing rules, there is no requirement for the customer, whether small or large, to be notified of planned or routine maintenance of metering equipment at their connection point, except if such maintenance requires a planned or unplanned interruption to the supply of electricity to the premises. The existing NERR contains a number of provisions regarding notification to the customer of a planned or unplanned interruption. The final rule maintains these arrangements. The final rule makes a number of amendments to the supply interruption provisions to allow retailers to arrange a supply interruption for the purposes of installing, maintaining, repairing or replacing metering equipment, and the process for notifying the customer. ⁹⁵⁷ These existing and amended provisions apply equally to small and large customers under the NERR. The Commission is of the view that no additional prescription is required for large customers specifically.
Origin Energy	During the transition period, DNSPs should be required to provide advance notice to the retailer and Metering Coordinator of the type 5 and 6 meters that need replacing to help those parties comply with the NER when the new rules commence. This information should be discoverable in MSATS and provided from 2016 to facilitate the replacement of meters when the new rules commence. ⁹⁵⁸	Under current rules, the Responsible Person has a number of obligations with regard to the testing of metering installations. A Registered Participant may also require that the Responsible Person make arrangements for the testing of a metering installation. ⁹⁵⁹ If the test results indicate deviation from the technical requirements for that metering installation, the results must be made available to the persons entitled to that metering data, ⁹⁶⁰ which includes the FRMP. The Commission is of the view that these arrangements provide retailers with

⁹⁵⁶ Victorian DNSPs, submission on draft determination, p60.

⁹⁵⁷ See Appendices A3 and A4.

⁹⁵⁸ Origin Energy, submission on draft determination, pp3,7.

Stakeholder	Issue	AEMC response
		sufficient means to determine which metering installations might be needing replacement when the new rules commence. The final rule therefore does not introduce any additional requirements on DNSPs to provide information about metering installations that need replacing.
AGL	Changes should be made to clause 7.9.1 of the NER draft rule to clarify that the role of the Metering Coordinator is to coordinate services and arrange access to the connection point. The AEMC should review all references to the Metering Coordinator in this clause to determine whether they align with intended responsibilities and obligations. ⁹⁶¹	Clauses 7.9.1(c), (f) and (g) of the NER final rule have been amended to refer to the Metering Coordinator 'arranging' the testing.
Lumo Energy	Clause 7.9.1 does not actually assign responsibility for testing to the Metering Coordinator. The clause that assigns responsibility is in Schedule 7.6.1(c). The obligation should be placed in the rule and referred to in the schedule. ⁹⁶²	<p>Responsibility for testing is not assigned to the Metering Coordinator. Clause 7.9.1(b) of the NER final rule provides that a Metering Coordinator only has to arrange testing when testing has been requested by the Registered Participant. Additionally, clause 7.9.1(c) imposes an obligation on AEMO to arrange for testing where the Metering Coordinator has not itself arranged the testing. Clause 7.9.1 continues to impose obligations on both AEMO and the Metering Coordinator in relation to test results.</p> <p>Schedule 7.6.1(c) broadly mirrors the obligation in 7.9.1(a) that a person must <i>ensure</i> that testing of the metering installation is carried out in accordance with clause 7.9.1 or Schedule 7.6. Clause 7.9.1 imposes an obligation on a person to carry out testing in accordance with clause 7.9.1 or Schedule 7.6. The Commission is of the view that it is not</p>

959 Existing clause 7.6.1(b) of the NER.

960 Existing clause 7.6.1(h) of the NER.

961 AGL, supplementary submission on draft determination, pp15-17.

962 Lumo Energy, submission on draft determination, p8.

Stakeholder	Issue	AEMC response
		necessary to move the obligation into the rule as this would create duplication. However, clause 7.9.1(a) of the NER final rule has been amended to reflect the language in Schedule 7.6.1(c): "A person that arranges or carries out the testing of a metering installation under this clause 7.9.1..."
All scenarios/general comments		
AGL	We should not use the term 'opt out' for faults, maintenance replacements or new connections. In these circumstances the person requesting the new meter is the builder or DNSP. ⁹⁶³	The term 'opt out' is used in the context of a new meter deployment to describe a customer's right to refuse the installation of a meter that meets the minimum services specification and retain their existing, working meter. In fault, maintenance replacement or new connection scenarios, small customers will not have the ability to 'opt out' of the installation of a meter that meets the minimum services specification in the way that they will under a new meter deployment. With the exception of notification about a supply interruption to install a new meter, retailers have no obligation to communicate with the customer about the installation of the new meter in these scenarios. As such, retailers can choose how they communicate these arrangements to their customers or requesting parties.
AGL	The terms 'maintenance replacement' and 'new meter deployment' should be defined elsewhere, e.g. in the NER as they relate to metrology processes that don't sit within the function of the NERR. If contained within the NER, the exact definitions of these terms could be deferred to AEMO's procedures, as could other definitions that are only useful for explaining these terms, i.e. 'good electricity industry practice'. ⁹⁶⁴	These terms were introduced for the purposes of the opt out provisions in the NERR draft rule. They are not used in the NER draft rule. As such, we consider that these terms should remain in the NERR where they are used.

⁹⁶³ AGL, submission on draft determination, p7.

⁹⁶⁴ AGL, supplementary submission on draft determination, pp25-26.

Stakeholder	Issue	AEMC response
Landis+Gyr	The rule should incentivise the installation of advanced meters prior to the implementation of the new rules, given that 10-15 per cent of customers will have their meter replaced with a type 5 or 6 meter in the next two years. ⁹⁶⁵	The final rule sets out a framework to facilitate the installation of more advanced metering in the NEM. The framework has been established by making significant changes to the NER and NERR. Industry and market institutions need time to prepare for these changes. While we recognise that a number of consumers will have their meter replaced with a regulated type 5 or type 6 meter before the new rules commence, the Commission considers that the benefits of allowing industry sufficient time to put in place their own arrangements to support the new framework outweigh the disadvantages associated with the installation of basic meters over the next two years. Nevertheless, the existing regulatory framework does not prevent retailers from installing advanced meters prior to the commencement of the new rules.
Lumo and Red Energy	Consumers will not be provided the choice to select additional services over and above those listed in the minimum service specification in either maintenance replacement or fault scenarios. ⁹⁶⁶	This is correct, and is the same as under the current arrangements. Similar to the reasons for not introducing an ability for customers to opt out in maintenance replacement or fault scenarios, it would be neither practical nor appropriate to introduce a requirement to ask the customer whether they would like the replacement meter to be capable of providing services in addition to those set out in the minimum services specification. Doing so would likely create confusion for customers and, in fault scenarios, would delay the installation of working meter.

⁹⁶⁵ Landis+Gyr, submission on draft determination, p6.

⁹⁶⁶ Lumo and Red Energy, submission on draft determination, p2.

C3 Meter reversion

Summary

This appendix outlines the Commission's final determination in relation to meter reversion.

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.⁹⁶⁷ The final 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 final 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 final determination with respect to meter reversion requirements.

A meter reversion policy determines 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:

- existing arrangements in relation to meter reversion requirements;
- the relevant elements of the COAG Energy Council's rule change request;
- stakeholder views, including submissions to the consultation paper, the draft rule determination and outcomes of stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasoning for the final rule.

⁹⁶⁷ Subject to the specific limited exceptions outlined in Appendix C1.

C3.2 Existing arrangements

Under the existing NER, 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.⁹⁶⁸

AEMO may include in the metrology procedure a guideline, specification or other standard for a particular jurisdiction in relation to type 5, 6 or 7 metering installations, which alters the application of the metrology procedure for that jurisdiction.⁹⁶⁹ Such guidelines, specifications or other standards (referred to in the NER as “jurisdictional metrology material”) may only be submitted to AEMO for inclusion in the metrology procedure by jurisdictions. The metrology procedure outlines these jurisdictional variations, the majority of which prevent a Responsible Person from replacing an interval meter with an accumulation meter.⁹⁷⁰

C3.3 Rule proponent's view

The COAG Energy Council proposed maintaining the existing arrangements that allow jurisdictions to determine their own reversion policies through the metrology procedure.⁹⁷¹

C3.4 Stakeholder views

C3.4.1 Consultation paper and initial workshops

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.⁹⁷² 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.⁹⁷³

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

⁹⁶⁸ Existing clause 7.2.5(d)(7) of the NER.

⁹⁶⁹ Existing clause 7.14.2(a) of the NER.

⁹⁷⁰ Section 2.6 of the Metrology Procedure: Part 2, National Electricity Market.

⁹⁷¹ COAG Energy Council, rule change request, October 2013, p17.

⁹⁷² AGL, submission on consultation paper, p11.

⁹⁷³ ESAA, submission on consultation paper, p2.

that reversion is not always straightforward, as the functionality and services enabled by meters cannot be easily compared on a like-for-like basis.

C3.4.2 Draft determination and operational workshop

Only two stakeholders commented on this issue in submissions to the draft rule determination.

Origin supported meter reversion being not allowed under the draft rule.⁹⁷⁴

However, the South Australian Department of State Development considered the draft rule was not consistent with the policy intent as it contained provisions that:

- permit meter reversion in accordance with the metrology procedure; and
- enable jurisdictional metrology material to address guidelines for the replacement of an interval meter with an accumulation meter.

The South Australian Department of State Development requested that the AEMC resolve this inconsistency in the final rule.⁹⁷⁵

C3.5 Commission's analysis

Changes between the draft and final rule

There are no changes between the draft and final rule on this issue.

The Commission is of the view that allowing reversion 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.⁹⁷⁶

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 final rule requires any new or replacement metering installation installed at a small customer's connection point to be a type 4 metering installation that meets the minimum services specification, except where:

⁹⁷⁴ Origin, submission on the draft rule determination, p.8.

⁹⁷⁵ South Australian Department of State Development, submission on draft rule determination, p.2.

⁹⁷⁶ Subject to the specific limited exceptions outlined in Appendix C1.

- the Metering Coordinator has obtained from AEMO an exemption from complying with such requirement because there is no telecommunications network available to enable remote access to the metering installation;⁹⁷⁷ or
- a customer refuses installation of a type 4 metering installation.⁹⁷⁸

In these cases, the Metering Coordinator must ensure a type 4A metering installation is installed.⁹⁷⁹ These are meters that are capable of meeting the minimum services specification, if remote access is activated, but are not connected to a telecommunications network.⁹⁸⁰

The final 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 customers above a certain size specified by jurisdictions in accordance with table S7.4.3.1 of the NER final rule.

The Commission has not removed the existing jurisdictional metrology material provisions that permit jurisdictions to specify guidelines for type 5, 6 and 7 metering installations in relation to the replacement of a device capable of producing interval data with a device that is only capable of producing accumulation data.⁹⁸¹ For reasons discussed above, the Commission considers that the final rule is sufficiently clear that no reversion from a type 4 or 4A metering installation to an accumulation meter will be possible at a small customer's connection point under the new arrangements.

The Commission also notes that jurisdictional metrology material may only apply in relation to type 5, 6 and 7 metering installations.⁹⁸² As no new type 5 or 6 metering installations can be installed at a small customer's connection point under the final rule, jurisdictional guidelines will not be relevant to new meters installed at small customer connection points after the new Chapter 7 of the NER commences.

⁹⁷⁷ Clause 7.8.4(a) of the NER in the final rule.

⁹⁷⁸ Clauses 7.8.4(d) of the NER final rule.

⁹⁷⁹ Clauses 7.8.4(b) and (h) of the NER final rule.

⁹⁸⁰ Table S7.4.3.1 of the NER final rule.

⁹⁸¹ This clause is renumbered as clause 7.16.4 in the final rule.

⁹⁸² Type 7 metering installations relate to uses such as public lighting and are not relevant in this context.

D Network regulatory arrangements

Summary

This appendix sets out the arrangements under the final 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 Access to network-related services, including via a network device.
- D5 Alterations to type 5 and 6 metering installations to make them capable of remote acquisition.

D1 Unbundling of metering charges

Summary

This appendix outlines the Commission's final determination in relation to the unbundling of metering charges from distribution use of system charges.

The final 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. This is the same as the draft rule.

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 for distribution services in accordance with the existing regulatory framework, rather than the rules being amended to specify a particular approach for metering services only.

The final rule requires the LNSP to take on the Metering Coordinator role for type 7 metering installations.⁹⁸³ 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 final 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;

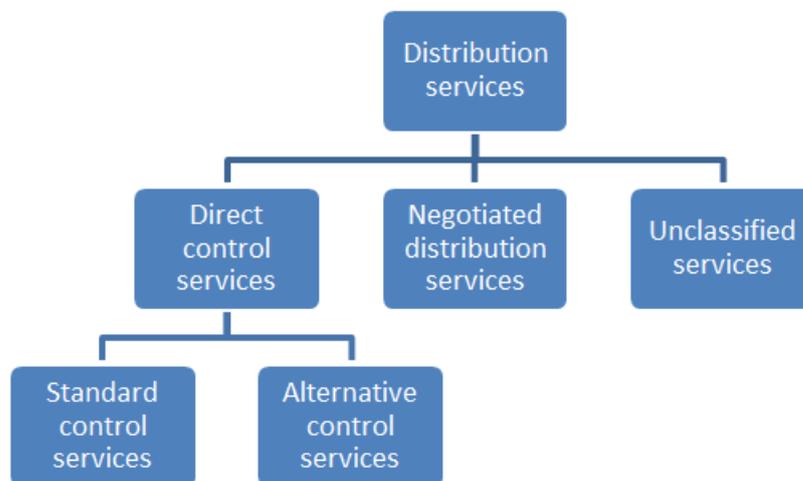
⁹⁸³ Type 7 metering installations are not a physical meter but rather a reconciliation between DNSPs and the users of that service using an algorithm to determine the throughput of energy, e.g. for public lighting and traffic lights.

- stakeholder views expressed in submissions to the consultation paper and draft determination; and
- the Commission’s analysis of the key issues and reasons for its final rule.

D1.2 Existing arrangements

As part of the regulatory determination process, the AER determines how, if at all, the distribution 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.⁹⁸⁴ If the AER decides not to classify a distribution service, the service is not regulated under the NER, i.e. it is unclassified.⁹⁸⁵ 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.

⁹⁸⁴ Clause 6.2.1(a) of the NER.

⁹⁸⁵ 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.⁹⁸⁶ 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.⁹⁸⁷

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.⁹⁸⁸

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 and type 6 metering installations have historically been classified by the AER as a standard control service. This means that DNSPs have bundled 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.

Table D1.1 outlines the AER's current (C) and proposed (P) classification of metering services by type for DNSPs across the NEM.

986 AER, Final framework and approach for Energex and Ergon Energy, AER, April 2014, p9.

987 Clause 6.2.2(c) of the NER.

988 Clause 6.2.5 of the NER.

Table D1.1 Classification of metering services

	Standard control	Alternative control	Negotiated	Unclassified
ACT ^C (2015/16-2018/19) ⁹⁸⁹	-	Type 5/6 metering services Type 7 metering services	-	Type 1-4 metering services
NSW ^C (2015/16-2018/19) ⁹⁹⁰	Type 7 metering services	Type 5/6 meter provision, maintenance, reading, data services and transfer administration services (including unrecovered meter cost)	-	Type 1-4 metering services Type 5/6 meter installation services
Qld ^C (2015/16-2019/20) ⁹⁹¹	Type 7 metering services	Type 5/6 metering services	-	Type 1-4 metering services
SAC (2015/16-2019/20) ⁹⁹²	Type 7 metering services	Type 5/6 metering services Exceptional large customer metering services (types 1-4 installed prior to 1 July 2000) ⁹⁹³	Type 1-4 metering services	-

⁹⁸⁹ AER, Final decision, ActewAGL distribution determination 2015-16 to 2018-19, Overview, April 2015, p45. Note that a number of errors were identified in the AER's final decision for ActewAGL, including an inaccurate description of metering service classifications. See the AER website for more information.

⁹⁹⁰ AER, Final decision, Ausgrid distribution determination 2015-16 to 2018-19, Overview, April 2015, p45. Note that a number of errors were identified in the AER's final decisions for the NSW DNSPs, including an inaccurate description of metering service classifications. See the AER website for more information.

⁹⁹¹ AER, Final decision, Energex determination 2015-16 to 2019-20, Attachment 13 - Classification of services, October 2015, p7.

⁹⁹² AER, Final decision, SA Power Networks determination 2015-16 to 2019-20, Attachment 13 - Classification of services, October 2015, p7.

⁹⁹³ These services are classified as alternative control services for legacy reasons. See AER, Final framework and approach paper ETSA Utilities 2010-15, p10.

	Standard control	Alternative control	Negotiated	Unclassified
Tas ^P (2017/18-2018/19) ⁹⁹⁴	-	Type 5/6 metering services Type 7 metering services	-	Type 1-4 metering services PAYG metering services provided by Aurora Retail
Vic ^P (2016-20) ⁹⁹⁵	-	Type 5/6 and smart metering services (regulated service only) Type 7 metering services	-	Type 1-4 metering services (excluding smart metering) Type 5/6 and smart metering services (subject to competition)

As the table shows, the majority of charges for type 5 and 6 metering installations are already, or will be at the next regulatory reset, classified as alternative control services.⁹⁹⁶ This means that charges for these services are already, or will soon be, unbundled from distribution use of system charges NEM-wide.

The AER 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.⁹⁹⁷

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, e.g. 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

⁹⁹⁴ AER, Framework and approach for TasNetworks distribution for the regulatory control period commencing 1 July 2017, July 2015, p13.

⁹⁹⁵ AER, Final framework and approach for the Victorian electricity distributors, Regulatory control period commencing 1 January 2016, 24 October 2014, p20.

⁹⁹⁶ The exceptions are: (1) type 5/6 metering installation services in NSW, which is an unregulated service to accommodate the *Scheme for the accreditation of service providers to undertake contestable services*; and (2) new type 5/6 and smart metering services in Victoria for when metering contestability is introduced by this rule change.

⁹⁹⁷ AER, Final framework and approach for Energex and Ergon Energy, April 2014, p41.

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.⁹⁹⁸

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

D1.4.1 Consultation paper

Most stakeholders have indicated support for the unbundling of metering charges from distribution use of system charges.⁹⁹⁹ In submissions on the rule change request, several DNSPs noted that type 5 and 6 metering services had already been unbundled from distribution use of system charges and therefore no changes to the NER were required.¹⁰⁰⁰

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.¹⁰⁰¹ Origin Energy agreed that metering charges should be unbundled from distribution use of system charges, but

⁹⁹⁸ COAG Energy Council, rule change request, October 2013, p6.

⁹⁹⁹ AER, submission on consultation paper, p5; ERM Power, submission on consultation paper, p13; Energy Australia, submission on consultation paper, p5; Lumo Energy, submission on consultation paper, p7; Vector, submission on consultation paper, p13.

¹⁰⁰⁰ 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.

¹⁰⁰¹ AGL, submission on consultation paper, p8.

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.¹⁰⁰² 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.¹⁰⁰³

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.¹⁰⁰⁴

D1.4.2 Draft determination

The AEMC's draft rule did not require the AER to unbundle metering charges from distribution use of system charges. The AER welcomed this decision and noted that it has already committed to unbundling metering costs in all jurisdictions.¹⁰⁰⁵ This view was shared by SACOSS.¹⁰⁰⁶ The Electrical Trades Union highlighted the importance of unbundling to ensure consumers are not 'double charged' in any way.¹⁰⁰⁷

There were no comments on the draft rule in relation to type 7 metering services.

D1.5 Commission's analysis

Changes between the draft and final rule

There are no changes between the draft and final rule on this issue.

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 in section D1.2, the current NER provisions allow the AER to determine the

¹⁰⁰² Origin Energy, submission on consultation paper, p7.

¹⁰⁰³ Metropolis, submission on consultation paper, p7.

¹⁰⁰⁴ Vector, submission on consultation paper, p13. Cost recovery arrangements are addressed in Appendix D2.

¹⁰⁰⁵ AER, submission on draft determination, p9.

¹⁰⁰⁶ SACOSS, submission on draft determination, p1.

¹⁰⁰⁷ Electrical Trades Union, submission on draft determination, p8.

classification of distribution services and how the various cost components of these services will be recovered.¹⁰⁰⁸

The Commission considers it to be appropriate that the AER continues 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.

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 stated in recent regulatory determinations that the incremental costs incurred by DNSPs in providing type 7 metering services are minimal relative to total service costs. The AER sees no potential for the development of competition in the provision of type 7 metering services, and therefore sees no net benefit of unbundling type 7 metering services from distribution use of system charges.¹⁰⁰⁹

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 in section D1.2.2, type 7 metering services are provided through a direct relationship between the DNSP and the customer, i.e. 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. No such evidence has been provided. The final 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 installations¹⁰¹⁰

¹⁰⁰⁸ Arrangements for DNSPs to recover residual metering service costs when a customer switches to a competitive metering service are discussed in Appendix D2.

¹⁰⁰⁹ See for example: AER, Final framework and approach for the Victorian electricity distributors, Regulatory control period commencing 1 January 2016, 24 October 2014, p57.

¹⁰¹⁰ Clause 7.6.4(a) of the NER final rule.

D2 Cost recovery for regulated metering services

Summary

This appendix outlines the Commission's final 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 associated with the provision 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 final 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. This is the same as the draft rule.

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 draft determination, and in stakeholder workshops held by the AEMC;
- the Commission's analysis of the key issues and reasons for its final rule.

D2.2 Existing arrangements

The costs of providing type 5 and 6 metering services are generally regulated NEM-wide by the AER as a direct control service.¹⁰¹¹ A direct control service is also referred to as a regulated metering service in this appendix. DNSPs recover the costs of

¹⁰¹¹ Refer Appendix D1. The current exception is the installation of type 5 and 6 metering installations in NSW, which is an unregulated service.

providing these assets and services to consumers over a period determined by the AER in distribution regulatory determinations. In most jurisdictions, type 1-4 metering services are not regulated by the AER.¹⁰¹² 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. Upfront 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 published its final decision on cost recovery arrangements for regulated metering services provided by the ACT and NSW DNSPs in April 2015, and similarly for the Queensland and South Australian DNSPs in October 2015. These arrangements are set out in section D2.5.4.

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.¹⁰¹³ It is unclear whether DNSPs have been 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.

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.¹⁰¹⁴

The rule change request proposed 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 proposed giving the AER explicit responsibility to assess residual metering costs and determine the exit fee to be charged to recover those costs.

¹⁰¹² 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.

¹⁰¹³ Existing clause 7.3A(g) of the NER.

¹⁰¹⁴ COAG Energy Council, rule change request, p12.

The rule change request proposed the following criteria that the AER would need to have regard to 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 proposed that the AER could consider whether a cap on the exit fee would be appropriate and, if so, the level of the cap.¹⁰¹⁵

The COAG Energy Council indicated that the objective of the proposed arrangement was 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.¹⁰¹⁶

D2.4 Stakeholder views

D2.4.1 Consultation paper and initial workshops

Stakeholder submissions to the consultation paper indicated that the existing regulatory frameworks do not provide sufficient certainty on:

- how a DNSP can recover its residual costs; and
- the exit fee that might be payable by a party seeking to replace or upgrade a regulated meter.

Stakeholders indicated that this uncertainty acted 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.¹⁰¹⁷

¹⁰¹⁵ COAG Energy Council, rule change request, October 2013, p31.

¹⁰¹⁶ Ibid., p6.

¹⁰¹⁷ 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

Stakeholders also considered that changes needed 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.

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.¹⁰¹⁸ EDMI supported a uniform exit fee structure to allow DNSPs to recover their investment without distorting the market.¹⁰¹⁹ EnergyAustralia supported clearly defined exit fees with a transparent, reducing fee path to provide the market with investment certainty.¹⁰²⁰

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.¹⁰²¹

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.¹⁰²²

Proposed criteria

A number of stakeholders shared the view that the proposed criteria regarding the components and magnitude of the exit fee were appropriate.¹⁰²³ 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.¹⁰²⁴

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

Energy, submission on consultation paper, p7; SA Power Networks, submission on consultation paper, p8.

1018 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.

1019 EDMI, submission on consultation paper, p11.

1020 EnergyAustralia, submission on consultation paper, p5.

1021 SACOSS, submission on consultation paper, p2; ATA and other consumer groups, submission on consultation paper, p5; PIAC, submission on consultation paper, p1.

1022 Metropolis submission, 17 June 2014, p7; Vector submission, 29 May 2014, p2.

1023 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.

1024 NSW DNSPs, submission on consultation paper, p14.

annually. ERM Power considered that this would provide an efficient price signal to replace older meters first.¹⁰²⁵

While some stakeholders were of the view that a cap on the exit fee would be appropriate,¹⁰²⁶ 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.¹⁰²⁷

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.¹⁰²⁸ 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.¹⁰²⁹

Party to determine the fee

Many stakeholders supported the proposal that the AER have a more explicit role in determining exit fees.¹⁰³⁰ Two retailers were of the view that this should occur in open consultation.¹⁰³¹ Ergon Energy considered that the AER should not determine the 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.¹⁰³²

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.¹⁰³³

1025 ERM Power, submission on consultation paper, p14.

1026 Energy Australia, submission on consultation paper, p5; ATA and other consumer groups, submission on consultation paper, p5.

1027 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.

1028 ENA, submission on consultation paper, p24.

1029 SA Power Networks, submission on consultation paper, p8.

1030 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.

1031 AGL, submission on consultation paper, p8; Simply Energy, submission on consultation paper, p9.

1032 Ergon Energy, submission on consultation paper, p10.

1033 AER, submission on consultation paper, p5.

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.¹⁰³⁴

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.¹⁰³⁵ 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.¹⁰³⁶

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.¹⁰³⁷

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.¹⁰³⁸ 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.¹⁰³⁹

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.¹⁰⁴⁰

1034 SA Power Networks, submission on consultation paper, p8; NSW DNSPs, submission on consultation paper, p14.

1035 NSW DNSPs, submission on consultation paper, p5.

1036 Ergon Energy, submission on consultation paper, p10; NSW DNSPs, submission on consultation paper, p5; Energex, submission on consultation paper, p5.

1037 AER, submission on consultation paper, p5.

1038 SA Power Networks, submission on consultation paper, p9.

1039 Vector, submission on consultation paper, p3.

1040 Metropolis, submission on consultation paper, p7.

D2.4.2 Draft determination

In the draft determination, the Commission considered 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, and therefore no further prescription in the rule was required.

The Commission also considered that the application of existing clause 7.3A of the NER was unclear, and did not include this provision in the draft rule.

The AER welcomed this decision and the discretion provided to it to determine the level and design of metering exit fees for customers moving from a regulated metering service. It provided an overview of its approach to metering cost recovery as set out in the preliminary decisions for the Queensland and South Australian DNSPs and final decisions for the NSW and ACT DNSPs.¹⁰⁴¹ These decisions are set out below. AGL also supported the AEMC's draft decision to leave the AER to determine how residual costs were recovered in accordance with the existing regulatory framework, but stated that it did not support the application of upfront exit fees or administration fees.¹⁰⁴²

Vector supported the AER's decision to remove exit fees and administration fees for the transfer of a customer, noting that these fees would have created barriers to entry for competitive metering services. It also expressed support for the AER's decision to allow DNSPs to recover residual capital costs of legacy metering assets as an alternative control service.¹⁰⁴³

Origin Energy was of the view that the AER's decisions were not conducive to competition because the annual charge allowances are not high enough to support an economic rollout of advanced meters. It asked the AEMC to continue a dialogue with the AER to minimise cross subsidisation of regulated metering services.¹⁰⁴⁴

Engineroom Infrastructure Consulting was of the view that the AER's regulatory approach was not satisfactory for calculating the residual costs of metering services. Specifically, it considered that there was little consistency in approach by the AER and between DNSPs with regard to the valuation of the metering asset base (MAB), capital expenditure allowances and operating expenditure allowances. It recommended that the final rule be more explicit in specifying the approach and powers of the AER in relation to these issues.¹⁰⁴⁵

¹⁰⁴¹ AER, submission on draft determination, p9.

¹⁰⁴² AGL, submission on draft determination, p9.

¹⁰⁴³ Vector, submission on draft determination, p3.

¹⁰⁴⁴ Origin Energy, submission on draft determination, p8.

¹⁰⁴⁵ Engineroom Infrastructure Consulting, submission on draft determination, pp3-11.

D2.5 Commission's analysis

Changes between the draft and final rule

There are no changes between the draft and final rule on this issue.

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 existing 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. The final rule does not include this provision.

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.¹⁰⁴⁶

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.¹⁰⁴⁷ 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 distribution regulatory determinations under the requirements of the existing regulatory framework.

¹⁰⁴⁶ Section 7A of the NEL.

¹⁰⁴⁷ Existing 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.

Under previous AER determinations, and some current determinations, 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, 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, e.g. 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 (i.e. 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.

D2.5.4 AER decisions on cost recovery arrangements

The AER has considered these issues in recent regulatory determination processes for the ACT, NSW, Queensland and South Australian DNSPs.

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.¹⁰⁴⁸

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 regulated, type 5/6 metering services in the following way:

¹⁰⁴⁸ Slides from the workshop are available on the AER website.

- Annual, unbundled metering charges: To recover meter asset costs (existing and replacement), supporting asset costs and operational costs.
- 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.¹⁰⁴⁹

In March 2015, the AER published a consultation paper on an alternative approach, noting that its draft decision to add residual metering capital costs to the regulatory asset base for standard control services on an annual basis was not appropriate under the NEL.¹⁰⁵⁰

In its final decision for the ACT and NSW DNSPs, published on 30 April 2015, the AER did not approve an upfront exit fee to recover residual costs when a consumer switches to a competitive metering service. Nor did it accept an exit fee to recover administration costs, because it found that there were no additional tasks or functions that DNSPs would incur when customers change to a competitive metering service. The AER determined that the ACT and NSW DNSPs could recover residual metering costs through two types of alternative control service charges:

1. An upfront capital charge for all new meters installed at new and upgraded connections after 1 July 2015.
2. An annual charge comprising two components:
 - (a) Capital – metering asset base (MAB) recovery. These costs will be recovered from all consumers who had a DNSP-provided type 5 or 6 meter at 1 July 2015 until the MAB is depleted.
 - (b) Non-capital – operating expenditure and tax. These costs will only be recovered from customers that continue to receive a regulated metering service from the DNSP.

The AER acknowledged that its final decision signals a higher switching cost relative to its draft decision. This is because a switching customer will directly share the residual capital costs associated with their past regulated metering service with all other type 5/6 metering customers, rather than with all distribution customers (including customers who have never received a type 5/6 metering service) as would have been the case under the draft decision. The AER concluded that, on balance, its final decision better meets the regulatory objectives under the NEL and NER than either the NSW

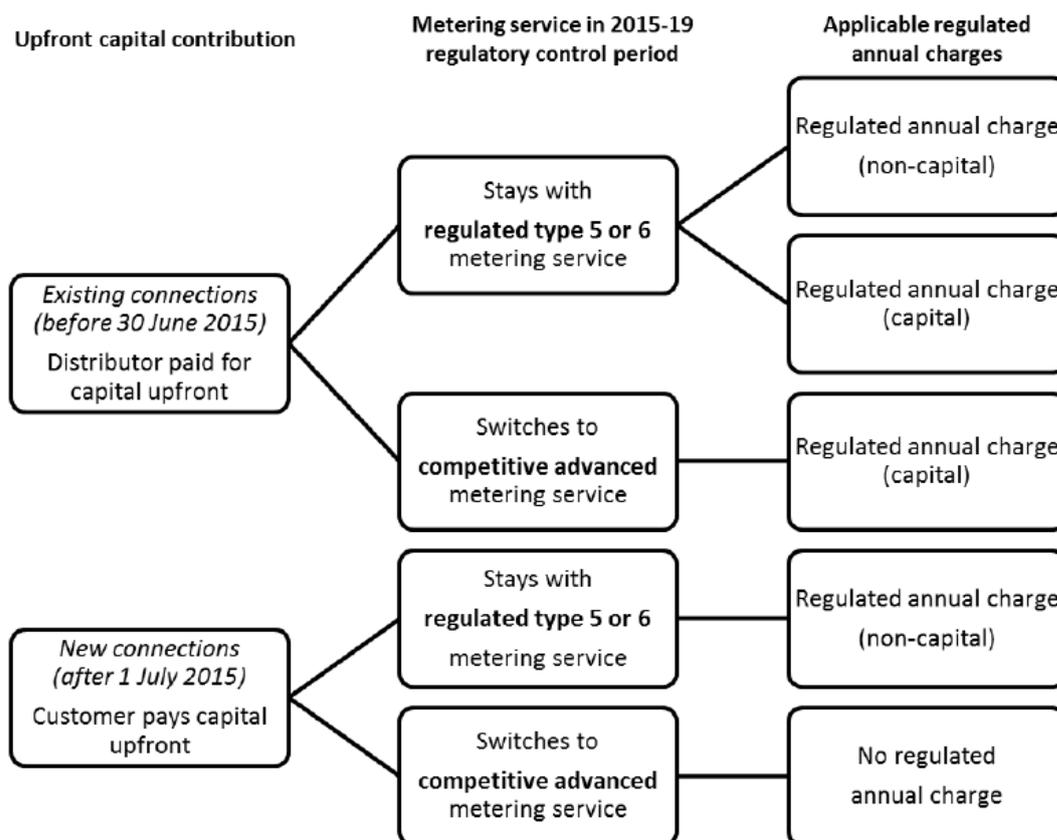
¹⁰⁴⁹ See: AER, Draft decision on Ausgrid distribution determination, Attachment 16 - Alternative control services, November 2014, pp29-49.

¹⁰⁵⁰ AER, consultation paper, Alternative approach to the recovery of the residual metering capital costs through an alternative control services annual charge, March 2015.

DNSPs' proposal or its own draft decision. The AER considered that this approach, depicted in Figure D2.1, supports the development of competition in the provision of metering services, is administratively simple and minimises cross subsidies between consumers who remain on the regulated metering service and those who switch.¹⁰⁵¹

The AER made the same decision in its final determinations for the Queensland and South Australian DNSPs, published 29 October 2015.¹⁰⁵²

Figure D2.1 Regulated metering charges¹⁰⁵³



D2.5.5 Final rule

The Commission considers that the arrangements for a DNSP to recover the residual costs of its regulated metering service should continue to be determined by the AER in accordance with the existing regulatory framework. Accordingly, the final rule maintains the existing arrangements.

¹⁰⁵¹ AER, Final decision, Ausgrid distribution determination 2015-16 to 2018-19, Attachment 16 - Alternative control services, April 2015, pp50-52.

¹⁰⁵² See AER, Final decision, Energex determination 2015-16 to 2019-20, Attachment 16 - Alternative control services, October 2015; AER, Final decision, SA Power Networks determination 2015-16 to 2019-20, Attachment 16 - Alternative control services, October 2015.

¹⁰⁵³ AER, Final decision, Ausgrid distribution determination 2015-16 to 2018-19, Attachment 16 - Alternative control services, April 2015, p31.

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.

The AER has explained that the following regulatory objectives are relevant to its consideration of cost recovery arrangements for regulated metering services:

- 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.
- 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.¹⁰⁵⁴

These considerations reflect those that the AEMC, AER and a number of stakeholders identified as important when considering the recovery of residual costs in the context of a competitive market for metering and related services.

D2.5.6 Implications of the final rule

The final 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, and as such does not provide absolute certainty to parties looking to make investment decisions in advanced metering and services until regulatory determinations are finalised.

However, the AER has already made final decisions on cost recovery arrangements for the ACT, NSW, Queensland and South Australian DNSPs. Arrangements for all DNSPs in the NEM will be in place by the AER by the time the new rules under this rule change commence (1 December 2017).

¹⁰⁵⁴ See for example: AER, Draft decision on Ausgrid distribution determination, Attachment 16 - Alternative control services, November 2014, p36.

We note the concerns raised by some stakeholders regarding the outcome of the AER's decisions. Nonetheless, we consider that the AER is best placed to determine appropriate cost recovery arrangements through the regulatory determination process in accordance with the existing regulatory framework. Stakeholders will continue to 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.

D2.5.7 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.

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.

D2.5.8 AEMC response to stakeholder views

Table D2.1 Stakeholder views and AEMC response

Stakeholder	Issue	AEMC response
Origin Energy	Meters replaced due to a fault or as part of a maintenance replacement should not be subject to an exit fee or ongoing metering charges. ¹⁰⁵⁵	This is a matter for consideration by the AER. The AER has determined that exit fees will not apply for the ACT, NSW, Queensland and South Australian DNSPs. All consumers who had a DNSP-provided type 5 or 6 meter at 1 July 2015 will pay the capital component of the annual alternative control service charge until the metering asset base is depleted.
Engineroom Infrastructure Consulting	The draft rule does not have sufficient consumer protections in place to help customers understand exit arrangements and what they must pay for. ¹⁰⁵⁶	Under the AER's cost recovery arrangements, no upfront exit fee will apply when a customer moves away from a regulated metering service. However, we acknowledge the importance of transparency and consumers understanding the components that make up their electricity bill. The Commission considers that existing consumer protections in the regulatory framework are sufficient and flexible enough to support consumers in this regard. Further, the AER, governments, consumer groups and industry all have a role in communicating the new arrangements that this rule change will bring about.

¹⁰⁵⁵ Origin Energy, submission on draft determination, p8.

¹⁰⁵⁶ Engineroom Infrastructure Consulting, submission on draft determination, p11.

D3 Distribution ring-fencing arrangements

Summary

This appendix sets out the Commission's final determination with respect to distribution ring-fencing arrangements.

The final rule requires the AER to develop 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 final rule provides that the AER must prepare and publish this guideline by 1 December 2016. No other changes have been made to the provisions in the NER that govern distribution ring-fencing guidelines.

The distribution ring-fencing 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 final 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 draft determination, and at stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for its final rule.

Under the final rule an LNSP currently acting as the Responsible Person providing type 5 or 6 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 provided by the regulated entity, 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 referred to 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.
Full or partial operational separation	Sharing of commercially sensitive information and decision making	<p>Operational separation may involve, to varying extents:</p> <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

Measures	Behaviour targeted	What it entails
		restrictions on access to systems with confidential information; and/or <ul style="list-style-type: none"> 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 contestable services such as 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 services¹⁰⁵⁷ 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.¹⁰⁵⁸ This rule also requires DNSPs to comply with any ring-fencing guideline developed by the AER.

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.¹⁰⁵⁹ This work was halted in late 2012 to accommodate the Better Regulation review

¹⁰⁵⁷ 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.

¹⁰⁵⁸ 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 clause also allows the AER to include provisions to add to, or waive a DNSP's obligations under the guidelines.

¹⁰⁵⁹ AER, Position paper – Electricity Distribution Ring-fencing Guidelines, September 2012, p11.

and the rule changes that were expected to flow from the Power of Choice review, including this rule change.¹⁰⁶⁰

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.¹⁰⁶¹
- 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.¹⁰⁶²
- 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.¹⁰⁶³
- The shared asset arrangements set out in the AER's Shared Asset Guideline - A "shared asset" is an asset used to provide regulated services and another service that is not classified as a regulated service. The Shared Asset Guideline sets out a methodology to be applied by the AER to calculate the reduction in building block revenues that will apply when a network business also earns revenue from shared assets by providing non-regulated services.¹⁰⁶⁴

¹⁰⁶⁰ <http://www.aer.gov.au/node/12493>

¹⁰⁶¹ 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).

¹⁰⁶² AER, Final Decision: Electricity distribution networks – Cost allocation guidelines, June 2008, p5.

¹⁰⁶³ 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.

¹⁰⁶⁴ AER, Shared Asset Guideline, November 2013, section 3.1.

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.

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';¹⁰⁶⁵ and
- the AER may develop ring-fencing arrangements to facilitate competitive neutrality.¹⁰⁶⁶

D3.4 Stakeholder views

D3.4.1 Consultation paper and initial workshops

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.

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:¹⁰⁶⁷

¹⁰⁶⁵ COAG Energy Council, rule change request, October 2013, p11.

¹⁰⁶⁶ Ibid., p13.

¹⁰⁶⁷ 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;

- 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 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.¹⁰⁶⁸

EnergyAustralia and Simply Energy, on the other hand, considered that ring-fencing should be required as soon as the new rules come into effect.¹⁰⁶⁹ 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.¹⁰⁷⁰

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.¹⁰⁷¹”

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

Vector, submission on consultation paper, pp21-22; SA Power Networks, submission on consultation paper, p10.

1068 Ergon Energy, submission on consultation paper, p14; ENA, submission on consultation paper, p35; SA Power Networks, submission on consultation paper, p12.

1069 EnergyAustralia, submission on consultation paper, p6; Simply Energy, submission on consultation paper, p10.

1070 Origin Energy, submission on consultation paper, p10.

1071 Vector, submission on consultation paper, p22.

operating in a segment of the market where competition is unlikely to emerge, or may take some time to emerge.

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 through a Metering Provider or Metering Data Provider subsidiary. They suggested therefore that the DNSP also be ring-fenced from these two businesses.

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.¹⁰⁷² 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'.¹⁰⁷³

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.¹⁰⁷⁴ EnergyAustralia considered that these types of measures were required to provide certainty and confidence in the market and to encourage entry and investment.¹⁰⁷⁵

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:

¹⁰⁷² 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.

¹⁰⁷³ 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.

¹⁰⁷⁴ 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.

¹⁰⁷⁵ EnergyAustralia, submission on consultation paper, p6.

- The existing jurisdictional ring-fencing guidelines, which apply to the provision of specific contestable services, cannot accommodate the proposed market arrangements.¹⁰⁷⁶
- The AER should be given responsibility for deciding what ring-fencing measures to employ and set these out in a new distribution ring-fencing guideline.
- 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.

D3.4.2 Draft determination and operational workshop

Most stakeholders continued to agree that a DNSP seeking to provide metering services in the competitive market should only be able to do so via an entity that is ring-fenced from their regulated business.

However, there were a number of issues raised regarding:

- whether the AER should be required to develop a guideline and, if so, the appropriate timing; and
- the level of prescription in the NER or guidance from the AEMC necessary to assist the AER in developing guidelines.

These issues are discussed in turn below.

Development and timing of guideline

Many retailers and metering businesses supported the AER developing ring-fencing guidelines for DNSPs.¹⁰⁷⁷ Lumo and Red Energy noted that establishing distribution ring-fencing guidelines would ensure that distributors that choose to compete in the metering services market do so on a competitively neutral basis.¹⁰⁷⁸

¹⁰⁷⁶ 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.

¹⁰⁷⁷ Active Stream, submission on draft determination, p2; AGL, submission on draft determination, pp9-10; EDMI, submission on draft determination, p3; Lumo, submission on draft determination, p4; Origin Energy, submission on draft determination, p9; Vector, submission on draft determination, p3; Red Energy, submission on draft determination, p4.

¹⁰⁷⁸ Lumo, submission on draft determination, p4; Red, submission on draft determination, p4.

A number of DNSPs considered that the AER should not be required to develop ring-fencing guidelines.¹⁰⁷⁹ Rather, they considered the existing provision permitting the AER to develop guidelines to be sufficient. The ENA considered that it was not necessary or efficient to mandate the establishment of guidelines when the AER already has discretion to do so.¹⁰⁸⁰

Ergon Energy Retail considered that the development of the ring-fencing guidelines should be brought forward to provide direction and certainty to market participants.¹⁰⁸¹ On the other hand, ActewAGL considered that requiring the AER to develop ring-fencing guidelines by a set date prevents the AER from extending the time available to adequately consult and consider issues.¹⁰⁸²

Level of prescription or guidance to the AER

A number of stakeholders considered that the AEMC should provide the AER with additional guidance or direction in developing the ring-fencing guidelines.¹⁰⁸³

ActewAGL considered the AEMC should provide further direction to the AER on the principles to be applied in developing a guideline. They considered the following principles to be appropriate:¹⁰⁸⁴

- apply the COAG principles of best practice regulation;
- take account of all relevant costs and benefits;
- take account of existing ring-fencing and other regulatory interventions and not remove all business advantages; and
- recognise differences in jurisdictions and apply waivers as appropriate.

The AER considered there should be an explicit requirement in the final rule that DNSPs competing to supply minimum services specification meters as a Metering Coordinator should be required to do so through an entity that is ring-fenced from their regulated business.¹⁰⁸⁵

The NSW DNSPs recommended that the NER require the AER to specify the anti-competitive behaviour or unfair advantage that it is seeking to address through ring-fencing. They also considered that the AER should be required to review existing

¹⁰⁷⁹ ActewAGL, submission on draft determination, p2; SA Power Networks, submission on draft determination, p14; Victorian DNSPs, submission on draft determination, p55.

¹⁰⁸⁰ ENA, submission on draft determination, p25.

¹⁰⁸¹ Ergon Energy Retail, submission to draft determination, p2.

¹⁰⁸² ActewAGL, submission to draft determination, p2.

¹⁰⁸³ ActewAGL, p2; Active Stream, p2; AER pp6-7; Ergon Energy Retail, p2; Jemena, p4; NSW DNSPs, p5; Simply Energy, p4; Victorian DNSPs, pp54-55, 58.

¹⁰⁸⁴ ActewAGL, submission to draft determination, p3.

¹⁰⁸⁵ AER, submission on draft determination, pp6-7.

regulatory mechanisms to determine whether further regulation is necessary.¹⁰⁸⁶ The NSW DNSPs set out a number of questions that they believed the AER should consider in developing the guidelines, including cost considerations.¹⁰⁸⁷ Similarly, the Victorian DNSPs considered that there should be guidance in the NER to ensure the AER consider a number of specific factors in developing ring-fencing guidelines.¹⁰⁸⁸

Simply Energy submitted that the AEMC should put in place specific requirements that the AER must enforce to ensure that regulated revenue is not used to subsidise a DNSP's competitive business.¹⁰⁸⁹

ActewAGL, the ENA and Jemena submitted that, in developing ring-fencing guidelines, the AER should distinguish between concerns regarding unfair competition and competitive advantage in the market. In particular, ActewAGL and Jemena considered that the ring-fencing guidelines should not remove all business advantages, such as economies of scale and scope. They considered that doing so would result in higher costs for customers.

On the other hand, Alinta considered the draft rule determination to be relatively prescriptive on the form and governance of DNSPs through the distribution ring-fencing guidelines.¹⁰⁹⁰

Energex, Ergon Energy Distribution, the NSW DNSPs and SA Power Networks submitted that the final determination or the final rule should be clear that DNSPs that only provide type 5 and 6 metering services should not have to be ring-fenced.¹⁰⁹¹ Similarly, the ENA considered that the final determination should provide guidance to the AER such that the ring-fencing guidelines would not apply in the following circumstances:¹⁰⁹²

- where the DNSP is the initial Metering Coordinator for existing type 5 and 6 meters and does not operate in the competitive segment of the metering market; and
- where DNSPs are required to provide type 7 metering services.

1086 NSW DNSPs, submission on draft determination, p5.

1087 Ibid, pp5-6.

1088 Victorian DNSPs, submission on draft determination, pp54-55.

1089 Simply Energy, submission on draft determination, p4.

1090 Alinta, submission on draft determination, p1.

1091 Energex, Attachment A p10; Ergon Energy Distribution, p4; NSW DNSPs, p5; SA Power Networks, p14.

1092 ENA, submission on draft determination, p25.

D3.5 Commission's analysis

Changes between the draft and final rule

There are no changes between the draft and final rule on this issue.

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 market¹⁰⁹³, it should be ring-fenced from these businesses¹⁰⁹⁴ 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.¹⁰⁹⁵

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.¹⁰⁹⁶

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;¹⁰⁹⁷ or

¹⁰⁹³ Refer section D3.5.1 below.

¹⁰⁹⁴ 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.

¹⁰⁹⁵ 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 deduced 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.

¹⁰⁹⁶ Ibid., p13.

¹⁰⁹⁷ Section 61(2) of the NEL.

- 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.¹⁰⁹⁸

D3.5.1 Development and timing of the guideline

The final NER requires the AER to develop and publish distribution ring-fencing guidelines by 1 December 2016.¹⁰⁹⁹ The Commission notes the ENA's view that compelling the AER to develop the guideline is unnecessary. However, the Commission considers it important to have guidelines in place for when the new arrangements come into effect so that both DNSPs that intend to operate in the competitive market and other potential Metering Coordinators have certainty about the nature of the ring-fencing arrangements for DNSPs.

The Commission also notes the various views on the timing for the guideline. The Commission considers that the timing appropriately balances providing the AER with sufficient time to develop the guidelines with providing DNSPs sufficient time to put any necessary ring-fencing in place prior to the new arrangements commencing and give Metering Coordinators certainty before the market starts.

D3.5.2 Level of prescription or guidance to the AER

The Commission does not consider it appropriate to amend the distribution ring-fencing guideline provisions as part of this rule change. The guideline applies to the provision of "other services" by DNSPs (i.e. other than direct control services) which is much broader than metering. The Commission considers it out of scope of this rule change to amend the guideline provisions more broadly.

Generally, 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 for metering services;
- 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;
- the level of competition in the market for metering services in which the DNSP is operating; and
- the costs of implementing the measures and the effectiveness of these measures.

More specifically, 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.

¹⁰⁹⁸ Section 61(3) of the NEL.

¹⁰⁹⁹ Clause 11.78.8 of the NER final rule .

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.¹¹⁰⁰ Stakeholders have indicated that the provision of type 5-7 metering services could fall into this category, and some stakeholders consider that these services should not have to be ring-fenced.

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.

Under clause 6.17.2 of the NER the AER may only develop guidelines for the accounting and functional separation of the provision of direct control services by DNSPs from the provision of other services by DNSPs. Therefore while type 5, 6 and 7 metering services continue to be classified as direct control services, and if a DNSP does not provide other services, the guideline will not apply and ring-fencing arrangements will not be required.

However, if competition emerges in the market for type 5 and 6 metering services and they are no longer classified as direct control services, it is appropriate that ring-fencing arrangements could apply. Therefore the Commission considers that DNSPs that the NER should not explicitly exclude type 5 and 6 metering services from any ring-fencing arrangements. Type 7 metering services will continue to be provided on an exclusive basis by DNSPs and it is therefore unlikely that these services will be subject to ring-fencing guidelines in the future.

The Commission also notes the AER's preliminary view that in developing the ring-fencing guideline it may distinguish between competitive and non-competitive segments of the metering market. They stated:¹¹⁰¹

"This could mean that distributors taking on the role of initial Metering Coordinator would not need to be ring-fenced. However, should it then seek to be a Metering Coordinator to provide a new or replacement meter (after [the effective date]) it would need to do so as part of an entity ring-fenced from its regulated business."

The Commission considers the AER may also wish to have regard to the degree of competition that is likely to emerge in a particular area or jurisdiction. For example, the AER may consider waiving some of the ring-fencing requirements in jurisdictions where it is not expected that there will be significant competition for type 4 metering services and there is a risk that the costs of more onerous forms of ring-fencing could outweigh the benefits.

¹¹⁰⁰ 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.

¹¹⁰¹ AER, submission on draft determination, p6.

D4 Access to network related services, including via a network device

Summary

This appendix sets out arrangements regarding:

1. the installation and use of network devices by the LNSP; and
2. an LNSP's ability to access services by way of a metering installation in addition to those set out in the minimum services specification without customer consent.

Appendix E sets out two ways in which DNSPs may access the network-related services and functions enabled by advanced meters.

- 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. The final rule generally does 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.

The final rule allows DNSPs to continue to use existing network devices or install new network devices (subject to certain restrictions), for example if they cannot negotiate a satisfactory arrangement with the Metering Coordinator to access the services enabled by an advanced meter at a connection point. The definition of network device in the final rule is intended to capture the variety of new and existing apparatus or equipment at or adjacent to a metering installation that enables an LNSP to monitor, operate or control the network for the purposes of providing network services. It is broad enough to capture load control equipment and advanced meters deployed by the Victorian DNSPs under the AMI program.

The final rule sets out the permitted use of network devices. Specifically, DNSPs must not use a network device to provide services to a retail customer or any other third party, with the following two exceptions:

- the reconnection or disconnection of a metering installation via remote access, as permitted under energy laws; and
- the provision of services to a retail customer where those services are incidental to the provision of network services that are reasonably required to enable the LNSP to meet its obligations to provide a safe, reliable and secure network.

The final rule introduces a number of rights and obligations of LNSPs and Metering Coordinators with respect to the retention, installation and removal of network devices. In particular, the final rule clarifies the rights and obligations of parties in circumstances where there is insufficient space for both a metering installation and a network device in a metering facility.

Separately, the final rule requires the Metering Coordinator to ensure that access to services in addition to those set out in the minimum services specification is only provided to a person and for a purpose to which the customer has given prior consent. However, it contains an exception allowing DNSPs to access services in addition to those set out in the minimum services specification without the customer's consent (subject to commercial agreement with the Metering Coordinator) provided that, in the Metering Coordinator's reasonable opinion, such access is reasonably required to enable the DNSP to meet its obligations to provide a safe, reliable and secure network.

D4.1 Introduction

This appendix provides an overview of the Commission's final determination with respect to a DNSP's ability to:

- retain or install, and use, network devices; and
- access services in addition to those set out in the minimum services specification that may be enabled by a metering installation without the customer's consent.

This appendix covers:

- how DNSPs access the services enabled by advanced meters, and other network equipment at customer premises, under the existing rules;
- relevant aspects of the COAG Energy Council's rule change request;
- stakeholder views expressed in submissions to the consultation paper, draft determination and additional consultation paper, and in stakeholder workshops held by the AEMC; and
- the Commission's analysis of the key issues and reasons for its final rule.

This issue forms part of the Commission's broader policy position that the relationship between a Metering Coordinator and other parties seeking access to the services enabled by advanced meters should be established on a commercial, not regulated, basis. This is discussed further in Appendix E.

D4.2 Existing arrangements

As discussed in Chapter 3, advanced meters can be used to provide a range of services to consumers, retailers, energy service companies and DNSPs. 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 regulated activities.¹¹⁰² DNSPs do have a right under the existing NER to alter a 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.¹¹⁰³

Network-related services can also be provided to DNSPs via other means at customer premises. For example, a number of DNSPs, particularly those in Queensland and NSW, use load control infrastructure located at the customer's premises to help the DNSP manage demand for electricity during peak usage times. In most cases, customers agree to a part of their electricity load being controlled (e.g. pool pump or hot water) at the DNSP's discretion in exchange for a cash rebate or cheaper tariff for the load being controlled.

D4.3 Rule proponent's view

The COAG Energy Council's rule change request proposed that a DNSP seeking access to the network-related services of advanced meters would be able to offer payment for those services to the Metering Coordinators operating in its network area.¹¹⁰⁴

The rule change request proposed that the Metering Coordinator should be required to ensure that any existing load control functionality at a connection point remains operational when the metering installation is changed.¹¹⁰⁵ It also proposed that, in Victoria, the LNSP would be the Metering Coordinator for the meters it deployed under the AMI program and may continue in this role to the exclusion of other parties for a defined period, which would be established by the Victorian Government through a jurisdictional instrument.¹¹⁰⁶

¹¹⁰² The AER's approach to service classification has meant that DNSPs are not able to install meters with remote reading capability and recover the costs of doing so through regulated revenue.

¹¹⁰³ See existing clause 7.3.4(f) of the NER. Existing 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. The final rule makes a number of amendments to these provisions (clause 7.8.9 of the NER final rule), which are discussed in Appendix D5.

¹¹⁰⁴ COAG Energy Council, rule change request, October 2013, p13.

¹¹⁰⁵ *Ibid.*, p28.

¹¹⁰⁶ *Ibid.*, p33.

The rule change request did not contemplate the installation or retention of a 'network device' as a means of giving DNSPs bargaining power when negotiating for access to network-related services by way of a metering installation.

Other than as it relates to a customer's ability to opt out of the installation of a meter that meets the minimum services specification, the rule change request did not propose any changes to the NER regarding customer consent for services provided by way of a metering installation.

D4.4 Stakeholder views

D4.4.1 Consultation paper and initial workshops

Responses to this aspect of the COAG Energy Council's rule change request primarily focused on:

1. how DNSPs will access network-related services when advanced meters have already been installed;
2. the role that DNSPs could play in facilitating the installation of advanced meters to gain access to network-related services; and
3. the services or functionality that would be available in new meters.

Stakeholder views on issues (1) and (2) are set out in Appendix E. Stakeholder views on issue (3) are set out in Appendix C1.

DNSPs generally supported the proposal that Metering Coordinators be required to ensure that existing load control functionality at a connection point remains operational when the metering installation is changed. The ENA was of the view that DNSPs should be able to retain their own devices where the functionality, price and service offered by the Metering Coordinator is unsatisfactory.¹¹⁰⁷ The NSW DNSPs were of the view that DNSPs should be able to retain their meter where it provides necessary network and access control functions and services. Several DNSPs considered that any meter or equipment used by the DNSP for network purposes should not be removed without the DNSP's consent.¹¹⁰⁸

Energex noted that its extensive load control system is not reliant on advanced meters, and submitted that this system should continue to operate as part of the regulated DSP program. Ergon Energy was of the view that a DNSP's load control capability should not be transferred by other parties to time switches separate from advanced meters if the minimum services specification does not include load control.¹¹⁰⁹

¹¹⁰⁷ ENA, submission on consultation paper, p9.

¹¹⁰⁸ ENA, submission on consultation paper, p23; NSW DNSPs, submission on consultation paper, p2; SA Power Networks, submission on consultation paper, p6.

¹¹⁰⁹ Ergon Energy, submission on consultation paper, p4.

The AER supported the proposal that existing load control capability should be maintained, but questioned the extent to which the existing arrangement between the DNSP and a consumer might delay consumer interest in upgrading to a meter with built in load control capability.¹¹¹⁰

D4.4.2 Draft determination and operational workshop

Network devices

The draft rule introduced the below definition of network device and allowed a DNSP to retain an existing network device, or install a new network device, for the purposes of monitoring or operating its network.

“network device

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 was intended to cover a variety of new and existing network devices that may be used by DNSPs, including existing load control equipment and advanced meters that can be used by the DNSP to help operate or maintain its network, including the AMI meters that were deployed by Victorian DNSPs.

The draft rule introduced a number of provisions regarding the installation and operation of network devices, including that:

- LNSPs:
 - may install a network device at or adjacent to a metering installation for the purposes of monitoring or operating their networks;
 - must not use a network device to remotely disconnect or reconnect a metering installation via remote access;
 - must not remove, damage or render inoperable a metering installation; and
 - must not disclose any information obtained from a network device to any person except as permitted under the rules.
- Metering Coordinators:
 - must cooperate with an LNSP who wishes to install a network device, and provide all reasonable assistance to facilitate its installation at or adjacent to a metering installation; and

¹¹¹⁰ AER, submission on consultation paper, p7.

- must not remove, damage or render inoperable a network device, except with the LNSP’s consent.¹¹¹¹

The reasons for this draft rule are set out in detail in Appendices A1, A4 and D4 of the draft rule determination.

Stakeholders commented extensively on the network devices provisions in their submissions to the draft determination. These are summarised by theme in the subheadings below.

The policy itself

Retailers and several metering businesses were of the view that the network device provisions contradicted the objectives of the rule change and posed a significant risk to the success of metering contestability.¹¹¹² Specifically, they expressed concern that the arrangements do not incentivise DNSPs to negotiate with Metering Coordinators for access to services and may limit a Metering Coordinator’s ability to install new meters. These stakeholders proposed that DNSPs and Metering Coordinators be required to attempt negotiation before installing a network device.¹¹¹³

Some retailers considered that the network device provisions were not necessary because retailers would require their appointed Metering Coordinator to work with DNSPs to ensure that network and other services that benefit the consumer are accommodated in advanced meters.¹¹¹⁴

Consumer groups and retailers raised concerns about inefficient asset and service duplication, and considered that all services should be performed by a single meter.¹¹¹⁵ In this context, CALC was of the view that DNSPs should not be able to install a new network device beyond the life of the existing meter if it was retained as a network device. AGL was of the view that the network device provisions should apply in Victoria only because the meters there are of a higher functionality than in other jurisdictions.¹¹¹⁶

In contrast, DNSPs supported the provisions and suggested a number of amendments to expand and clarify the policy.¹¹¹⁷

¹¹¹¹ See clause 7.8.6 of the NER draft rule.

¹¹¹² Active Stream, submission on draft determination, p2; AGL, submission on draft determination, p3; ERAA, submission on draft determination, p2; Origin Energy, submission on draft determination, pp4-5.

¹¹¹³ AGL, submission on draft determination, p9; Energy Australia, submission on draft determination, p3; Metropolis, submission on draft determination, pp4-5.

¹¹¹⁴ Simply Energy, submission on draft determination, p3.

¹¹¹⁵ CALC, submission on draft determination, p5; ERAA, submission on draft determination, p2; QCOSS, submission on draft determination, p5.

¹¹¹⁶ AGL, submission on draft determination, p9.

¹¹¹⁷ ENA, submission on draft determination, p22; Energex, submission on draft determination, Attachment A, pp5-8; Ergon Energy, submission on draft determination, p4; NSW DNSPs,

The AER noted that DNSPs would need to demonstrate, through the network determination process, that bypass was a more efficient option than sourcing services from the Metering Coordinator.¹¹¹⁸

What network devices can be used for

Most stakeholders that commented on the issue were of the view that the definition of network device needed to be clarified. Retailers were concerned that the definition was too broad, and wanted certainty that it would not allow DNSPs to provide contestable services such as demand response.¹¹¹⁹

DNSPs suggested a number of amendments to the definition of network device to expressly state that they can be used:

- for load control;¹¹²⁰
- to "fulfil their network obligations";¹¹²¹ and
- for disconnection/ reconnection (e.g. for emergency supply capacity limiting and load shedding).¹¹²²

The AER was unclear on how the DNSP would obtain authorisation to deliver the services enabled by a network device, particularly if they were 'customer-facing' services, e.g. load control. It was of the view that the provisions have the potential to confuse the role of the retailer for the customer if the DNSP is providing services directly to the customer.¹¹²³ Lumo and Red Energy considered that the onus should be on the retailer to ensure that the meter installed is capable of providing services the customer wants, for which it would gain the customer's consent.¹¹²⁴

AGL wanted to see more detail in the rules regarding what network devices can and cannot be used for, and how the provisions would be enforced.¹¹²⁵

submission on draft determination, pp13-17; SA Power Networks, submission on draft determination, p12; Victorian DNSPs, submission on draft determination, pp16-20, 36.

1118 AER, submission on draft determination, p8.

1119 AGL, submission on draft determination, p8; ERAA, submission on draft determination, p2.

1120 ENA, submission on draft determination, p22; Energex, submission on draft determination, Attachment A, p7; Ergon Energy, submission on draft determination, p4; NSW DNSPs, submission on draft determination, p15.

1121 ENA, submission on draft determination, p15.

1122 SA Power Networks, submission on draft determination, p12; Victorian DNSPs, submission on draft determination, pp18-19.

1123 AER, submission on draft determination, p8.

1124 Lumo and Red Energy, submission on draft determination, p5.

1125 AGL, submission on draft determination, p8.

Installation of and access to network devices

Several DNSPs questioned whether there would be any costs associated with the Metering Coordinator's requirement to provide reasonable assistance when a DNSP installs a network device.¹¹²⁶ Energex asked that, if these arrangements are to be left to commercial negotiation, that the NER include a requirement that any associated charges are fair and reasonable to provide guidance in the event that dispute resolution under Chapter 8 is required.¹¹²⁷

Stakeholders, particularly DNSPs, requested a number of amendments and clarifications to the draft rule regarding the installation of, and access to, network devices. These included:

- A provision to ensure DNSPs are notified if a Metering Coordinator removes, damages or renders a network device inoperable without the LNSP's consent and reimburse the LNSP for any necessary repairs to or replacement of the device where it has breached this requirement.¹¹²⁸
- A requirement on DNSPs to notify Metering Coordinators when they want to access their network devices, in the context of the Metering Coordinator's accountability for site security.¹¹²⁹
- A provision to require the Metering Coordinator to protect the wiring of existing devices when it installs a new meter.¹¹³⁰
- That clause 7.15.2 of the draft rule be amended to make it clear that DNSPs can access metering installations for any purpose associated with the LNSP's equipment, wiring or devices to which the metering installation is connected or which is co-located within any facility within which the metering installation is housed or located.¹¹³¹
- A requirement for the Metering Coordinator to cooperate regarding ongoing access to a network device, not just for its installation.¹¹³²
- Provisions that set out how multiple devices on a meter board are to be safely managed.¹¹³³

1126 Energex, submission on draft determination, p7; NSW DNSPs, submission on draft determination, p15.

1127 Energex, submission on draft determination, Attachment A, p7.

1128 Clause 7.8.6(b)(2) of the NER draft rule. See Energex, submission on draft determination, Attachment A, p7.

1129 Landis+Gyr, submission on draft determination, p9.

1130 Energex, submission on draft determination, p4; Ergon Energy, submission on draft determination, p4.

1131 Energex, submission on draft determination, Attachment A, p8; ENA, submission on draft determination, p31.

1132 NSW DNSPs, submission on draft determination, p17.

- Clarification that network devices would be installed on the supply side of the meter, because not doing so would render the devices less effective.¹¹³⁴

Several retailers and metering businesses questioned why DNSPs needed to install network devices at the metering installation when they are presumably able to install devices on their own assets (e.g. on distribution poles).¹¹³⁵ Metropolis was of the view that DNSPs should only add equipment to the metering installation if it cannot be installed anywhere else.¹¹³⁶

AusNet Services asked that the rules clarify when a meter (e.g. a meter installed under the AMI program) becomes a network device.¹¹³⁷

Practical restrictions to the installation of network devices

A number of stakeholders noted that not all meter boards would have the physical space to accommodate a new meter if the DNSP chose to retain its existing device/meter, in which case the meter board would have to be upgraded at the consumer's expense.¹¹³⁸ Landis+Gyr, and several stakeholders at the operational workshop, were of the view that the meter should take precedence if the meter board cannot accommodate both it and a network device.¹¹³⁹

Metropolis raised technical issues related to the wiring of advanced meters and network devices, noting that this may be costly to deal with and may increase the likelihood of equipment failure. It noted its current practice of replacing the DNSP's capability 'like-for-like' through the new meter, and suggested that the rules be amended to allow Metering Coordinators to do this.¹¹⁴⁰ It submitted that CT metering cannot support multiple devices. It also noted that the requirement for Metering Providers to verify the safety of metering installations does not extend to network devices, and therefore considered that a DNSP accessing the metering installation to install a network device would have to break the security seals, after which the Metering Provider would have to revisit the site at a cost.¹¹⁴¹

Visibility of existing infrastructure that would fit the definition of network devices was also raised as a concern. Metropolis proposed that DNSPs be required to maintain a

1133 AGL, submission on draft determination, p9.

1134 Victorian DNSPs, submission on draft determination, p20. For example, if the network device was on the customer's side, the Victorian DNSPs submitted that they would be prevented from monitoring network conditions when the meter is de-energised, and that the meter reading would include the energy consumed by the network device when it should not.

1135 Lumo and Red Energy, submission on draft determination, p5; Simply Energy, submission on draft determination, p3.

1136 Metropolis, submission on draft determination, p6.

1137 AusNet Services, submission to draft determination, p14.

1138 Energy Australia, submission on draft determination, p3; Metropolis, submission on draft determination, p3; AGL, submission on draft determination, p8.

1139 Landis+Gyr, submission on draft determination, p9.

1140 Metropolis, submission on draft determination, p5.

1141 Ibid., pp3-4.

register of the services they wish to retain and the onsite equipment that supports them.¹¹⁴² It was of the view that this arrangement would support negotiation between the Metering Coordinator and DNSP. In a similar vein, Lumo and Red Energy were unclear how the Metering Coordinator would become aware that the DNSP wishes to retain its meter as a network device.¹¹⁴³

Costs and consumer involvement

A number of stakeholders were concerned that the network device provisions would result in additional costs for consumers.

Retailers questioned how costs related to network devices would be recovered, for example:

- whether the costs associated with maintaining a network device would be charged to individual consumers, or smeared;¹¹⁴⁴
- whether exit fees would be payable where a network meter is retained but not operated for billing and settlement purposes;¹¹⁴⁵ and
- whether both the capital and non-capital unbundled metering fee will be removed for consumers who have a network device.¹¹⁴⁶

Momentum was of the view that the draft rule should preclude DNSPs from charging customers in respect of network meters that have been retained for network benefits.¹¹⁴⁷ AGL questioned whether network devices would be considered a regulated service. It proposed that the draft rule be amended to require network devices to be ring fenced from the services provided by the metering installation at the site, including any third parties accessing the metering installation.¹¹⁴⁸

Customer choice was also raised as an issue of concern by retailers and consumer groups. A number of stakeholders questioned why DNSPs would not be required to provide consumers with a choice or ability to opt out of the installation of a new network device.¹¹⁴⁹ These stakeholders argued that not involving the customer in the decision making process, or providing them with an ability to opt out, would be inconsistent with the Commission's consumer choice objective. Origin and Metropolis

1142 Ibid., p5.

1143 Lumo and Red Energy, submission on draft determination, p5.

1144 AGL, submission on draft determination, p9; Energy Australia, submission on draft determination, p3; Lumo and Red Energy, submission on draft determination, p5.

1145 ERAA, submission on draft determination, p2; Lumo and Red Energy, submission on draft determination, p5.

1146 Lumo and Red Energy, submission on draft determination, p5.

1147 Momentum, submission on draft determination, p2

1148 AGL, submission on draft determination, p9.

1149 AGL, submission on draft determination, p9; ERAA, submission on draft determination, p2; Lumo and Red Energy, submission on draft determination, p5; QCOSS, submission on draft determination, p5; Simply Energy, submission on draft determination, p3.

were of the view that any network device on the customer's side of the meter should be approved by the customer.¹¹⁵⁰ CALC saw that consumer trust would be significantly undermined if they are paying for a new meter which they were told was required, while the old meter is still working and remains in place for use by the DNSP.¹¹⁵¹

CALC and the Queensland Consumers' Association were of the view that load control should be included in the minimum services specification. If not included in the specification, the QCA proposed that retailers be required to have available and offer a meter that includes load control whenever a consumer in Queensland is offered an advanced meter.¹¹⁵²

Lumo and Red Energy considered that the onus should be on the retailer to ensure that the meter installed is capable of providing services the customer wants, for which it would gain the customer's consent.¹¹⁵³

Customer consent for the provision of network-related services

The draft rule placed an obligation on the Metering Coordinator to ensure that access to services provided by way of a metering installation at a small customer connection point is only given to:

- in respect of a service listed in the minimum services specification, certain specified "access parties";¹¹⁵⁴
- in respect of a service not listed in the minimum services specification, to a person and for a purpose to which the small customer has given prior consent; or
- otherwise, a person and for a purpose that is permitted under the NER draft rule.¹¹⁵⁵

Under the draft rule, these provisions would allow the LNSP to request, and the Metering Coordinator to provide (subject to commercial agreement), access to the LNSP to any of the services set out in the minimum services specification without the customer's prior consent. These aspects of the draft rule are set out in Appendix C1 of the draft determination.

In its submission to the draft determination, the ENA expressed concern that the draft rule would prevent DNSPs from accessing services in addition to those set out in the

¹¹⁵⁰ Metropolis, submission on draft determination, p6; Origin Energy, submission on draft determination, p9.

¹¹⁵¹ CALC, submission on draft determination, p5.

¹¹⁵² CALC, submission on draft determination, p5-6; Queensland Consumers Association, submission on draft determination, p2.

¹¹⁵³ Lumo and Red Energy, submission on draft determination, p5.

¹¹⁵⁴ Clause 7.15.4(b)(1) of the NER draft rule. An access party is a party listed in column 3 of Table s7.5.1.1 of the NER draft rule as being able to access one or more of services listed in the minimum services specification.

¹¹⁵⁵ See clause 7.15.4 of the NER draft rule.

minimum services specification by way of a metering installation without the customer's consent. It argued that requiring customer consent would present a barrier to the delivery of services that benefit customers and the network as a whole.¹¹⁵⁶

At the operational workshop in July 2015, a Victorian DNSP questioned whether, under the draft rule, it would have to obtain customer consent to get the benefit of network-related services that are already being provided by AMI meters.

Following the workshop, the AEMC asked the ENA to provide additional information on the types of services provided by way of a metering installation that it considers should and should not require the customer's prior consent. In summary, the ENA considered that customer consent should not be required for the provision of a service used by the DNSP to monitor, manage or protect:

- the "shared network for the benefit of all customers"; or
- the connection point for the benefit of the individual customer and/or surrounding customers, e.g. neutral integrity monitoring.

It considered that customer consent should be required for the provision of a service used by the DNSP that:

- is requested for a specific customer;
- does not affect any other customer; and
- is not necessary for the purpose of monitoring, managing or protecting the shared network, e.g. load management.

The ENA also provided an indicative list of services it saw as falling into each of the above categories.¹¹⁵⁷

D4.4.3 Additional consultation paper

Network devices

The additional consultation paper sought stakeholder views on the Commission's proposed approach to addressing two specific issues regarding network devices that were raised by stakeholders at the operational workshop and in submissions to the draft determination.

1. What network devices can be used for.
2. The course of action where space on the meter board is limited.¹¹⁵⁸

¹¹⁵⁶ ENA, submission on draft determination, p16.

¹¹⁵⁷ See ENA, supplementary submission on draft determination, pp5-9.

¹¹⁵⁸ See section 5 of the additional consultation paper.

What network devices can be used for

The Commission proposed a number of amendments to the draft rule, including to:

- revise the definition of network device to "apparatus or equipment associated with the provision or the monitoring, operating and control of network services, which may include switching devices, measurement protection and control protection";
- provide that an LNSP may only use a network device for the provision of network services that support the safe, secure and reliable operation of the network;
- provide that an LNSP may not use a network device to provide/on-sell services to third parties unless the service is provided to a customer and is incidental to the provision of network services that support the safe, secure and reliable operation of the network; and
- permit an LNSP to use network devices for remote de-energisation/ re-energisation where they are permitted to re-energise or de-energise a customer's premises under the NER or NERR.

A number of stakeholders considered that the definition of network devices was "wide-ranging" or "broad".¹¹⁵⁹ Energex was of the view that the definition should more clearly and succinctly articulate the AEMC's policy intent, and recommended that the definition be revised to "apparatus or equipment associated with supporting the safe, secure and reliable operation of the network and which may include devices for switching, measurement, protection and control."¹¹⁶⁰ The Victorian DNSPs recommended that the definition be revised to replace the word 'protection' with 'equipment', to make sure that it is technically correct.¹¹⁶¹

DNSPs generally considered that the position set out in the additional consultation paper regarding what a network device can be used for was an improvement to the draft rule.¹¹⁶² The AER was of the view that the network device provisions needed to more closely reflect the policy intent, i.e. that DNSPs may only install network devices as a genuine fall back option should competition not deliver an effective solution.¹¹⁶³

Retailers were generally of the view that network devices should not be used for the delivery of services to customers where those services are contestable, and that DNSPs should not be able to use network devices to provide or on-sell services to third

¹¹⁵⁹ AGL, submission on additional consultation paper, pp10-11; Energy Australia, submission on additional consultation paper, p3; NSW DNSPs, submission on additional consultation paper, p6; Red Energy, submission on additional consultation paper, p5.

¹¹⁶⁰ Energex, submission on additional consultation paper, p8.

¹¹⁶¹ Victorian DNSPs, submission on additional consultation paper, p3.

¹¹⁶² ENA, submission on additional consultation paper, p4; Energex, submission on additional consultation paper, p8; Victorian DNSPs, submission on additional consultation paper, p3.

¹¹⁶³ AER, submission on additional consultation paper, pp1,5.

parties.¹¹⁶⁴ Several retailers considered that network devices should only be used for downstream network-related services, and therefore that the meter needs to be upstream so it is protected from de-energisation by the LNSP via a network device and can measure accurately.¹¹⁶⁵ AGL and Origin considered that, where an advanced meter is to be installed as part of a maintenance replacement or new meter deployment, DNSPs should be obliged to consider the delivery of any service provided by an existing network device via the advanced meter if it is capable of delivering it.¹¹⁶⁶

AGL and Active Stream submitted that a lack of compliance and enforcement provisions regarding the use of network devices, combined with the wide scope of use and no requirement to demonstrate an attempt to negotiate in good faith for the provision of equivalent services through the advanced meter, would make the installation of network devices more attractive to DNSPs.¹¹⁶⁷

Course of action where space on the meter board is limited

The Commission proposed a number of amendments to the draft rule to clarify the course of action where space on the meter board is limited. These amendments are described in the additional consultation paper.¹¹⁶⁸ In summary, the proposed amendments would have permitted a Metering Coordinator or Metering Provider to remove an existing network device to install a new meter, without the LNSP's consent, if it reasonably determines that there is insufficient space to house both the network device and the metering installation within the existing facility used to house the metering installation.

In submissions to the additional consultation paper, retailers and metering businesses generally supported the proposal that the installation of a meter take precedence over the retention of a network device where there is insufficient space on the meter board to accommodate both.¹¹⁶⁹ Energy Australia supported the proposal that Metering Coordinators be required to notify the LNSP if a network device is removed due to space limitations on the meter board.¹¹⁷⁰

¹¹⁶⁴ ERAA, submission on additional consultation paper, p3; Origin Energy, submission on additional consultation paper, p4; Energy Australia, submission on additional consultation paper, p3; Red Energy, submission on additional consultation paper, p5; Active Stream, submission on additional consultation paper, p2.

¹¹⁶⁵ ERAA, submission on additional consultation paper, p2; Red Energy, submission on additional consultation paper, p5.

¹¹⁶⁶ AGL, submission on additional consultation paper, p10; Origin Energy, submission on additional consultation paper, p4.

¹¹⁶⁷ AGL, submission on additional consultation paper, p10; Active Stream, submission on additional consultation paper, p2.

¹¹⁶⁸ See section 5 of the additional consultation paper.

¹¹⁶⁹ Energy Australia, submission on additional consultation paper, p3; Origin Energy, submission on additional consultation paper, p4; Red Energy, submission on additional consultation paper, p5; Vector, submission on additional consultation paper, p4.

¹¹⁷⁰ Energy Australia, submission on additional consultation paper, p3.

DNSPs expressed concern that providing ability for a Metering Coordinator/ Metering Provider to remove a network device without consultation or the consent of the DNSP:

- removes the practical use of a network device as a bypass option for the delivery of network services;
- restricts the development of effective network services; and
- undermines network security and the effectiveness provided by current load control capabilities.¹¹⁷¹

Ergon Energy considered that it would be a cost duplication to require the DNSP to pay for access to services from a Metering Coordinator's advanced meter, or to have network devices re-installed, as the cost of the original network device would have already been shared across the customer base or is being recovered under new cost recovery provisions.¹¹⁷² Energex shared a similar view, submitting that, if load control devices are removed, consumers would lose the benefit of the service but continue to bear the costs as the cost of the device will remain in the DNSPs regulatory asset base. It questioned whether there would be any requirement for consumers to be consulted or advised on the potential financial implications of losing load control capability.¹¹⁷³

The Victorian DNSPs submitted that Metering Coordinators would have an incentive to determine that there was insufficient space on the meter board and so remove the network device, even where this was not the case. They also expressed concern that in Victoria, where AMI meters would become network devices if a new meter is installed, consumers will lose out on benefits they have already paid for if these devices are removed.¹¹⁷⁴ This view was shared by the ENA.¹¹⁷⁵

The Victorian DNSPs set out their view on practical issues associated with the removal of a network device, including that:

- the DNSP would observe a sustained power outage and would not know the cause, and may send a team to assess the site, the costs of which would be billed to the customer or retailer;
- there is an increased risk of un-managed network overloading, increased network augmentation, delayed tariff reassignment and bill shock for customers;

¹¹⁷¹ ENA, submission on additional consultation paper, p5; Energex, submission on additional consultation paper, p9; Ergon Energy, submission on additional consultation paper, p6; NSW DNSPs, submission on additional consultation paper, pp3,5,6; Victorian DNSPs, submission on additional consultation paper, p3.

¹¹⁷² Ergon Energy, submission on additional consultation paper, p7.

¹¹⁷³ Energex, submission on additional consultation paper, p10.

¹¹⁷⁴ Victorian DNSPs, submission on additional consultation paper, pp3-4.

¹¹⁷⁵ ENA, submission on additional consultation paper, p5.

- there is no opportunity for a DNSP to negotiate with the Metering Coordinator for the continued provision of data or services that would no longer be accessible through the network device if it is removed; and
- the proposed amendments would remove the notice required under the existing service level procedure regarding the removal of a meter.¹¹⁷⁶

Most DNSPs were of the view that network devices should not be removed without the DNSP's consent.

The ENA proposed a number of amendments to the provision that would allow a Metering Coordinator to remove a network device without consent, including:

- Either party (i.e. the Metering Coordinator/Metering Provider or LNSP) may install or replace their own meter or network device (as the case may be) if there is sufficient space to house both the metering installation and the network device within the existing facility used to house the metering installation.
- Neither party may remove, damage or render inoperable an existing network device or meter (as the case may be).
- If there is insufficient space, neither party may install or replace their equipment unless both parties agree.¹¹⁷⁷

Several DNSPs recommended that if Metering Coordinators were able to remove network devices without consent in circumstances where space on the meter board is limited, they should be required to provide the DNSP with access to equivalent services through the meter at no cost.¹¹⁷⁸ Ergon Energy submitted that, if this recommendation is not supported, the rules should not permit the removal of a network device that provides load control services without the customer's consent. It also recommended that a clear obligation be placed on the Metering Coordinator to request a change in the applicable network tariff for the site and to provide final reads and other necessary information.¹¹⁷⁹

The Victorian DNSPs proposed that DNSPs be required to not unreasonably withhold consent for the removal of a network device if there is insufficient space. However, they submitted that if the ability for the Metering Coordinator/Metering Provider to remove a network device without DNSP consent is maintained, that:

- operational procedures include a protocol that requires Metering Coordinators to negotiate with DNSPs in relation to access to network-related data and services before the commencement of a replacement program or new meter deployment;

¹¹⁷⁶ Victorian DNSPs, submission on additional consultation paper, p6.

¹¹⁷⁷ ENA, submission on additional consultation paper, p6; Victorian DNSPs, submission on additional consultation paper, p7.

¹¹⁷⁸ Ergon Energy, submission on additional consultation paper, p7; SA Power Networks, submission on additional consultation paper, p6.

¹¹⁷⁹ Ergon Energy, submission on additional consultation paper, p7.

- operational procedures include a mandatory process that the Metering Coordinator must follow when it has removed a network device;
- load control protocols be required to be developed before the commencement date of the new rules;
- a dispute resolution process is introduced;
- an enforcement regime is introduced; and
- access regulation on the Metering Coordinator is introduced, and a review of this be completed within three years of the commencement of the new rules.¹¹⁸⁰

SA Power Networks proposed that the Metering Coordinator should be required to provide the DNSP with reasonable notice that there is insufficient space to install a new meter and retain an existing network device. It proposed that, if the DNSP wishes to retain its network device, both parties be required to enter into negotiations to provide an equivalent facility, with each party bearing a proportionate share of the costs to install their equipment.¹¹⁸¹

Installation of a network device

Origin Energy questioned how DNSPs will communicate to Metering Coordinators that they intend to install a network device, and whether Metering Coordinators were expected to know whether there is room on the meter board to accommodate it.¹¹⁸²

Red Energy considered that DNSPs should be required to provide notification to the Metering Coordinator, the customer and the relevant FRMP where they intend to install a network device.¹¹⁸³ AGL and Red Energy questioned who would pay the costs associated with installing a network device, and who is liable for damages if the LNSP damages a meter when installing a network device.¹¹⁸⁴

The NSW DNSPs proposed that the rules clarify that DNSPs can access a small customer metering installation for the purposes of installing a network device, and require the Metering Coordinator to cooperate to provide ongoing assistance with respect to access to the network device.¹¹⁸⁵

Other comments

Several DNSPs submitted that the network device provisions would conflict with DNSPs' other legislative obligations. The ENA questioned whether the AEMC could

¹¹⁸⁰ Victorian DNSPs, submission on additional consultation paper, p7.

¹¹⁸¹ SA Power Networks, submission on additional consultation paper, pp5-6.

¹¹⁸² Origin Energy, submission on additional consultation paper, p5.

¹¹⁸³ Red Energy, submission on additional consultation paper, p5.

¹¹⁸⁴ AGL, submission on additional consultation paper, p11; Red Energy, submission on additional consultation paper, p6.

¹¹⁸⁵ NSW DNSPs, submission on consultation paper, p7.

make the proposed amendments and whether they would be "legally valid" if made. It argued that a network device is part of the LNSP's infrastructure and is an essential part of equipment that helps it meet its NERL obligations, as well as its jurisdictional statutory rights and obligations in relation to technical and safety requirements for the connection of customer installations to networks. The ENA submitted that there are also jurisdictional protections that relate to interference with DNSP equipment and infrastructure.¹¹⁸⁶

SA Power Networks considered that the removal of, or interference with, a network device undermines their ability to meet obligations under the NERR and may constitute a breach of Section 84 of the SA Electricity Act.¹¹⁸⁷

Energex noted that technical standards in Queensland require that a meter board must be upgraded to provide sufficient space to house both the meter and any DNSP load control device where a customer-initiates a change to its meter.¹¹⁸⁸

Customer consent for the provision of network-related services

The additional consultation paper sought stakeholder views on the Commission's proposed approach to address the concerns raised by DNSPs about this aspect of the draft rule. In summary, the Commission proposed that Metering Coordinators should not be required to ensure that prior consent of the customer is obtained for the provision of certain network-related services. The Commission proposed indicative changes to the draft rule to:

- maintain the requirement for the Metering Coordinator to ensure that access to services in addition to those set out in the minimum services specification is only provided to a person and for a purpose to which the small customer has given its prior consent or that is otherwise permitted under the NER; and
- establish an exception to the above requirement under which the prior consent of the customer is not required to be obtained where the service provided by way of the metering installation is being provided to the LNSP for the purposes of supporting the safe, secure and reliable operation of the network.¹¹⁸⁹

In submissions to the additional consultation paper, DNSPs expressed support for the Commission's proposed approach.¹¹⁹⁰

¹¹⁸⁶ ENA, submission on additional consultation paper, p6.

¹¹⁸⁷ SA Power Networks, submission on additional consultation paper, p4.

¹¹⁸⁸ Energex, submission on additional consultation paper, p10.

¹¹⁸⁹ The proposed amendments are set out in more detail in section 4 of the additional consultation paper.

¹¹⁹⁰ SA Power Networks, submission on additional consultation paper, pp3-4; Energex, submission on additional consultation paper, p8; Ergon Energy, submission on additional consultation paper, p6; Victorian DNSPs, p13; ENA, submission on additional consultation paper, p11; NSW DNSPs, submission on additional consultation paper, p4.

Retailers and metering businesses generally did not support the proposed amendments. They considered that the amendments would provide DNSPs with too much discretion to provide undefined network-related services to customers without consent.¹¹⁹¹ AGL was of the view that providing DNSPs with the ability to access any network-related service without consent:

- would compromise competitive neutrality;
- would compromise customer interests and consumer protection principles;
- may result in customers paying higher network charges for services they had not requested; and
- potentially pre-empts the AER's decisions on the distribution ring-fencing guidelines.¹¹⁹²

Origin Energy proposed that DNSPs be required to demonstrate to the AER and Metering Coordinators that such services support the safe, secure and reliable operation of the network.¹¹⁹³ AGL argued that these services should be explicitly defined in the NER and a civil penalty should apply if a DNSP seeks to access a service that has not been defined as a "shared network benefit service" without the customer's consent.¹¹⁹⁴

D4.5 Commission's analysis

Changes between the draft and final rule

There are a number of changes between the draft and final rule.

With regard to network devices, the final rule:

- amends the definition of 'network device' to better implement the Commission's policy intent regarding the type of equipment that can be a network device, and that the network device provisions apply to devices located at or adjacent to a metering installation;
- provides that an LNSP must not use a network device to provide services to a retail customer or any other third party, except:
 - where those services are incidental to the provision of network

¹¹⁹¹ Active Stream, submission on additional consultation paper, p5; AGL, submission on additional consultation paper, p9; Energy Australia, submission on additional consultation paper, p2; ERAA, submission on additional consultation paper, p2; Metropolis, submission on additional consultation paper, p5; Origin Energy, submission on additional consultation paper, p3; Vector, submission on additional consultation paper, p4.

¹¹⁹² AGL, submission on additional consultation paper, p9.

¹¹⁹³ Origin Energy, submission on additional consultation paper, p3.

¹¹⁹⁴ AGL, submission on additional consultation paper, p9.

services that are reasonably required to enable the LNSP to meet its obligations to provide a safe, reliable and secure network; or

- to disconnect or reconnect a metering installation via remote access.
- clarifies the rights and obligations of parties in circumstances where there is insufficient space for both a metering installation and a network device in a metering facility;
- introduces a requirement for the LNSP to bear all reasonable costs incurred by the Metering Coordinator as a consequence of providing assistance to the LNSP for the installation or maintenance of a network device; and
- clarifies how information obtained from a network device can be used and disclosed.

The final rule adopts the approach set out in the additional consultation paper regarding DNSPs' access to services in addition to those in the minimum services specification. Specifically, it permits LNSPs to access these services without the customer's consent provided that, in the Metering Coordinator's reasonable opinion, such access is reasonably required by the LNSP to enable it to meet its obligations to provide a safe, reliable and secure network.

D4.5.1 Network devices

Under the final rule, and 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 commercially agreed.

Throughout the consultation process DNSPs expressed concern about the potential for Metering Coordinators to exercise market power when dealing with DNSPs. 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 and conclusions 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 final rule permits DNSPs to continue to use existing network devices or install new network devices, subject to certain restrictions.

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, will be sufficient to constrain any exercise of market power. The risk of inefficient duplication should be low, particularly given that expenditure to install and maintain network devices will need to be financed by the DNSP out of its overall revenue allowance that is approved by the AER. As noted by the AER in its submission to the draft determination, "any proposal to bypass competitively procured services and recover the costs of network devices via regulated revenues would ultimately be subject to review in our determinations. A distributor would need to demonstrate why this was a more efficient option than sourcing services from a Metering Coordinator."¹¹⁹⁵

Definition of 'network device' and what they can be used for

The final rule inserts the following definition of 'network device':¹¹⁹⁶

"network device

Apparatus or equipment that:

- (a) enables a *Local Network Service Provider* to monitor, operate or control the *network* for the purposes of providing *network services*, which may include switching devices, measurement equipment and control equipment; and
- (b) is located at or adjacent to a *metering installation* at the *connection point* of a *retail customer*."

The definition is amended from that in the draft rule to better implement the Commission's policy intent and address technical issues raised by stakeholders in submissions. The definition is intended to capture the range of new and existing equipment that may be used by a DNSP to monitor, operate or control the network for the purposes of providing network services, including existing load control equipment and advanced meters deployed by the Victorian DNSPs under the AMI program. The amendments to the definition also clarify that the network device provisions apply to devices located at or adjacent to a metering installation.

The Commission acknowledges the concern raised by several retailers in submissions to the draft determination that the definition of network device provided in the draft rule may put DNSPs at a competitive advantage for services that could be provided on a competitive basis by other parties, e.g. retailers, Metering Coordinators or energy service companies. The Commission agrees with the views of a number of stakeholders that, to support competitive neutrality and the development of a market for the provision of services enabled by advanced meters, DNSPs should not be able to provide services to retail customers or any other third party. This is reflected in the

¹¹⁹⁵ AER, submission on draft determination, p8.

¹¹⁹⁶ Chapter 10 of the NER final rule, under 'network device'.

final rule.¹¹⁹⁷ This restriction only applies to network devices. It does not prevent a DNSP from setting up an appropriately ring-fenced business to provide other services via a metering installation.

However, the final rule includes an exception to this limitation where the services being provided to a retail customer are incidental to the provision of network services that are reasonably required to enable the LNSP to meet its obligations to provide a safe, reliable and secure network.¹¹⁹⁸ The Commission's intention is that the provision of load control services for the purposes of network management¹¹⁹⁹ will fall within the exception to the general prohibition on LNSPs using network devices to provide services to retail customers. DNSPs provide load control services to retail customers, and doing so has benefits for the safety, reliability and security of the distribution network.

The final rule permits an LNSP to use a network device to reconnect or disconnect a metering installation via remote access.¹²⁰⁰ This a change from the draft rule. The Commission made this change to provide DNSPs with additional bargaining power when negotiating for access to network-related services by way of a metering installation. However, DNSPs are unlikely to provide re-energisation and de-energisation services to other parties. This is because the only parties that can arrange for a re-energisation or de-energisation are the DNSP itself or the FRMP. The FRMP is likely to arrange for such services through the Metering Coordinator that it has appointed.

The final rule does not specify how network devices would need to be wired, e.g. on the supply side or customer side. The Commission is of the view that detailed technical arrangements regarding the installation of a network device are best placed in AEMO procedures and managed in accordance with the rights and obligations of LNSPs and Metering Coordinators under the NER. The final rule requires AEMO to develop and maintain procedures that apply to, among other things, Metering Coordinators and LNSPs when installing network devices.¹²⁰¹

DNSPs have clear rights of access to their equipment at a customer's premises under their deemed standard connection contract with customers.¹²⁰² The final rule also requires the Metering Coordinator, at the request of the LNSP, to ensure that the LNSP receives all reasonable assistance to facilitate access to a metering facility for the installation or maintenance of a network device (see below). On these bases, the Commission is of the view that the final rule does not need further prescription regarding an LNSP's right of access to the premises for the purposes of installing or

¹¹⁹⁷ Clause 7.8.6(a)(3) of the NER final rule.

¹¹⁹⁸ Clause 7.8.6(b)(2) of the NER final rule.

¹¹⁹⁹ For example, the use of load control at numerous premises in a DNSP's network as a way of meeting reliability standards rather than augmenting the network.

¹²⁰⁰ Clause 7.8.6(b)(1) of the NER final rule.

¹²⁰¹ See clause 7.8.6(i) of the NER final rule.

¹²⁰² See clause 9.1(d), (f), (g) of the model terms and conditions for deemed standard connection contracts in Schedule 2 of the NERR.

maintaining a network device, as was proposed by several stakeholders in submissions to the draft determination.

The final rule provides that information obtained from a network device (such as usage information) may be accessed by the LNSP, is confidential and must be treated as confidential information in accordance with the NER.¹²⁰³ In response to a request for clarification in the Victorian DNSPs submission on the draft determination, the final rule provides that, for the purposes of the confidential information provisions in Chapter 8 of the NER, information obtained from a network device is deemed to have been provided by the retail customer at the relevant connection point.¹²⁰⁴

Arrangements for the installation, retention and removal of network devices

Installation of a new network device

The final rule amends the rights and obligations of LNSPs and Metering Coordinators with respect to the retention, installation and removal of network devices under the draft rule.

The Commission considers that the installation of a new network device should be a last resort if all other attempts to source network-related services through the meter or other means have failed or are more costly. However, the Commission is of the view that the rules should not prevent the installation of a new network device if there is space within the metering facility¹²⁰⁵ to accommodate both it and the metering installation.

Under the final rule the LNSP:

- may install and maintain a network device provided that the installation and maintenance of the network device does not:
 - adversely impact on the operation of the metering installation, including its compliance with the Rules and procedures authorised under the Rules;
 - damage the metering installation; or
 - prevent the metering installation being maintained or removed, as required, by or on behalf of the Metering Coordinator;¹²⁰⁶

¹²⁰³ Clause 7.8.6(c) of the NER final rule.

¹²⁰⁴ Clause 7.8.6(c)(3) of the NER final rule. The effect of these provisions is that an LNSP will not be permitted to use or disclose information obtained from a network device except as permitted under rule 8.6 of the NER. Specifically, the LNSP must seek the customer's consent before disclosing the information under the consent exception in clause 8.6.2(c).

¹²⁰⁵ The term 'metering facility' is defined in clause 7.8.6(k) of the NER final rule for the purposes of clause 7.8.6 of the NER final rule to mean "the existing facility used to house the metering installation". It is often referred to by stakeholders as a 'meter box' or 'meter board'.

¹²⁰⁶ Clause 7.8.6(a)(1) of the NER final rule.

- must not remove a metering installation, or any part of a metering installation, in order to install or maintain a network device.¹²⁰⁷

Under the final rule, the Metering Coordinator must, at the request of the LNSP, ensure that the LNSP receives all reasonable assistance to facilitate access to a metering facility for the installation or maintenance of a network device.¹²⁰⁸ The final rule introduces a requirement for the LNSP to pay all reasonable costs incurred by the Metering Coordinator as a consequence of providing assistance to the LNSP to facilitate access to a metering facility for the installation or maintenance of a network device.¹²⁰⁹ The Commission considers that it is reasonable for the LNSP to be required to pay for the reasonable costs it imposes on the Metering Coordinator to provide assistance, where such assistance is necessary.

Under the final rule, the Metering Coordinator must not, and must ensure that the Metering Provider does not, except with the consent of the LNSP, or where there is insufficient space¹²¹⁰ for both the metering installation and the network device within the metering facility:

- remove the network device;
- take any action that adversely impacts on the operation of the network device;
- damage the network device; or
- prevent the network device being maintained or removed, as required, by or on behalf of the LNSP.¹²¹¹

The final rule does not introduce a requirement for the LNSP to notify the retailer and/or Metering Coordinators when arranging the installation of a network device. Nor does it require a customer to consent to the installation of a network device. The Commission is of the view that LNSPs should not be required to notify retailers or consumers of, or gain consent for, the installation of a network device provided that there is sufficient space to accommodate it and the LNSP complies with all relevant obligations under the NER and NERR regarding its use.

The final rule does not require Metering Coordinators to assess whether there is sufficient space on a meter board before the LNSP installs a network device. This will be the LNSP's responsibility.

The Commission does not expect that the enabling provisions in the final rule will make the installation of new network devices a more attractive option for DNSPs than seeking to negotiate with the Metering Coordinator for network services to be provided by the metering installation, as was suggested by some stakeholders in their

¹²⁰⁷ Clause 7.8.6(a)(2) of the NER final rule.

¹²⁰⁸ Clause 7.8.6(d)(1) of the NER final rule.

¹²⁰⁹ Clause 7.8.6(e) of the NER final rule.

¹²¹⁰ The concept of 'sufficient space' is explained in the next section.

¹²¹¹ Clause 7.8.6(d)(2) of the NER final rule.

submissions to the additional consultation paper. The cost of new network devices, including their installation and any associated costs, will need to be financed by the DNSP out of its overall revenue allowance that is approved by the AER. Where commercial agreements are more efficient, the incentive based regulatory framework should lead to DNSPs to seek access to network-related services through a Metering Coordinator.

Course of action where space on the meter board is limited

The Commission understands that a large proportion of existing equipment in the NEM that would fit the definition of a network device only has the capability for load control. Generally, the Commission considers that DNSPs should be able to retain existing load control capability, as was proposed in the rule change request, provided there is sufficient space for both the metering installation and the network device.

The primary purpose of a metering installation is to house a meter for billing and settlement of the customer's electricity consumption. A functional, accurate meter is vital to the operation of the NEM. Therefore if there is insufficient space on a meter board to house both a meter and a network device, the meter should have priority.

Under the final rule, this concept of sufficient space is captured by providing an exception to the prohibition on a Metering Coordinator removing a network device without the LNSP's consent if, in the Metering Coordinator's or Metering Provider's reasonable opinion, the metering installation cannot be installed in the metering facility in a manner that allows it to:

- operate effectively and in compliance with the Rules and procedures authorised under the Rules; and
- be maintained or removed, as required, by or on behalf of the Metering Coordinator,

without removing or impacting on the network device.¹²¹²

The final rule also introduces a requirement that the Metering Coordinator may only arrange the removal of a network device if it has complied with any applicable jurisdictional electricity legislation.¹²¹³ This amendment has been made in response to submissions from several DNSPs that the proposed arrangements set out in the additional consultation paper would conflict with legislative arrangements put in place at the jurisdictional level.

If a Metering Coordinator removes or arranges the removal of an existing network device under clause 7.8.6(f) of the NER final rule, it must notify the LNSP as soon as practicable after it is removed and keep a record of the basis upon which it determined that it needed to be removed, including:

¹²¹² See clause 7.8.6(f)(1)-(3) of the NER final rule.

¹²¹³ See clause 7.8.6(f)(4) of the NER final rule.

- the address from which the network device was removed;
- the date and time of removal of the network device;
- photographs and measurements of the network device, the metering installation and the metering facility; and
- any other material in relation to its decision to remove the network device that is required by the procedures developed by AEMO (see below).¹²¹⁴

The Commission considers that these requirements should mitigate the concerns raised by several DNSPs that Metering Coordinators will have an incentive to determine that there was insufficient space on the meter board and so remove the network device, even where this was not the case.

In recognition of the importance of the network device provisions, the Commission recommends in Appendix G that the following obligations be classified as civil penalty provisions:

- the obligations on the Metering Coordinator not to remove, and to ensure that the Metering Provider does not remove, a network device except in the circumstances permitted under the NER;¹²¹⁵
- the obligations on the Metering Coordinator to notify the LNSP of the removal of the network device and retain records of the removal as required by the NER and AEMO procedures;¹²¹⁶ and
- the obligations on the LNSP to install and maintain a network device only in the circumstances permitted under the NER, and to not remove a metering installation in order to install or maintain a network device.¹²¹⁷

The final rule does not require a Metering Coordinator to seek the DNSP's consent prior to the removal of a network device where there is insufficient space (as described above). The Commission is of the view that such an approach is impractical and inefficient because:

- the customer would have a longer period without a working meter if it is being installed under a fault or maintenance replacement scenario;
- this may leave the customer without the services it has signed up for, e.g. through their retailer, which prompted the installation of a new meter;

¹²¹⁴ See clauses 7.8.6(g)-(i) of the NER final rule.

¹²¹⁵ Clause 7.8.6(d)(2) of the NER final rule.

¹²¹⁶ Clause 7.8.6(g) of the NER final rule.

¹²¹⁷ Clause 7.8.6(a)(1)-(2) of the NER final rule.

- a second site visit would be required to carry out the work once the DNSP had made a decision, resulting in additional costs that would be passed on to consumers;
- if the DNSP refused the removal of the network device, billing and settlement of the customer's consumption would not be possible because a working meter cannot be installed, resulting in significant impacts on the customer and the market.

The final rule does not require retailers and their appointed Metering Coordinators to approach DNSPs to offer to provide services delivered by existing network devices through advanced meters when planning a maintenance replacement or new meter deployment, as was proposed in some stakeholder submissions. Nor does it require the Metering Coordinator to provide the DNSP with access to equivalent services, i.e. load control, through their meter at no cost if it has removed the DNSP's network device, as was proposed by several DNSPs. The Commission is of the view that there are sufficient incentives on all parties to do so prior to the commencement of Chapter 7 of the final rule, particularly if the retailer and the customer are receiving a benefit associated with that service.

The Commission is aware of two ways in which DNSPs currently control customer loads.

The first is under the Peak Smart program in Queensland, whereby customers receive a cash rebate when they install a signal receiver on a compliant air conditioning unit. The ability to control the unit's operation is located in the air conditioning unit itself, and so would neither fit the definition of network device nor be affected by changes to the metering installation or the removal of a network device.

In all other cases, the load being controlled by the DNSP (e.g. the customer's hot water or pool pump) is metered separately to the customer's general load. The DNSP assigns the customer to a cheaper network tariff for the load being controlled, which is payable by the retailer to the DNSP and passed on by the retailer to the customer. If the load control capability is removed, the retailer will no longer receive the discounted network tariff. The retailer therefore has a strong incentive to make sure that load control capability is retained when a new meter is installed at that premises so that it can continue to obtain the benefit of the discounted controlled load network tariff. It could do this by either retaining the load control equipment where there is sufficient space, or providing equivalent functionality to the DNSP through the new meter.

Throughout the consultation process, a number of retailers and metering businesses have indicated their willingness to work with DNSPs to provide services that would have otherwise been provided by network devices. For example, in its submission to the draft determination, Metropolis suggested the creation of a register of services currently being used by DNSPs at customer connection points so that Metering Coordinators can install meters that are capable of providing the same services.

For the same reasons, the final rule does not require the Metering Coordinator to provide the DNSP with advance notice that there is insufficient space to install a new meter and retain the existing network device.

The Commission considers that the risk of the benefits of AMI meters to consumers in Victoria being lost if the meters are removed is low. The final rule allows small customers to opt out of the installation of a new meter under a new meter deployment. In other cases, for example where the meter is faulty or due to be replaced, a new meter will need to be installed to enable the accurate billing and settlement of that customer's electricity consumption. Given that the exit fees applying to AMI meters in Victoria are relatively high, the risk of their "indiscriminate removal" by a new Metering Coordinator under a new meter deployment before the end of their useful lives, as was suggested by the ENA, is considered to be very low.

AEMO procedures

In submissions to the draft determination and additional consultation paper, a number of stakeholders raised practical issues associated with the installation and removal of network devices. The Commission is of the view that these issues are best addressed in more detailed AEMO procedures. Consequently, the final rule requires AEMO to develop and maintain procedures regarding a number of aspects of the network device provisions, including:

- when an existing metering installation may be considered a network device;
- the installation or removal of network devices, including the return of a network device to the LNSP; and
- notifications between parties in respect of activities that affect network devices or metering installations, including the provision of records to the LNSP when a network device is removed.¹²¹⁸

D4.5.2 Customer consent for the provision of network-related services

The Commission agrees with the concerns raised by the ENA and other DNSPs that requiring customer consent to be obtained before LNSPs can access network-related services by way of a metering installation may present a barrier to the delivery of services that benefit customers and the network as a whole. This is particularly the case for the provision of services that monitor the integrity or safety of electricity supply (e.g. neutral integrity monitoring) as they do not have a detrimental impact on the quality or reliability of the customer's supply.

Accordingly, the final rule permits Metering Coordinators to give LNSPs access to services in addition to those set out in the minimum services specification without the customer's consent provided that, in the Metering Coordinator's reasonable opinion, such access is reasonably required by the LNSP to enable it to meet its obligations to

¹²¹⁸ See clauses 7.8.6(i) of the NER final rule.

provide a safe, reliable and secure network.¹²¹⁹ The LNSP will need to reach commercial agreement with the Metering Coordinator for access to that service. The provision of network-related services enabled by AMI meters in Victoria would be captured by this rule to the extent that it satisfies the requirements of this clause.

The Commission acknowledges the concerns raised by retailers and metering businesses in their submissions to the additional consultation paper that this approach would provide DNSPs with too much discretion to provide undefined network-related services to customers without consent. However, the Commission does not consider it appropriate to include a prescriptive list of network-related services in the NER that require/ do not require the customer's consent, as available services may change over time. Furthermore, developing and including a prescriptive list of "network shared benefit services", as was proposed by AGL in its submission to the additional consultation paper, is arguably outside the scope of this rule change and may pre-empt the AER's decisions on a distribution ring-fencing guideline. We expect that the development of the ring-fencing guideline will help address the concerns raised by retailers regarding competitive neutrality. Where a service is contestable, the ring-fencing guideline will outline any appropriate ring-fencing arrangements.

Consumers will not pay more because DNSPs are able to access network-related services from advanced meters as an alternative to, for example, network augmentation. Under the existing economic regulatory framework in the NER, the AER determines the maximum revenue allowance based on what is required by a prudent and efficient service provider.

The final rule introduces a 'reasonableness' test to be applied by the Metering Coordinator to determine whether access to services in addition to those in the minimum services specification without the customer's consent is reasonably required by the LNSP to enable it to meet its obligations to provide a safe, reliable and secure network. The Commission is of the view that this test, together with the existing economic regulation framework and the distribution ring-fencing guidelines, will promote competitive neutrality and provide a transparent regime for the delivery of efficient outcomes for consumers.

¹²¹⁹ Clause 7.15.4(b)(3)(i) of the NER final rule.

D4.5.3 AEMC response to other stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

Table D4.1 AEMC response to other stakeholder views

Stakeholder	Issue	AEMC response
Origin Energy	Customer consent should be sought when a new customer moves into a premises where network-services requiring consent are in place. ¹²²⁰	The final rule provides that a Metering Coordinator must ensure that access to services in addition to those in the minimum services specification is only provided to a person and for a purpose to which the small customer has given its prior consent or that is otherwise permitted under the NER. As set out above, the final rule provides an exception to this rule to permit an LNSP to access these services without the customer's consent provided that, in the Metering Coordinator's reasonable opinion, such access is reasonably required by the LNSP to enable it to meet its obligations to provide a safe, reliable and secure network. If the provision of that service satisfies this exception, the consent of the incumbent customer, or any subsequent customer at that site, is not required. If a new customer moves into a premises where a DNSP is accessing services that require consent, the incoming customer's consent would be required for the DNSP to continue accessing those services.

¹²²⁰ Origin Energy, submission on additional consultation paper, p4.

D5 Alterations to type 5 and 6 metering installations to make them capable of remote acquisition

Summary

This appendix sets out the Commission's final determination with respect to the ability of Metering Coordinators, particularly DNSPs in their role as initial Metering Coordinator, to alter a type 5 or 6 metering installation to make it capable of remote acquisition without the metering installation becoming classified as a type 4 or type 4A metering installation.

The Commission considers that in limited circumstances there will be benefits in allowing type 5 and 6 metering installations to be altered without becoming reclassified. First, where there are practical difficulties in manually reading a meter, permitting alterations to allow for remote reading is likely to improve the efficiency, accuracy and frequency of meter reads where it would otherwise be difficult, unsafe or costly to read the meters. This would result in more accurate bills and may reduce the costs of meter reads. These cost savings would ultimately be passed through to consumers.

For this reason, the final rule permits a Metering Coordinator to arrange to alter a type 5 or 6 metering installation where the alteration is reasonably required to address operational difficulties. This is already permitted under the existing NER. The final rule clarifies what is meant by "operational difficulties".

Second, there may be benefits from permitting an LNSP in its role as the initial Metering Coordinator for type 5 and 6 metering installations to upgrade a meter so that it can be remotely read where the purpose for which the LNSP is altering the meter is to enable the LNSP to meet its obligations to provide a safe, secure and reliable network. While there may be other ways in which LNSPs can manage their networks, such as placing devices on pole tops, utilising existing infrastructure in this way may provide a more cost effective approach that could ultimately provide savings for consumers.

The final rule therefore permits the LNSP, as the initial Metering Coordinator, to arrange to alter a type 5 or 6 metering installation to make it capable of remote acquisition where the alteration of the metering installation is reasonably required to enable the Local Network Service Provider to meet its obligations to provide a safe, reliable and secure network.

The Commission is of the view that under both of these scenarios a DNSP would only be able to alter a small proportion of its meters. Consequently, the Commission does not consider that permitting such alterations is likely to impact competition in the market for metering services.

D5.1 Introduction

This appendix outlines the Commission's final rule in relation to circumstances under which a Metering Coordinator may alter a type 5 or 6 meter to make it capable of remote acquisition without the meter becoming classified as a type 4 or type 4A meter.

This appendix covers:

- the existing arrangements relating to the alteration of type 5 and 6 metering installations;
- the COAG Energy Council's rule change request;
- stakeholder views expressed in submissions to the consultation paper, draft determination and additional consultation paper; and
- the Commission's analysis of the issues and reasons for its final rule in relation to the alteration of type 5 and 6 metering installations.

D5.2 Existing arrangements

Currently the NER permits LNSPs to alter a type 5 or 6 metering installation to make it capable of remote acquisition where the LNSP decides that "operational difficulties" reasonable require the metering installation to be capable of remote acquisition.¹²²¹ Where this occurs, the metering installation does not change to type 4.¹²²² In other situations an alteration to, or replacement of, a metering installation by a FRMP must be managed in accordance with the meter churn procedures.

The existing NER specifies that operational difficulties "may include locational difficulties where the metering installation is: (1) at a site where access is difficult; or (2) on a remote rural property".

D5.3 Rule proponent's view

The rule change request did not provide a view on the circumstances in which a Metering Coordinator should be able to alter a type 5 or 6 metering installation without the classification changing.

D5.4 Stakeholder views

D5.4.1 Consultation paper

Several DNSPs submitted that the existing NER does not permit LNSPs to take advantage of network efficiencies that may be enabled by altering type 5 and 6

¹²²¹ Existing clauses 7.3.4(e) and (f) of the NER.

¹²²² Existing clause 7.3.4(g) of the NER.

metering installations to make them capable of remote acquisition. They considered the existing rules:

- are ambiguous, resulting in LNSPs investing in communications-enabled meters that cannot be used to improve network efficiency;¹²²³ and
- only allow a type 6 electronic meter to be communications-enabled at customer's premises and retain that classification where an LNSP can demonstrate it is for operational difficulties.¹²²⁴

D5.4.2 Draft determination

The draft determination did not change the scope of the provision that permits type 5 and 6 metering installations from becoming communications-enabled without the classification changing.

In response to the draft determination, the ENA stated that the restriction on LNSPs being able to upgrade interval meters should be removed to enable remote reading,¹²²⁵ suggesting the following benefits could be achieved:¹²²⁶

- it would clarify the definition of 'operational difficulties' to enable type 5 or 6 meters to be read remotely where the meter is or has become difficult to access for manual meter reading; and
- using the existing monitoring and logging capabilities of an electronic type 5 or 6 meter can be an effective and low-cost means to capture data for network planning and quality of supply management purposes.

SAPN¹²²⁷ and Energex¹²²⁸ provided similar comments regarding expanding the scope of the existing provision. AGL also commented on the current ambiguity in the clause and queried both its purpose and how it would work in practice.¹²²⁹

The ENA submitted that clause 7.10.6(a) of the NER draft rule,¹²³⁰ which relates to metering data performance standards, should be amended to exclude metering installations that have been altered to be capable of remote acquisition under clause 7.8.9 of the NER draft rule.¹²³¹ They note that letters of no-action from the AER have previously been required with respect to potential non-compliance with this clause,

¹²²³ ENA, submission on consultation paper, p28; SA Power Networks, submission on consultation paper, p10.

¹²²⁴ Ergon Energy, submission on consultation paper, p5.

¹²²⁵ ENA, submission on draft determination, p28.

¹²²⁶ ENA, Further advice on metering, 10 August 2015, pp1-2.

¹²²⁷ SAPN, submission on draft determination, p13.

¹²²⁸ Energex, submission on draft determination, p13

¹²²⁹ AGL, supplementary submission on draft determination, p14.

¹²³⁰ Clause 7.10.7 of the final rule.

¹²³¹ ENA, Further advice on metering, 10 August 2015, p1,3.

since while such meters are capable of remote acquisition they are still read as though they were a type 5 or 6 meter.

D5.4.3 Additional consultation paper

In response to these issues by raised DNSPs in submissions on the draft determination, the Commission proposed to allow a Metering Coordinator to alter a type 5 or 6 metering installation to make it capable of remote acquisition in two scenarios:¹²³²

- where, in the Metering Coordinator's reasonable opinion, operational difficulties require the metering installation to be capable of remote acquisition; and
- where the Metering Coordinator is also the LNSP for the relevant connection point under clause 11.78.7(h) of the NER draft rule, the Metering Coordinator's primary purpose for upgrading the meter is to assist it to meet its obligations as an LNSP to provide a safe, secure and reliable network, as determined by the LNSP acting reasonably.

The proposed approach also clarified the definition of "operational difficulties" and proposed amendments to the metering data performance standards set out in clause 7.10.6 of the NER draft rule.

A number of stakeholders did not support the proposed approach set out in the additional consultation paper. The AER, retailers and metering businesses raised the following concerns with the proposed approach:

- It could frustrate the growth of competitively provided advanced meters.¹²³³
- Allowing regulated distributors to undertake further widespread investments may prevent competitive businesses from accessing potential revenue streams.¹²³⁴
- Customers would face higher costs if the meter was altered and subsequently replaced with a type 4 meter.¹²³⁵
- There may be operational difficulties associated with a competitive Metering Coordinator replacing the meter if it malfunctions.¹²³⁶

¹²³² See AEMC 2015, *Expanding competition in metering and related services*, Additional consultation on specific issues, 17 September 2015, Sydney, p25-29 for a full discussion of the proposed approach.

¹²³³ Submissions on additional consultation paper: Active Stream, p5; AGL, p13; AER, pp3-5; EnergyAustralia, p3; Metropolis, p6; and Origin Energy, p5.

¹²³⁴ AER, submission on additional consultation paper, p4.

¹²³⁵ Active Stream, submission on additional consultation paper, p5; AGL, submission on additional consultation paper, p13.

¹²³⁶ Active Stream, submission on additional consultation paper, p5.

- There is potentially broad scope for the provision to lead to further wide-spread regulated meter investments that would be counter to the objective of expanding competition.¹²³⁷
- While the AER may deem an alteration to be inefficient and so refuse additional revenue for this purpose, the NER would permit the DNSP to undertake the alteration anyway.¹²³⁸
- It provides significant competitive power to DNSPs.¹²³⁹
- It reduces incentives for DNSPs to negotiate with Metering Coordinators for services.¹²⁴⁰
- DNSPs have alternatives inside the grid for monitoring the network.¹²⁴¹
- It may increase the number of potential network devices, which could impact the efficiency of the commercial deployment of advanced meters.¹²⁴²

Some of those that did not support the approach considered that DNSPs should only be able to alter a type 5 or 6 metering installation to make it capable of remote acquisition after offering the FRMP the opportunity to replace the meter with a type 4 meter that meets the minimum services specification. Origin Energy and EnergyAustralia considered that the DNSP should only be permitted to undertake the alteration if the FRMP decided not to proceed.¹²⁴³ The AER and Metropolis similarly considered that DNSPs should negotiate through the competitive market for the services it requires.¹²⁴⁴

AGL and Active Stream considered the meter should not be altered if it is not replaced by the FRMP,¹²⁴⁵ i.e. DNSPs should not be permitted to alter metering installations, even where a meter is difficult to read manually, unless the FRMP agrees. Metropolis held a similar view.¹²⁴⁶

The AER considered that "the option that poses the least harm for competition in metering would be for the meter alterations clause to be removed altogether".¹²⁴⁷

¹²³⁷ AER, submission on additional consultation paper, p3-5.

¹²³⁸ AER, submission on additional consultation paper, p3-5.

¹²³⁹ Metropolis, submission on additional consultation paper, p6.

¹²⁴⁰ Metropolis, submission on additional consultation paper, p6.

¹²⁴¹ Origin Energy, submission on additional consultation paper, p5.

¹²⁴² Origin Energy, submission on additional consultation paper, p5.

¹²⁴³ EnergyAustralia, submission on additional consultation paper, p3; Origin Energy, submission on additional consultation paper, p5.

¹²⁴⁴ AER, p3; Metropolis, p6.

¹²⁴⁵ Active Stream, submission on additional consultation paper, p5; AGL, submission on additional consultation paper, p13.

¹²⁴⁶ Metropolis, submission on additional consultation paper, p9.

¹²⁴⁷ AER, submission on additional consultation paper, p4.

Instead, the AER considered that DNSPs could apply to the AER to alter their regulated meter and the AER could consider whether to allow a ring-fencing waiver to allow the investment to be characterised as a direct control service.¹²⁴⁸

The ERAA and EnergyAustralia considered that DNSPs should be required to obtain customer consent where they seek to alter a meter to make it capable of remote acquisition.¹²⁴⁹ The ERAA considered this approach would be consistent with the approach in circumstances where a customer refuses to have an advanced meter installed.

In contrast to the above, the ENA, Energex, the NSW DNSPs and SA Power Networks all expressed general support for the proposed approach.¹²⁵⁰ Energex was disappointed that the proposed approach did not include allowing type 5 and 6 meters to be altered for general efficiency reasons. Ergon Energy Distribution, while generally supportive of the proposed approach, considered the scope of the provision should be broadened to facilitate the development of network tariffs.¹²⁵¹

Several stakeholders commented on the need to clearly define what is meant by "operational difficulties".¹²⁵²

D5.5 Commission's analysis

Changes between the draft and final rule

The final rule expands the circumstances in which a Metering Coordinator may alter a type 5 or 6 meter to make it capable of remote acquisition, compared to the draft rule. Specifically, clause 7.8.9(b) of the NER final rule permits the Metering Coordinator, where it is the LNSP, to alter a metering installation where the alteration is reasonably required to enable the LNSP to meet its obligations to provide a safe, reliable and secure network.

The final rule clarifies the definition of operational difficulties. The final rule also corrects a cross reference in clause 7.10.7(c) that has the effect of clarifying that AEMO may relax or exempt the metering data performance standards associated with a metering installation that is capable of being remotely read where the metering installation has been altered under clause 7.8.9(b) of the NER final rule.

¹²⁴⁸ Ibid., p5.

¹²⁴⁹ EnergyAustralia, submission on additional consultation paper, p3; ERAA, submission on additional consultation paper, p3.

¹²⁵⁰ Submissions on additional consultation paper: ENA, p12; Energex, p11; NSW DNSPs, p4; and SA Power Networks, p6. Note that some of these DNSPs qualified their support, noting their preference to review the legal drafting before it was finalised.

¹²⁵¹ Ergon Distribution, submission on additional consultation paper, p8.

¹²⁵² AER, submission on additional consultation paper, p4; Metropolis, submission on additional consultation paper, p7-8; NSW DNSPs, submission on additional consultation paper, p4 and Vector, submission on additional consultation paper, p4.

To evaluate whether LNSPs should be permitted to alter type 5 or 6 metering installations to make them capable of remote acquisition without having the meter classification change, the Commission considered:

- the potential benefits that would flow to customers from permitting DNSPs to access the network-related benefits of communications enabled meters; and
- the possible impact of such arrangements on competition in the market for metering services, and the long term impact any detrimental impact may have on customers.

This section sets out the Commission's reasoning why, on balance, consumers are likely to benefit from permitting LNSPs to alter meters in certain circumstances.

D5.5.1 Potential benefits from allowing type 5 and 6 metering installations to be altered

There are a number of potential benefits from allowing type 5 and 6 metering installations to be altered to be communications enabled, without requiring them to be reclassified as a type 4 metering installation.

First, where there are genuine practical difficulties in manually reading a meter, allowing it to be read remotely is likely to improve the efficiency, accuracy and frequency of meter reads where it would otherwise be difficult or costly to read the meter. This would result in more accurate bills and may reduce the costs of meter reads. These cost savings would ultimately be passed through to consumers. The existing NER already permits type 5 and 6 meters to be altered to be capable of remote acquisition in these circumstances.¹²⁵³

Second, there may be benefits from permitting an LNSP in its role as the initial Metering Coordinator¹²⁵⁴ for type 5 and 6 metering installations to alter a meter so that it can be remotely read where the alteration is reasonably required to enable the LNSP to meet its obligations to provide a safe, reliable and secure network. For example, depending on the location of a meter on the network, the ability to remotely read a meter may assist the LNSP to control voltage in order to meet power quality standards. An example provided by the ENA is having such meters at several locations within areas of high solar penetration so the LNSP can monitor and manage localised swings in voltage that result from the intermittent nature of solar generation.¹²⁵⁵

While there may be other ways in which LNSPs can manage their networks, such as placing devices on pole tops, utilising existing infrastructure in this way may provide a more cost effective approach that could ultimately provide savings for consumers. Unless LNSPs are able to alter a metering installation to be communications enabled without it becoming classified as a type 4 or 4A meter, LNSPs are unlikely to consider

¹²⁵³ Existing clauses 7.3.4(e) to (g) of the NER.

¹²⁵⁴ Under clause 11.78.7 of the NER final rule.

¹²⁵⁵ ENA, Further advice on metering, 10 August 2015, p. 2.

this option. This is because if the meter is reclassified there would be implications for the LNSP in terms of compliance obligations and cost recovery.

Type 4 metering installations are required to comply with different obligations, including different metering data performance standards, than type 5 or 6 metering installations. For example, type 4 meters are required to be read more frequently than type 5 and 6 meters. Further, there are different accreditation requirements for Metering Data Providers that provide metering services for type 4 versus type 5 or 6 meters. Consequently a change in classification could lead to more onerous obligations on the LNSP.

Further, the LNSP would no longer be able to recover the costs associated with that metering installation via its regulated revenue and would instead need to negotiate with the FRMP and agree terms and conditions to continue providing metering services. While the Commission considers that DNSPs should be negotiating for access to services provided via a metering installation, we are concerned that in this instance it may present a barrier to the efficient use of existing infrastructure.

Permitting a meter alteration under the NER will not, of itself, give DNSPs any additional rights to recover any expenditure incurred in making the meter capable of remote acquisition. Rather, the efficiency of any proposed expenditure will be assessed by the AER as part of a DNSP's revenue determination.

In response to the additional consultation paper published by the Commission, the AER submitted that even if it finds a proposal to upgrade meters inefficient, LNSPs will not be prevented from upgrading meters anyway since distributors have discretion in how they choose to use their overall revenue allowance.¹²⁵⁶ While this is the case, the Commission considers that LNSPs will only do so where they expect such expenditure to result in cost savings.

In each of its distribution determinations for DNSPs during 2015, the AER classified type 5 and 6 metering services as alternative control services. As a result of this classification, the AER created a separate "metering asset base". Any future capital expenditure used to provide type 5 or 6 metering services (metering assets) will therefore not be included in the regulatory asset base (RAB) that applies to standard control services and will not be subject to the RAB roll forward rules in chapter 6 of the NER. There is no requirement under the NER or the AER's recent distribution determinations that future capital expenditure on metering assets is automatically rolled into the metering asset base.

Any future capital expenditure on metering assets will only be able to be recovered by DNSPs through network charges if the AER determines that it is appropriate to allow them to do so as part of a future distribution determination. For example, if a DNSP incurs capital expenditure on metering assets during its current regulatory period, it will only be able to recover that expenditure if the AER decides to include that expenditure in the opening metering asset base in its next distribution

¹²⁵⁶ AER, submission on additional consultation paper, p4.

determination.¹²⁵⁷ In determining whether to allow any future capital expenditure on metering assets to be added to the metering asset base, the AER is able to have regard to a number of factors, including whether that expenditure was efficient.¹²⁵⁸

In the current regulatory period, for example the 2014-19 regulatory period for NSW DNSPs, the AER states in its distribution determinations that the metering asset base is only expected to increase to account for capital expenditure on replacement type 5 and 6 meters installed by DNSPs prior to the commencement of the final rule.¹²⁵⁹

Expenditure on new meters for new and upgraded connections prior to the new arrangements commencing is required to be recovered through an upfront capital charge to the individual customer and will not be added to the metering asset base.¹²⁶⁰

To the extent the expenditure on assets for the purposes of an alteration is to provide both metering services and standard control services (e.g. network monitoring), the existing economic regulation rules in Chapter 6 of the NER will enable the AER to consider the efficiency of that expenditure when determining the DNSP's revenue allowance for future regulatory periods.

For these reasons, a DNSP is only likely to alter a meter if it reduces the DNSP's operating expenditure or capital expenditure on metering assets or operating or maintaining the distribution network. Where this occurs, the savings will be passed on to consumers through lower revenue allowances in the next regulatory period.¹²⁶¹

While there may be initial cost savings for consumers associated with DNSPs utilising existing infrastructure, these benefits need to be weighed against the longer term implications if such a provision had a detrimental impact on the market for Metering Coordinator services. The next section analyses this trade-off and explains why the Commission does not consider the ability for LNSPs to alter metering installations should be broadened any further than where it is reasonably required due to operational difficulties or to enable the LNSP to meet its obligations to provide a safe, reliable and secure network.

D5.5.2 Impact on competition in the Metering Coordinator market

In considering the circumstances under which an LNSP should be able to alter a meter to make it capable of remote acquisition, the Commission has given careful thought to

¹²⁵⁷ Assuming that the AER continues to classify these services as alternative control services and adopts a similar form of control mechanism in its next distribution determination.

¹²⁵⁸ The AER's decision will be based on matters including the national electricity objective, the revenue and pricing principles and the distribution pricing principles.

¹²⁵⁹ See for example, AER, Ausgrid Final decision 2015-19, Attachment 16 - Alternative control services, pp 51-52.

¹²⁶⁰ Ibid.

¹²⁶¹ For example, if the AER allowed a DNSP to recover expenditure incurred in altering a meter under the "operational difficulties" test, the AER would also take into account the DNSP's reduced operating expenditure due to not having to manually read the meter, with the likely impact that the overall revenue that the DNSP could recover through network charges would be reduced.

the potential impact on the market for services provided by Metering Coordinators. The primary purpose of this rule change request is to introduce competition into the provision of metering services and, in doing so, the framework must provide a level playing field for any business seeking to enter this market. Any provisions that may threaten the viability of competition of this new market would be inconsistent with this objective.

This section considers the impact on competition in the Metering Coordinator market in three separate scenarios:

- where there are genuine practical difficulties in manually reading a meter;
- using metering installations to monitor and operate the network; and
- using the metering installation for services beyond network monitoring and operation.

Practical difficulties in reading the meter manually

The Commission acknowledges concerns raised by the AER and retailers regarding the impact on the competitive market for Metering Coordinators of permitting LNSPs to use regulated revenue to alter metering installations for reasons of operational difficulties.

However, meters that are difficult or unsafe to access should make up a minority of an LNSP's metering asset base and the Commission is satisfied that the final rule sufficiently constrains the circumstances in which metering installations can be altered such that it will only occur in a minority of cases. Consequently, the Commission's view is that the benefits from allowing these meters to be altered to be capable of remote acquisition are likely to outweigh the costs. Where such alterations occur, any cost savings from remotely reading the meter will ultimately be passed through to customers. Given the relatively small number of meters that are likely to fall into this category, the Commission does not consider that permitting LNSPs to alter meters where there are operational difficulties in manually reading a meter is likely to impact on competition between Metering Coordinators.

The Commission agrees with stakeholder views that the definition of "operational difficulties" should be clarified and tightened. Under the existing NER, operational difficulties "may include locational difficulties". The use of the words "may include" (rather than "limited to" or words to similar effect) in the relevant provision means "operational difficulties" most likely extends beyond the circumstances specified. This clarification has been addressed in clause 7.8.9(d) of the NER final rule which specifies that operational difficulties arise where the metering installation is difficult or unsafe to access because:

- the metering installation is on a remote property;
- the metering installation is within a secure facility;

- the metering installation is in close proximity to hazardous materials; or
- accessing or arranging access to the metering installation otherwise poses a risk to the safety and security of persons or property.

Using metering installations to monitor and operate the network

Similar to the above, the AER and retailers have raised concerns that permitting LNSPs to alter a meter for the purposes of monitoring and operating the network may have adverse consequences on the market for Metering Coordinator services.

For reasons discussed above, the Commission considers that there are likely to be cost savings for customers from permitting such alterations to occur where the alteration is reasonably required to enable the LNSP to meet its obligations to provide a safe, reliable and secure network. The Commission considers that an LNSP will only be able to justify upgrading a small proportion of its meters under this provision. This is because it is unlikely that an LNSP could justify upgrading a significant number of metering installations in a particular geographic area on the basis that it is required to enable the provision of a safe, reliable and secure network. For this reason, the Commission does not consider that permitting such alterations is likely to impact competition in the market for Metering Coordinator services.

On balance, therefore, the Commission considers there is merit in permitting LNSPs to upgrade meters to make them capable of remote acquisition for reasons relating to meeting their network obligations. This is addressed in clause 7.8.9(b)(2) of the final rule, which allows a Metering Coordinator that is the LNSP to alter a type 5 or 6 metering installation to make it capable of remote acquisition where the alteration of the metering installation is reasonably required to enable the Local Network Service Provider to meet its obligations to provide a safe, reliable and secure network.

Using the meter for services beyond monitoring and operating the network

The Commission holds significant concerns about the ENA and Energex's proposal that any restrictions on LNSPs being able to upgrade interval meters already installed to enable remote reading should be removed. The Commission holds similar concerns regarding Energex's further proposal that if these restrictions are not removed, the clause should be expanded to allow upgrades for reasons of "efficiency" as well as "operational difficulties", while maintaining the type 5 or 6 classification.¹²⁶²

While such metering installations may not meet the minimum services specification,¹²⁶³ they could be used to provide many similar services as metering installations that do meet the minimum services specification. Consequently if the ENA and Energex's proposal was adopted, LNSPs could use such metering installations to compete with other Metering Coordinators while recovering costs via their regulated

¹²⁶² Energex, submission to the draft determination, p. 13.

¹²⁶³ The Commission's understanding is that these meters may not be capable of remote disconnection or reconnection.

revenue. Further, they would potentially face lower costs if they do not have to comply with as many obligations as they would for a type 4 meter. They are also unlikely to be subject to any distribution ring-fencing requirements in relation to these meters. This raises significant competition concerns.

Not all meters are able to be altered to be capable of remote acquisition. However, due to a jurisdictional requirement to roll out "smart ready" meters in Queensland, all meters installed by Energex and Ergon Energy Distribution since 1 July 2007¹²⁶⁴ are capable of being communications enabled. These meters will continue to be rolled out prior to the introduction of this new framework. Consequently if all these meters could be altered, there is likely to be a significant and detrimental impact on competition in the Metering Coordinator market.

While the cost of installing these meters has already been incurred and upgrading them could in some cases be a cost effective outcome, additional costs will need to be incurred to enable remote communications. Further, a new meter that meets the minimum services specification may provide additional services that are desired either by a retailer or a customer that would warrant installing a new meter. It is therefore appropriate that the efficiency of the costs of altering a meter is tested by the market.

For these reasons the final rule does not permit LNSPs to alter type 5 or 6 metering installations for broader efficiency reasons (e.g. to achieve efficiencies in the provision of services as a Metering Coordinator) without them being reclassified as a type 4 metering installation.

The Commission also considers it is not appropriate to permit alterations for the purpose of developing network tariffs, as proposed by Ergon Energy Distribution. DNSPs are already required to develop cost-reflective network tariffs without this information and are doing so based on an average customer load profile. While additional granularity in the data may be useful in developing more tailored tariffs, DNSPs do not require this information to meet their regulatory obligations. If DNSPs see value in this additional detail, they can negotiate with the Metering Coordinator for it to be provided.

For clarity, the NER do not prevent LNSPs from altering a metering installation to make it capable of remote acquisition for reasons other than operational difficulties and where the alteration of the metering installation is reasonably required to enable the LNSP to meet its obligations to provide a safe, reliable and secure network. However, the metering installation would become classified as a type 4 metering installation. If the LNSP considers that altering a meter to make it capable of remote acquisition is an efficient outcome, it can propose that the FRMP appoints it as the Metering Coordinator and agree on how to fund the upgrade on a competitive basis. That will allow the efficiency of the proposed upgrade to be tested by the market.

¹²⁶⁴ Queensland Electricity Industry Code.

D5.5.3 Proposed additional obligations on the LNSP

The Commission agrees with stakeholder views that it would be preferable for meter alterations to be tested by the competitive market. As discussed in Appendix E, there is an opportunity for DNSPs to work with FRMPs and their Metering Coordinators to install new meters that meet the minimum services specification. However, the Commission does not consider that this warrants a requirement for DNSPs to notify FRMPs when they intend to alter a meter as proposed by some stakeholders. This would be inconsistent with other similar provisions contained in the final rule. For example, DNSPs are not required to notify retailers when installing network devices.

The Commission does not consider that DNSPs should be required to obtain customer consent to alter a meter to make it capable of remote acquisition, as proposed by the ERAA and EnergyAustralia. This would be inconsistent with the approach taken for network devices, which do not require customer consent. The final rule also does not require customers to consent to the installation of an advanced meter, although a customer may opt out where it would replace an existing, working meter.

D5.5.4 Requiring an LNSP to apply to the AER

The AER considered that the provisions permitting an LNSP to alter a meter to be communications enabled should be removed altogether. Instead, under the AER's proposal, "should distributors seek to alter their regulated meters in a genuinely select range of exceptional circumstances", the following would occur:

- Distributors could apply to the AER to alter a meter. The AER would then consider the merits of doing so.
- The AER could then consider whether to apply a ring-fencing waiver to allow the investment to be characterised as a direct control service.
- If the AER did not grant the waiver, the distributor would not be able to add the investment to its regulated asset base.

For the reasons set out in section D5.5.1 above, the Commission does not consider that this proposal is necessary. The existing economic regulatory regime under chapter 6 of the NER already provides the AER with sufficient flexibility to assess whether expenditure incurred by a DNSP to alter a type 5 or 6 meter is efficient and should be added to either the metering asset base or form part of a DNSP's capital expenditure or operating expenditure allowance and be recovered through network charges.

The AER's proposal is also not appropriate because deleting the existing NER clause would mean that, even if the AER approved an alteration, the meter would be reclassified as a type 4 meter. Reclassification in this instance would not be appropriate as it could result in more onerous metering data performance standards, meter reading frequency requirements and accreditation requirements applying to the LNSP.

D5.5.5 Exempting altered meters from specific data requirements

The ENA's concerns regarding complying with metering data performance standards appear valid. The primary purpose under the final rule of permitting the meters to be altered without requiring them to be reclassified is to facilitate more accurate meter reads where the meter is difficult to read manually or to allow network monitoring and operation. There is no intention that altering the meter for such purposes should result in a requirement that the meter be read more frequently or be subject to more stringent data collection requirements.

However, the Commission does not consider it necessary to amend the provisions relating to metering data performance standards. Rather, a reference has been corrected in clause 7.10.7(c) of the NER final rule that allows AEMO to relax or exempt the performance standards that relate to a Metering Coordinator ensuring the provision of metering data from a metering installation that has the capability for remote acquisition.

The effect of this amendment is to explicitly include circumstances where the meter has been altered in accordance with 7.8.9(b), i.e. where a type 5 or 6 metering installation has been altered for reasons of operational difficulties or, under the final rule, where the alteration of the metering installation is reasonably required to enable the Local Network Service Provider to meet its obligations to provide a safe, reliable and secure network. Under 7.10.7(c), AEMO and the Metering Coordinator may agree on a lower performance standard that does not place a material risk on AEMO's ability to meet its settlements and prudential requirements obligations under the NER.

D5.5.6 Final decision

The Commission considers that permitting LNSPs to alter existing meters to enable remote acquisition has the potential to provide cost savings for DNSPs which will ultimately be passed through to customers. This is because it allows existing infrastructure to be utilised where this outcome is more efficient than installing a new meter or an alternative device for achieving the same purpose.

The Commission notes the AER and retailers' concerns that this approach could impact the market for competitive Metering Coordinator services. However, given that DNSPs will only be able to alter meters in this way where there are operational difficulties as clearly defined in the final rule or where the alteration of the metering installation is reasonably required to enable the Local Network Service Provider to meet its obligations to provide a safe, reliable and secure network, the Commission considers DNSPs would not be able to justify altering a substantial proportion of their meters under the meter alteration provisions. Consequently, we do not consider that a sufficient proportion of meters will be altered to impact on the level of competition in the market for metering services.

Further, DNSPs will only be able to fund alterations to the meters in two circumstances:

- if the AER approves the expenditure, in which case the efficiency of such alterations will be tested by the AER; or
- where the DNSP funds the alteration through its approved revenue allowance and approved network charges, which it only has an incentive to do if there are cost savings that would ultimately be passed through to consumers.

There is also a risk for the DNSP that the AER decides not to classify the services provided via the altered metering installation as direct control services, in which case the DNSP will not be able to recover any costs via regulated charges. Rather, the DNSP would need to reach a commercial arrangement with the FRMP to continue to provide, and receive payment for, the services.

Finally, altered type 5 and 6 meters may not meet the minimum services specification and consequently may not be capable of providing the services that customers and FRMPs want. There is nothing preventing the FRMP from appointing a new Metering Coordinator and installing a new meter that meets the minimum services specification. This is unlikely to cost the customer any more than it would if the meter had not been altered where the funding for the alteration is through a DNSP's existing revenue allowance and approved network charges.

D5.6 AEMC response to other stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

Table D5.1 Stakeholder views and AEMC response

Stakeholder	Issue	AEMC response
Victorian DNSPs (submission on additional consultation paper, p14)	The Victorian DNSPs note that smart meters may not be remotely read where there is some communication connectivity but the connectivity is not sufficiently reliable to provide smart meter services, including remote reading. They consider that in these circumstances such meters should be able to utilise the restricted communications capability to provide savings for the associated MC, without being classified as type 4 and so without having to support smart meter capabilities.	The detailed performance standards will be set out in AEMO procedures which may not require the same frequency as in Victoria, where AMI meters must be read daily. Further, clause 7.10.7(c) of the NER final rule permits AEMO to relax or exempt the performance standards specified for metering installations that are capable of remote acquisition when AEMO and the Metering Coordinator agree on a lower performance standard that does not place a material risk on AEMO's ability to meet its settlements and prudential requirements obligations under the Rules. The Commission considers

Stakeholder	Issue	AEMC response
		that this provision addresses the concern raised.
Metropolis (submission on additional consultation paper, p8)	Metropolis considered that, if the provision is retained, the metering installation should cease being deemed as type 5 or 6 when the DNSP is no longer the Metering Provider rather than the initial Metering Coordinator. They consider there are compliance issues for the new competitive Metering Coordinator if the deeming ceases when the Metering Coordinator changes.	Meters that are altered in accordance with this provision will continue to be classified as type 5 or 6 meters if the Metering Coordinator changes.

E Access to Metering Coordinator services

Summary

This appendix sets out the Commission's reasons for not regulating access to Metering Coordinator services at the outset of the new arrangements.

Under the new arrangements under the final 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 on reasonable terms and conditions or at efficient prices.

The Commission has considered a number of options for regulating services provided via a metering installation, particularly services that may be valued by DNSPs. These options have ranged from regulation of information provision and the negotiating process through to a regulatory-enforced negotiate/arbitrate model.

The Commission has also identified a number of factors that are likely to mitigate a Metering Coordinator's ability or incentive to restrict access to its services. These include:

- The number of potential entrants into the market competing to offer Metering Coordinator services.
- The risk that metering assets will become stranded if Metering Coordinators restrict access to them.
- The bargaining power of DNSPs as the only potential party interested in particular services.
- The ability of consumers to switch retailers, and so potentially Metering Coordinators, if Metering Coordinators do not offer access to products and services that consumers value.

The Commission has carefully weighed up the likely costs and benefits of various regulatory options, together with the factors that may mitigate competition concerns and the ability under the framework for DNSPs to retain or install network devices, except in certain circumstances. The Commission has concluded that introducing access regulation at the beginning of the market to 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 acknowledges the concerns raised, particularly by

DNSPs, and 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.¹²⁶⁵ The advice did not reach a firm conclusion on the need for regulation and proposed that it be more comprehensively considered as part of this rule change process.¹²⁶⁶

This appendix sets out the Commission's reasons for its decision to not regulate access to Metering Coordinator services.

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 access to Metering Coordinator services will be regulated under the final rule, as discussed in other Appendices. For example:

- the final rule clarifies the split between the regulatory obligations that must be provided under the rules and the discretionary services that may be provided by Metering Coordinators, Metering Providers and Metering Data Providers;
- regulatory obligations of Metering Coordinators and Metering Data Providers includes the provision of metering data to DNSPs and other relevant parties at no charge where required for billing and settlement;
- new and replacement rules and the minimum services specification mean that Metering Coordinators must ensure that all new meters are capable of providing the minimum specification services, which includes several negotiable services that DNSPs may want;

¹²⁶⁵ AEMC, Framework for open access and communications standards, final report, 31 March 2014.

¹²⁶⁶ Ibid., p24.

- where a DNSP acts as the initial Metering Coordinator for existing type 5 and 6 metering installations under the transitional arrangements, the final 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 advanced services provided by way of a metering installation, and metering data must be provided to certain parties as required by the rules and procedures.

This appendix covers:

- the relevant elements of the COAG Energy Council's proposal;
- stakeholder views expressed in submissions to the consultation paper and draft determination 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 access regulation 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.¹²⁶⁷ 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.¹²⁶⁸

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;

¹²⁶⁷ COAG Energy Council, rule change request, October 2013, p10.

¹²⁶⁸ Ibid., p9.

- 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

E.3.1 Consultation paper and initial workshops

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.

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 that DNSPs might require for supporting the operation of, and investment in, the network.¹²⁶⁹ 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.¹²⁷⁰

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.¹²⁷¹ Other metering businesses were strongly against any form of regulation and considered that the market is capable of preventing inefficient meter churn.¹²⁷²

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.¹²⁷³ EnerNOC proposed standard contracts be

¹²⁶⁹ ENA, submission on consultation paper, p7.

¹²⁷⁰ Ibid., p9.

¹²⁷¹ Calvin Capital, submission on consultation paper, p2.

¹²⁷² EDML, submission on consultation paper, p5; Metropolis, submission on consultation paper, p5; Landis+Gyr, submission on consultation paper, p9.

¹²⁷³ EnerNOC, submission on consultation paper, p1.

developed to govern the relationship between Metering Coordinators and third parties, with provisions that prevented Metering Coordinators from including discriminatory prices, terms and conditions in their contracts.¹²⁷⁴

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.¹²⁷⁵

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.¹²⁷⁶

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.¹²⁷⁷ To address these concerns, the ENA, the NSW DNSPs and the Victorian DNSPs suggested that:¹²⁷⁸

- 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.

1274 Ibid., p4.

1275 AER, submission on consultation paper, p9.

1276 AER submission, 28 May 2014, p6.

1277 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.

1278 Ibid.

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.¹²⁷⁹

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.

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 Coordinator¹²⁸⁰ either through options (a) or (b), and should not be allowed to install advanced meters as part of their regulated business, option (c).¹²⁸¹

The AER considered that DNSPs should not be allowed to install meters as part of their regulated business as this could:¹²⁸²

- 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

¹²⁷⁹ ATA and other consumer groups, submission on consultation paper, p7.

¹²⁸⁰ Either an independent Metering Coordinator or its own Metering Coordinator where the necessary ring-fencing arrangements in place.

¹²⁸¹ AER, submission on consultation paper, p6.

¹²⁸² AER, submission on consultation paper, pp6-7.

- 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.¹²⁸³

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).¹²⁸⁴ 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.¹²⁸⁵

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.¹²⁸⁶ SA Power Networks submitted:¹²⁸⁷

“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

¹²⁸³ 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.

¹²⁸⁴ 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.

¹²⁸⁵ 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.

¹²⁸⁶ 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.

¹²⁸⁷ SA Power Networks, submission on consultation paper, pp9-10.

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.¹²⁸⁸

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.¹²⁸⁹ Given 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.¹²⁹⁰ 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’.¹²⁹¹

1288 Energex, submission on consultation paper, p6.

1289 Because the meter may be replaced, or the new Metering Coordinator may decide not to offer the same terms and conditions of access.

1290 ATA and other consumer groups, submission on consultation paper, p3.

1291 PIAC, submission on consultation paper, p1.

E.3.2 Draft determination

Submissions to the draft determination generally addressed two issues:

- the need for access regulation; and
- proposals to regulate access to services provided via the metering installation.

The need for access regulation

The AER,¹²⁹² retailers¹²⁹³ and some metering businesses¹²⁹⁴ agreed with the Commission's draft decision that regulating access to metering services is not necessary and could potentially be detrimental to the market.

A number of stakeholders agreed that several factors would curtail any market power that a Metering Coordinator may have, including:

- DNSPs will have scope to negotiate with different Metering Coordinators who will compete to provide DNSPs with services, particularly where a DNSP requires a limited proportion of coverage in a particular geographic area.¹²⁹⁵
- DNSPs are potentially large customers of Metering Coordinators and have significant bargaining power.¹²⁹⁶
- DNSPs are able to deploy devices for operational and monitoring purposes at locations other than the metering installation such as power poles, and so their demand for services is elastic.¹²⁹⁷
- A competitive framework provides a price signal for DNSPs of the value of the services that they seek.¹²⁹⁸
- There are sufficient commercial drivers for Metering Coordinators to provide services to as many parties as possible.¹²⁹⁹

1292 AER, submission on draft determination, p8.

1293 Submissions on the draft determination: AGL, p7; ERAA, pp2-3; Ergon Retail, p3; ERM Power, p2; Origin Energy, pp9-10; Simply Energy, p3.

1294 EDML, submission on draft determination, p4; Metropolis, submission on draft determination, p9; and Vector, submission on draft determination, p3.

1295 Landis+Gyr, submission on draft determination, p7; Simply Energy, submission on draft determination, p2.

1296 Landis+Gyr, submission on draft determination, p7.

1297 Landis+Gyr, submission on draft determination, p7.

1298 Simply Energy, submission on draft determination, p4-5.

1299 AGL, submission on draft determination, p4,7; AER, submission on draft determination, p8; Origin, submission on draft determination, p9.

- DNSPs and energy service companies have a number of options for accessing services, including negotiating with a range of Metering Coordinators, partnering with retailers and developing innovative solutions outside of the meter.¹³⁰⁰
- The threat of regulation will constrain the behaviour of Metering Coordinators.¹³⁰¹

Simply Energy was concerned that requiring Metering Coordinators to honour previous contracts is onerous and unnecessary until a market failure is demonstrated, and that regulation of terms and conditions (including price) would disproportionately affect small metering businesses and hinder new entry.¹³⁰²

A number of retailers considered that regulation should not be introduced until there is a demonstrated market failure.¹³⁰³

Metropolis expressed the view that the market would develop well without the need to regulate access to Metering Coordinator services.¹³⁰⁴ Similarly, Vector considered that introducing regulation would introduce more costs than benefits.¹³⁰⁵

In contrast, DNSPs,¹³⁰⁶ and EnerNOC¹³⁰⁷ considered some form of access regulation is required to provide network businesses and others with access to competitive metering services. These stakeholders considered that, once engaged, a Metering Coordinator has an effective monopoly over the metering services provided at a particular customer site and therefore should be treated as such.

DNSPs expressed two particular concerns:¹³⁰⁸

- The “split incentives problem” - this would occur prior to a meter being installed, where DNSPs may be negotiating for particular services to be included in a meter and/or negotiating long term agreements with Metering Coordinators. DNSPs are concerned that Metering Coordinators may not have an incentive to include services of value to a network business, or that retailers will not have incentives to engage Metering Coordinators with the requisite skills to provide network services.

1300 ERAA, submission on draft determination, p3; ERM Power, submission on draft determination, p2

1301 Landis & Gyr, submission on draft determination, p7.

1302 Simply Energy, submission on draft determination, p2-3.

1303 Submissions on the draft determination: AGL, p2; ERAA, p3; Ergon Energy Retail, p2; Origin, p9-11; Simply Energy, p3.

1304 Metropolis, submission on draft determination, p9.

1305 Vector, submission on draft determination, p3.

1306 Submissions on the draft determination: ENA, pp17-18 and Appendix B; Energex, Attachment A pp1-2; Ergon Distribution, p2; Jemena, p3; Networks NSW, Attachment B; SA Power Networks, pp11-12; Victorian network businesses, pp32-35.

1307 EnerNOC, submission on draft determination.

1308 ENA, submission on draft determination, pp17-21 and Attachment B.

- The “hold-up problem” - this would occur where a DNSP had successfully negotiated for access to services provided via a particular metering installation, invested in systems on that basis, and the Metering Coordinator then churns. DNSPs are concerned that the new Metering Coordinator may charge a much higher price for continued access, knowing the DNSP has already incurred costs and relies on continued access. Consequently, they were concerned that they would not have an incentive to make investment decisions that relied on secure access to data and functions via a meter at a certain site.¹³⁰⁹

Landis+Gyr expressed similar concerns regarding the incentives of retailers to ensure the meter is capable of providing network services.¹³¹⁰

DNSPs also expressed a number of other concerns relating to potential market power of Metering Coordinators, including:

- practicalities of the processes for identifying the services that DNSPs require;
- retailer incentives;
- the potential control of retailers over contracting timelines; and
- complex planning challenges facing DNSPs.

Networks NSW disagreed that Metering Coordinators would have an incentive to negotiate even where DNSPs are the only buyer of certain services.¹³¹¹ To support this claim, they stated that there is a lack of agreements between network businesses and Metering Coordinators in New Zealand. The ENA also disputed the AEMC’s view that networks could enter into long term (“framework”) agreements with Metering Coordinators, stating that there was no evidence of DNSPs entering into such agreements in overseas markets.¹³¹² The ENA reiterated similar views in its submission on the Additional Consultation Paper on Specific Issues.¹³¹³

Networks NSW also considered that a negotiate/arbitrate framework, some form of price monitoring or an obligation to negotiate in good faith would be sufficient to deter an established metering business from entering the market.¹³¹⁴

DNSPs also raised concerns that retailers and Metering Coordinators would not have an incentive to invest in meters that would provide the types of services that network businesses may wish to procure. They endorsed their consultant's view that a three

¹³⁰⁹ SA Power Networks, submission on draft determination, p12.

¹³¹⁰ Landis+Gyr, submission on draft determination, p5.

¹³¹¹ Networks NSW, submission on draft determination, Attachment B

¹³¹² ENA, submission on draft determination, pp19-20.

¹³¹³ ENA, submission on Additional Consultation Paper on Specific Issues, p.1.

¹³¹⁴ Networks NSW, submission on draft determination, p13-14.

year review was "unlikely to be effective in addressing any actual competition or incentive problems that may emerge".¹³¹⁵

EnerNOC raised three specific concerns with the arrangements set out in the draft determination.¹³¹⁶

- Metering Coordinators do not have an incentive to compete for third parties' business (other than retailers);
- the factors identified by the Commission that should restrain the exercise of market power rely on consumers switching retailers, which will not assist third party providers in negotiating with Metering Coordinators; and
- retailers will be able to frustrate access by third party providers to metering services.

To mitigate these concerns, EnerNOC suggests the NER should include "access and pricing principles" to allow third parties to access metering services, combined with a dispute resolution process. EnerNOC considers this approach would not deter investment and would be low cost.¹³¹⁷

In addition, Embertec was concerned that retailers and Metering Coordinators may set up preferential contracts and limit metering services available to third parties.¹³¹⁸ The Victorian DNSPs noted their understanding that in New Zealand, retailer-metering provider arrangements include exclusive dealings for services and data, reducing the ability of DNSPs to access data and stifling the energy services market.¹³¹⁹

The Electrical Trades Union was concerned that customers may face increased costs if the new framework established an "unregulated monopoly with market power at the customer's premises".¹³²⁰

Proposals to regulate access to services provided via the metering installation

A number of proposals were put forward by DNSPs to address perceived gaps in the framework identified above that may lead to network businesses being unable to negotiate access to network services at an efficient cost.

¹³¹⁵ ENA, submission on draft determination, p20.

¹³¹⁶ EnerNOC, submission on draft determination, pp1-5.

¹³¹⁷ Ibid, pp6-7.

¹³¹⁸ Embertec, Submission on draft determination. p4-5.

¹³¹⁹ Victorian DNSPs, submission on draft determination, p34-35.

¹³²⁰ Electrical Trades Union, submission on draft determination, p7.

The proposed solutions are described in more detail in Table E.1 below, and include:¹³²¹

- requiring a retailer-nominated Metering Coordinator to contact the DNSP and consult on the services that the DNSP requires;
- requiring a retailer to notify a DNSP once it has selected its preferred Metering Coordinator;
- providing a forum where DNSPs can escalate concerns;
- compelling Metering Coordinators to negotiate with DNSPs and provide a dispute resolution process;
- requiring the appointment of a Metering Coordinator to be subject to DNSP approval;
- compelling a Metering Coordinator to accept previous Metering Coordinator-DNSP contract terms at a connection point;
- a new national metering objective to apply to Metering Coordinators; and
- requiring Metering Coordinators to negotiate in good faith and provide a dispute resolution process.

E.4 Commission's analysis

Changes between the draft and final rule

There are no changes between the draft and final rule on this issue.

The Commission first considered the issue of regulating access to metering services in its advice on a framework for open access and common communication standards. The Commission considered at that time that the nature of the competition issues that may arise in 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 may be 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, as consumers would need to first change their retailer in order to secure alternative metering services.¹³²² The Commission's final rule gives large customers the option to appoint their own Metering Coordinator, but does not allow small customers this ability. Appendix B1 sets why the Commission considers

¹³²¹ ENA, submission on draft determination, pp20-21 and Appendix B.

¹³²² AEMC, Framework for open access and communications standards, final report, 31 March 2014.

that the retailer should be responsible for appointing a Metering Coordinator on behalf of a small customer.

DNSPs and energy service companies have also raised a number of concerns regarding their ability to access services provided by way of a metering installation. Their primary concern is that a Metering Coordinator will be a monopoly provider of metering services provided via the metering installation at a given connection point and consequently, they are concerned that they will not be able to negotiate fair and reasonable terms and conditions of access.

In determining whether a framework for access and/or price regulation is required, the Commission has given consideration to the following outcomes, among others, that we are seeking to achieve through this rule change:

- The efficient deployment of advanced metering infrastructure i.e. there are commercial incentives for Metering Coordinators to enter the market and for retailers and DNSPs to invest in advanced metering services.
- Efficient investment in metering capability that will provide broader market benefits, i.e. Metering Coordinators are willing to invest in meters that are capable of providing services in addition to those required under the minimum services specification where there is demand for these services at a price that would recover the costs of providing those services.
- Metering services are priced efficiently, including:
 - for consumers. This will occur where there are multiple Metering Coordinators competing to be appointed by retailers and large customers; and
 - for DNSPs and energy service companies that wish to access services provided via a meter. This will occur where Metering Coordinators and DNSPs/energy service companies are able to agree on terms and conditions for the provision of metering services.

In undertaking this analysis we are cognisant that the market for advanced metering services at the mass market level is a new one. Access regulation is typically imposed in response to a demonstrated market failure where investment in infrastructure has already occurred. Since this market is yet to commence, there can be no demonstrated market failure and no investment has taken place.

The primary risk associated with imposing access and/or price regulation is that it may stifle investment in advanced metering. If this occurs, consumers will not realise the benefits intended to be achieved from this rule change. While advanced meters would eventually replace existing accumulation and interval meters as these existing meters fail, it could take many years for there to be sufficient scale for retailers to provide many of the products and services that advanced meters make possible, and for the cost savings associated with services such as remote meter reading to be realised.

On the other hand, there is a risk that without regulating access, DNSPs and energy service companies will not be able to come to commercial agreements with Metering Coordinators to provide the services they want at a price they are willing to pay. This could prevent parties other than retailers from competing in the market for energy services and could limit the flow-on benefits to customers from a more efficiently managed network.

The Commission has considered these risks in detail and carefully weighed up the likely costs and benefits associated with imposing various forms of access and price regulation compared to relying on commercial incentives. This assessment is structured as follows:

- section E.4.1 sets out an analysis of the competition and other issues that may arise to prevent parties gaining access to metering services provided by way of a metering installation, including the mitigating factors that may prevent Metering Coordinators from exercising any market power they may have;
- section E.4.2 explains why the Commission has confidence that competition in the market for metering services will emerge;
- section E.4.3 summarises the potential models of access regulation that the Commission has examined and why these models are likely to impose high costs or not be effective; and
- section E.4.4 sets out the Commission's final decision.

The final section provides a response to each of the potential options for regulation put forward by DNSPs in their submissions to the draft determination.

E.4.1 Factors that may limit access to metering services

The Commission has considered whether any risks to effective competition may arise that could warrant regulatory intervention. The Commission has identified two possible issues:

- Any Metering Coordinator will have a degree of market power¹³²³ through its control of access to the consumer's meter at a particular connection point. This may incentivise a Metering Coordinator to charge other parties wanting to access services from that meter a higher price than would otherwise be efficient. This may mean consumers pay higher than necessary charges for metering and related services.
 - Under certain ownership models, the Metering Coordinator may have an incentive to not just raise prices, but to discriminate against competitors

¹³²³ 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 it charges, 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.

seeking access to services, restricting competition in the retail market and/or the energy services market. This could occur where a retailer owns¹³²⁴, or is closely affiliated with, a Metering Coordinator.¹³²⁵

- DNSPs have raised a particular concern where they have negotiated an agreement with one Metering Coordinator at a connection point that then churns and DNSPs subsequently have to negotiate with a new Metering Coordinator.
- Since it is the retailer that appoints the Metering Coordinator for small customers, the Metering Coordinator may focus on this relationship and may not have an incentive to provide services that may be sought by other parties. Some stakeholders have referred to this as the "split incentives" problem.

These risks are explored in further detail below.

Risk that Metering Coordinators will set high prices and/or restrict access

All Metering Coordinators, indeed any commercial entity, will seek to charge as high a price as they can for the services they provide. In competitive markets the ability of a buyer to use an alternative provider will constrain the prices that can be charged for a particular service. However, as Metering Coordinators have some degree of control over access to a meter at a particular connection point, they may have a degree of market power. The price that a Metering Coordinator can charge will then depend on the value the buyer places on the services which, in turn, will depend on the alternatives available. This will differ depending on the party that is seeking access to the service.

The following sections consider whether a Metering Coordinator is likely to be able to charge high prices or restrict access to the different entities that are likely to be seeking metering services via a metering installation, i.e:

- a new retailer;
- a DNSP; and/or
- an energy service company.

The section also sets out the implication of retailers effectively owning (via a subsidiary) or being closely affiliated with a Metering Coordinator on these relationships.

¹³²⁴ Retailers, as Market Customers, are prohibited from being registered as a Metering Coordinator. However, they are still able to set up a legally separate entity to perform Metering Coordinator services.

¹³²⁵ There are a number of complementarities between metering and the provision of energy and energy management services that create incentives for retailers to integrate metering services into their businesses or be otherwise closely affiliated with providers of metering services. These complementarities include efficient retailing, including billing, provision of innovative tariff options and provision of value added energy services.

Relationship between a Metering Coordinator and a retailer

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 context, 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.

In this instance, the alternative available to the new retailer is to appoint a new Metering Coordinator. Therefore the incumbent Metering Coordinator faces an incentive to charge a retailer a price for metering services 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 price will depend on the different business models that develop in the market for the provision of metering services.

As a worst case scenario, some Metering Coordinators may charge the new retailer the full costs of providing and installing the meter, as well as the ongoing costs of providing metering services. In this case, 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, making it difficult for a new retailer to develop a bundled energy and metering product that was sufficiently attractive to entice the consumer to switch. Therefore this scenario could therefore create a barrier to switching in the retail energy market.

However, the Commission does not believe this outcome is likely for three main reasons.

First, an incumbent Metering Coordinator may not have recovered the full cost of the meter. Consequently it has an incentive to continue to provide metering services at that connection point by coming to an agreement with the new retailer to avoid having its asset stranded.

Second, the Commission is confident that there will be a number of Metering Coordinators entering the market to provide metering services. Strong competition in this market will improve the ability of a 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.

Third, some Metering Coordinators might be willing to enter into a leasing or rental arrangement with a retailer for the provision of metering services. Where meters are leased, the 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. A new Metering Coordinator may simply install the meter and the retailer starts paying the rental charge, which could be a daily, monthly or annual charge for use of the meter. Consequently an incumbent Metering Coordinator would be more limited in the price it could charge compared to a situation where the retailer would need to pay the full cost of the meter upfront.

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 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.

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 Commission considers that there is a high likelihood that these necessary market conditions will emerge in Australia. The evidence for this is discussed in a brief review of international arrangements in section E.4.2.

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.

Impact of ownership on this relationship

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, including quality of the services provided and/or the prices charged for services.

One example of where this may arise is where there is an incumbent Metering Coordinator that is owned by a retailer and a prospective new retailer is seeking to acquire the customer. The prospective new retailer is therefore seeking access to the services of the incumbent Metering Coordinator at that site.

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 fewer services, 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.

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.

As discussed above, 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.

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 arrangement 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. However, as above, the Commission considers that there will be sufficient alternatives for all retailers to choose from such that retailer-affiliated Metering Coordinators will not be able to exercise any market power. We also note that second tier retailers have not raised concerns with these arrangements.

Finally, we note that in some circumstances a refusal to supply services may breach the *Competition and Consumer Act* (Cth). This may provide a further constraint on the ability and incentive for a Metering Coordinator to engage in this type of conduct.

Relationship between a Metering Coordinator and a DNSP

As discussed above, 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 retailers, DNSPs do not have the ability to appoint an alternative Metering Coordinator as a competitive response.

DNSPs are particularly concerned about circumstances in which they may have negotiated an agreement with a Metering Coordinator and that Metering Coordinator subsequently churns. The new Metering Coordinator at that site has no obligation to provide services to the DNSP on the same terms and conditions, yet the DNSP may be relying on those services to fulfil its network functions. DNSPs have referred to this as the "hold-up" problem.

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.

The ENA's submission on the draft determination raises two concerns with this argument:¹³²⁶

- DNSPs may not be able to understand efficient costs for the provision of services by the Metering Coordinator; and
- Metering Coordinators may not have incentives to offer network services.

On the first point, the Commission notes that in any commercial negotiations taking place in a competitive market the service provider is unlikely to disclose their costs to the access seeker,¹³²⁷ just as the access seeker would not reveal the maximum price it is willing to pay for the services being offered. Rather, negotiations take place between these limits. In the case of the market for metering services, the Commission expects that Metering Coordinators will have sufficient incentive to obtain an additional revenue stream to negotiate a reasonable price with DNSPs.

Further, most DNSPs have undertaken trials of advanced meters in their networks. We note that the Victorian DNSPs already have access to this functionality through their AMI meters, and SA Power Networks, Energex and Ergon have all expressed an interest in upgrading their smart ready meters to be capable of remote acquisition at least in part so they can obtain voltage data and other services to help them manage their networks. It therefore seems likely that most DNSPs would have an idea of the costs involved in providing the services that they seek.

The second issue raised by DNSPs is addressed further below.

A second mitigating factor is that, for most network services, DNSPs will not need access to services at all connection points in order to operate the network effectively.

¹³²⁶ ENA, submission on the draft determination, Appendix B, p23.

¹³²⁷ Similarly in a regulated market the regulator has limited access to information regarding efficient costs. Consequently incentive mechanisms are put in place for efficient costs to be revealed over time.

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.

As raised in the ENA submission, the effectiveness of this mitigating factor will depend on the particular service being sought and the proportion of meters required for the service to be effective.¹³²⁸ However, given that DNSPs are likely to be seeking access to, and therefore negotiating for, a bundle of services, it is their overall bargaining power that is of relevance, not their relative bargaining power in relation to each specific service.

Third, DNSPs will have the option of either retaining existing devices or installing new network devices, except in certain circumstances.¹³²⁹ 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.

Further, 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.

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 agreement' is used in this context to refer to an agreement between a DNSP and a Metering Coordinator that sets out a standard set of terms and conditions of access, including price, that will apply when that Metering Coordinator is appointed at a particular connection point in that DNSP's network. These agreements could be negotiated in advance of the Metering Coordinator being appointed at any particular connection point. The DNSP may negotiate multiple such agreements with multiple Metering Coordinators operating in its network.

¹³²⁸ ENA, submission on the draft determination, Appendix B, p23.

¹³²⁹ An LNSP may install and maintain a network device provided that the installation and maintenance of the network device does not: (1) adversely impact on the operation of the metering installation, including its compliance with the Rules and procedures authorised under the Rules; (2) damage the metering installation; or (3) prevent the metering installation being maintained or removed, as required, by or on behalf of the Metering Coordinator.

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, the agreement with the new Metering Coordinator would come into effect, which will further reduce transaction costs and provide the DNSP with certainty about the conditions that will apply if the Metering Coordinator changes.

DNSPs have argued that no such framework agreements have been entered into between distribution network businesses and metering service providers in the UK or New Zealand.

We note that such agreements have operated effectively in New Zealand and the UK between retailers and metering service providers to prevent unnecessary meter churn. The Commission has not been provided with any compelling reasons as to why similar agreements could not work between DNSPs and Metering Coordinators where there is a value proposition for both parties.

Further, there are at least two examples in New Zealand where retailers and distribution businesses have worked together to achieve mutually agreeable outcomes. This includes partnering to roll out advanced meters and agreements to provide metering services. These case studies are set out in Box E.2 below.

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.

The ENA has responded to this suggestion in the draft determination that they "are unaware of any potential DSP aggregator which considers the market power risks are manageable". The ENA further notes that potential DSP aggregators presented evidence at the public forum that they consider there is significant potential for market power to be misused.¹³³⁰ EnerNOC raised a similar point, noting that DSP aggregators have no more bargaining power than networks to negotiate agreements with Metering Coordinators. The relationship between a Metering Coordinator and an energy service company is discussed below.

As the preceding discussion highlights, there are a number of factors that may constrain the pricing behaviour of Metering Coordinators in their negotiations with

¹³³⁰ ENA, submission on draft determination, p19, ENA submission on Additional Consultation Paper on Specific Issues, p1.

DNSPs, and commercial arrangements 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.

Impact of ownership on this relationship

As a monopoly network provider, DNSPs do not operate in the same market as retailers.¹³³¹ Consequently, retailer-affiliated Metering Coordinators are unlikely to have an incentive to discriminate against DNSPs in order to reduce competition in another market.

However, DNSPs and others have raised concerns that Metering Coordinators will not have an incentive to offer network services to DNSPs. This issue is discussed below.

Relationship between a Metering Coordinator and an energy service company

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 DNSPs, an energy service company is not able 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 an 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 through retailers, Metering Coordinators, that can provide these services. Provided the retail market is sufficiently competitive, a Metering Coordinator may risk being replaced if does not provide metering services to energy service companies on sufficiently competitive terms and conditions, as a consequence of retailer churn by a small customer. 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.

Another mitigating factor is the potential for energy service companies to use alternative devices. 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

¹³³¹ While DNSPs do not traditionally operate in the same market as retailers, we note that there a number of services that they may provide in contest with retailers such as load control. These issues are addressed separately.

of that service. If a 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 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.¹³³²

The incentive for the Metering Coordinator to behave inefficiently in relation to an energy service company is therefore constrained by a competitive retail market, the presence of other Metering Coordinators in the market and the existence of alternative devices to provide energy service companies with the services they require.

We acknowledge that, given retailers may also operate in the energy services market, energy services companies may face additional difficulties in accessing metering services compared with DNSPs. This is discussed in the next section.

Impact of ownership on this relationship

Where a Metering Coordinator is closely affiliated with a retailer, it may have an incentive to deny or frustrate access by energy service companies to 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;

¹³³² An advanced meter would be required to create the pricing signal that makes energy management worthwhile from the consumer's perspective.

- 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.

Where there is a vertical relationship there will be a clear incentive for the retailer-affiliated Metering Coordinator to provide access in a way that enhances the competitiveness of its retailer owner or closely affiliated retailer in the retail market. However, if consumers value energy management services they will look for retailers that can provide those services. The retailer may 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.

As discussed above, energy service companies may also have access to alternative technologies that provide the same information that they could obtain from the Metering Coordinator.

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 may create incentives for any retailer to provide access to functionality it controls where it is efficient to do so.

EnerNOC has challenged this view, noting that:¹³³³

- customers generally choose a retailer based on the retail energy component, not any third party services; and
- even where a third party service provider can convince a customer to change its retailer, the retail contract itself may present a barrier if it is a long-term contract with exit fees.

The Commission accepts that the factors mitigating any ability for Metering Coordinators to discriminate against energy service companies are weaker than for DNSPs or retailers. However, for reasons discussed below, the Commission considers that at this time the costs and risks associated with implementing a form of price and/or access regulation are likely to be higher than the benefits, and that the approach taken in the final rule is more likely to be in the long term interests of consumers. Barriers to energy services companies accessing services via metering installations will be an important consideration in the proposed review of the need for access regulation following the commencement of the new arrangements.

¹³³³ EnerNOC, submission on draft determination, p4.

Incentives to offer third party services

DNSPs and others have raised concerns that Metering Coordinators may not have incentives to invest in meters that are capable of providing the services of value to DNSPs, and that retailers do not have incentives to engage Metering Coordinators with the requisite skills to provide network services. This has been termed by some stakeholders the "split incentives" problem.

This issue was considered by the New Zealand Electricity Authority (then the Electricity Commission), who found that these concerns were unfounded. Their findings are set out in Box E.1 below.

Box E.1 Functionality of meters under a retailer-led roll out: the New Zealand experience

In 2009 the New Zealand Electricity Authority (then the Electricity Commission) was asked to investigate whether the roll-out of AMI should be regulated, and make a recommendation to the Minister of Energy and Resources on whether technical standards for AMI systems should be regulated, or whether the voluntary AMI guidelines in place were adequate. The Electricity Authority concluded that regulation of the roll out was not required and that there was high compliance with the voluntary guidelines¹³³⁴. They recommended a small number of additional technical regulations.¹³³⁵

In assessing the need for additional regulation, the Electricity Authority noted concerns held by some stakeholders that "an unregulated, retailer-led AMI roll-out will result in AMI functionality that delivers benefits to retailers, possibly foregoing opportunities for other benefits for consumers, electricity lines companies and the broader economy and environment".

However, the Electricity Authority concluded that these concerns were largely unfounded.¹³³⁶ In contrast, they found that the meters being rolled out by at least four retailers provided the full range of benefits that were anticipated to be made available by the roll out of advanced meters. They noted two exceptions, being last gasp functionality and the HAN interface.

¹³³⁴ Electricity Commission, *Advanced Metering Infrastructure in New Zealand: Roll-out and Requirements*, 3 December 2009.

¹³³⁵ These amendments included: requiring compliance with information exchange formats and protocols to ensure that AMI owners' systems are consistent, making it easier for participants to efficiently communicate with AMI systems; rules relating to access to and security of data collected and stored by AMI be introduced; and rules around the operation of AMI systems in pre-pay mode be introduced, to ensure that pre-pay consumers cannot be disconnected without the advanced meter receiving authorisation from the back office server. In the NEM, these matters are either addressed in the final rule or can be addressed through the implementation of a shared market protocol. The AEMC has provided advice to the COAG Energy Council on what business to business communications should be covered by a shared market protocol and how it should be governed.

¹³³⁶ Electricity Commission, *Advanced Metering Infrastructure in New Zealand: Roll-out and Requirements*, 3 December 2009, p.28.

In relation to last gasp, the Electricity Authority noted that this functionality was not being rolled out because "neither retailers nor distributors are willing to pay the costs of that feature, presumably because the benefits do not outweigh the costs".¹³³⁷ They went on to conclude that "it is appropriate that participants should determine whether last gasp functionality is economic, and accordingly does not recommend regulating to require that last gasp functionality be included in AMI systems".¹³³⁸

Similarly, the Electricity Authority concluded that it would be premature to require advanced meters to include HAN functionality because of, among other things, the speed with which HAN-related technology is evolving and the costs to consumers of requiring AMI to have a HAN interface.¹³³⁹

This issue is linked to the minimum services specification, which DNSPs have argued should be the same as in Victoria.¹³⁴⁰

There are four key reasons why the Commission considers that these concerns will not eventuate.

First, as discussed previously, DNSPs and energy services companies may provide an additional source of revenue for Metering Coordinators. Therefore, having the capabilities, both in terms of meter functionality and the necessary skills, to offer such services may help fund the roll out of advanced meters.

Second, most meters that are available on the market today have at least the same functionality as the Victorian specification. While we are aware of one metering provider that has suggested that meters may be adjusted for the minimum services specification, no other metering providers or potential Metering Coordinators have suggested this is a likely outcome.

Indeed, Vector noted "most smart metering providers in a competitive market are likely to exceed the minimum services specification so they could deliver improved services to their customers and attract new ones".¹³⁴¹ Several stakeholders have advised that in order to earn a return on their initial capital and installation costs, Metering Coordinators are likely to need their meters to remain in place and provide services for 10 to 15 years. Metering Coordinators will risk having their meter replaced early if they are unable to provide the services that are likely to be demanded. Therefore we would expect that Metering Coordinators would seek to have the flexibility to offer many different services over the life of their meters.

1337 Ibid.

1338 Ibid.

1339 Electricity Commission, *Advanced Metering Infrastructure in New Zealand: Roll-out and Requirements*, 3 December 2009, p.32-33.

1340 See Appendix C1.

1341 Vector, submission on draft determination, p2.

Third, there is no evidence that Metering Coordinators will not negotiate with DNSPs to ensure their meters are capable of providing the services that DNSPs want. In contrast, potential metering providers made it clear at several of the workshops held by the AEMC that they intend to negotiate with DNSPs so that their meters have the functionality desired by DNSPs, including load control.

Finally, DNSPs could play a role in facilitating the installation of advanced meters where they have established that there would be a network benefit associated with the installation. This could include:¹³⁴²

- providing an upfront capital contribution to Metering Coordinators in return for the provision of services over a defined period; or
- entering into long-term contracts with Metering Coordinators for the provision of services.¹³⁴³

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 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.

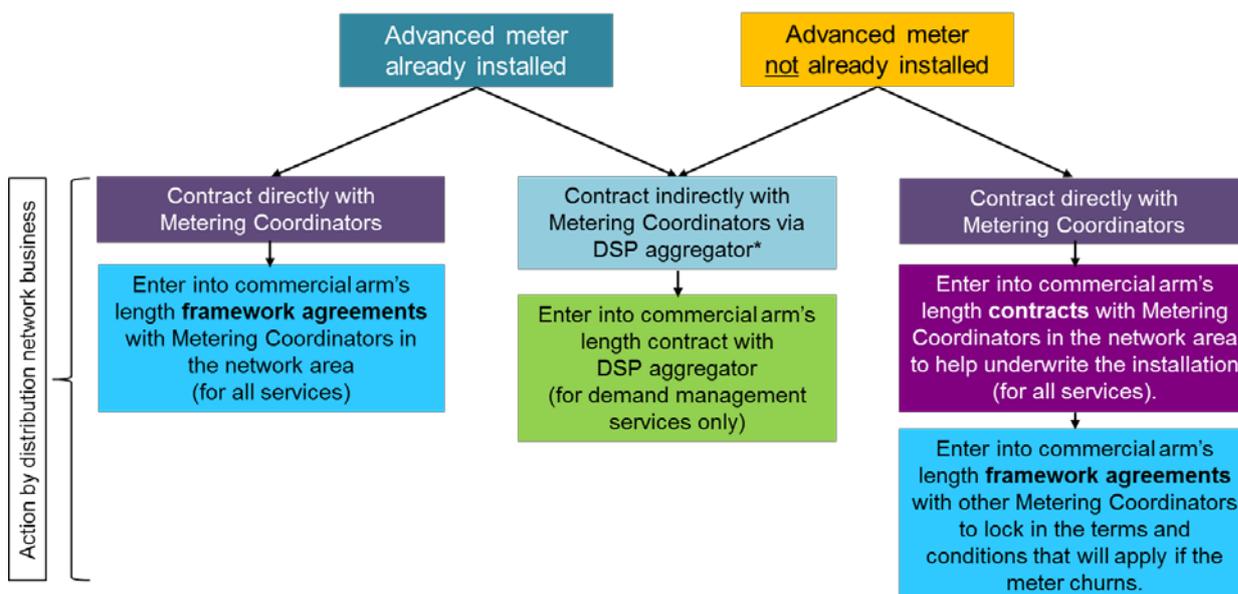
The Commission considers that these commercial arrangements can be used to overcome the concerns raised by DNSPs about the lack of certainty they will have about their ability to access services and the terms and conditions of access if they do not own the meter.

Figure E.1 illustrates the alternative contractual arrangements that a DNSP could use when seeking access to the services enabled by advanced meters.

¹³⁴² During the consultation process stakeholders also identified a possibility for DNSPs to install meters as part of its regulated business if it is prudent and efficient to do so. However, this option is inconsistent with the rule change, which provides for meters being installed under competitive arrangements. Allowing DNSPs to compete in a regulated capacity could have a detrimental effect on competition.

¹³⁴³ 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.

Figure E.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 forecast 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 revenue for the regulatory period.
3. Recovering the costs through the Demand Management Incentive Scheme for expenditure related to demand management.

The Commission notes DNSPs' concerns that there is no evidence of framework agreements having been reached between distributors and Metering Coordinators elsewhere. DNSPs have also suggested that it would be unlikely they would pay an upfront capital contribution to help fund the roll out of advanced meters due to uncertainty about whether they would still be able to access metering services if the Metering Coordinator changes.¹³⁴⁴

While it is up to DNSPs to decide how best to manage their own network within the bounds of the AER's regulatory process and the NER, we note that distributors in New Zealand have been helping to fund the roll out of advanced meters. See Box E.2 below.

¹³⁴⁴ Second stakeholder workshop.

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 other countries. The most compelling evidence comes from New Zealand, where a competitive market in metering services was established in the late 1990s. A number of 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 with the largest market shares are either owned or affiliated with retailers, they provide services on a non-exclusive basis to other retailers.¹³⁴⁵ They are also partnering with distributors, as discussed in Box E.2.

Box E.2 New Zealand case study

Many New Zealand network businesses have reached agreements with a number of retailers and/or metering equipment providers to both receive and provide metering services. Below we provide two examples where retailers and distributors are working together to achieve efficient outcomes for their customers.

SmartCo

SmartCo is a joint venture company owned by seven network businesses.¹³⁴⁶ SmartCo provides smart meter services to energy retailers including, among other things, meter read services to support billing and data services. The owners fund the investment and lease the meters to SmartCo, and also benefit from network services provided via the meter such as faster outage detection and restoration, and improved power quality.

SmartCo sub-contracts Advanced Metering Services, a division of Vector Ltd, to provide a range of services to retailers including meter data management, asset management, deployment and logistics management, integration and

¹³⁴⁵ LECCG, 'Developments in the New Zealand market for Advanced Metering Infrastructure and related services', 3 July 2008

¹³⁴⁶ See www.smartco.co.nz.

development services. While these services are sub-contracted to Advanced Metering Services, SmartCo holds the contracts with retailers and associated obligations.

As well as operating in their own member's distribution areas, SmartCo is rolling out advanced meters in two non-member distribution areas and are willing to providing services to those network businesses once commercial agreements are finalised.

Metrix and Counties Power

Metrix is a metering company owned by a retailer, Mighty River Power. Metrix has been working with Counties Power, a distributor south of Auckland, to install meters in Counties Power's network. Metrix is responsible for providing retailers with the metering data, while Counties Power intend to use the meters to improve power quality, outage detection, reduce outage times and provide pricing incentives to use power during off peak times.¹³⁴⁷

Many retailers and/or metering businesses in New Zealand 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.¹³⁴⁸

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.

A number of distributors have also formed a joint venture, SmartCo, to provide metering services. Further detail on this company is set out in Box E.2.

While the New Zealand market provides a guide as to how the metering services market could develop in Australia, there is no guarantee that similar outcomes will arise in the NEM. However, the New Zealand regulatory arrangements are very light handed. In contrast, the final rule includes provisions to encourage negotiations and strengthen the bargaining power of DNSPs. These measures include, among other things, regulatory obligations on the Metering Coordinator and Metering Data Provider to provide metering data and other specified data to DNSPs and a regulated minimum services specification. The success of the New Zealand advanced meter roll-out without these additional regulations provides the Commission with confidence that the Australian experience will be similarly successful.

¹³⁴⁷ Counties Power, Annual Report 2014, pp3-4.

¹³⁴⁸ Ibid., p3.

Further, 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 already operate in the Australian market for large customers and/or are seeking to establish themselves in Australia (eg Vector, EDMI and Metropolis) and have been active participants in this rule change process. Further, there are a number of retailers in Australia that are in the process of establishing their own Metering Coordinator businesses as stand-alone subsidiaries and are likely to be motivated to seek customers beyond their retailer parent. At least one distributor, United Energy, is also well advanced in establishing a ring-fenced Metering Coordinator business that intends to offer metering services to a range of parties.

E.4.3 The costs and benefits of regulating price and/or access

The Commission considers there are a number of factors that will mitigate the ability of Metering Coordinators to exercise any market power they may have at a particular connection point for reasons set out in section E.4.1. However, since this is an untested market in Australia we acknowledge that there is a risk that DNSPs and, in particular, energy service companies may not have access to the services that they value at an efficient price, or that negotiations may not take place sufficiently early in the process to ensure that services they value are capable of being provided via the meter.

To assess the likely costs and benefits of regulation, the Commission has developed and tested a number of possible light handed regulatory interventions, many of which have been proposed by DNSPs. This section sets out our assessment of these approaches. These range from options that would regulate the commencement of the negotiating process through to ones that would regulate the outcome of the process, i.e. access to metering services.

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.¹³⁴⁹ Less intrusive forms of regulation are beneficial in these circumstances as 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.

The Commission has not considered more intrusive forms of regulation, such as direct regulation of prices, terms and conditions. More intrusive forms of regulation would not be appropriate where there is a degree of competition and, based on the below analysis, the Commission considers that even light handed forms of regulation may pose risks for the development of the market. These more intrusive forms of regulation would only exacerbate these risks.

We have examined five possible approaches to regulatory intervention:

¹³⁴⁹ See Section 4.4, Expert Panel on Energy Access Pricing, 'Report to the Ministerial Council on Energy', April 2006

- a negotiate/arbitrate framework for metering services;
- a form of price monitoring for metering services;
- a requirement for Metering Coordinators to respond to requests for information on the services they could provide via a metering installation;
- a requirement for Metering Coordinators to contact a DNSP once it has entered into a contractual agreement with a retailer to provide metering services in a particular network area;¹³⁵⁰ and
- a requirement for Metering Coordinators to negotiate in good faith on the metering services that they could provide at a particular connection point.¹³⁵¹

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 where investment has already taken place. This raises questions about whether this type of regulation is appropriate in the context of a new 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.

The other three approaches may assist in the negotiation process without going so far as to provide an access right and associated dispute resolution process for access seekers. These types of approaches would have lower risks for Metering Coordinators and so lessen concerns regarding incentives to invest in this market.

DNSPs provided a number of other suggestions for imposing some form of regulatory intervention.¹³⁵² These models were generally developed to address either or both of the "split incentives" and "hold up" problems. While the Commission considered that a number of the proposals had some merit, particularly those that we examine in more detail below, further analysis of these options has led us to conclude that they would be difficult to implement in practice and/or not effective in resolving the concerns raised by DNSPs. Table E.1 sets out a response to each of the options raised in the ENA's submission on the draft determination.

The discussion below sets out for each of the five options an overview of the approach and an assessment of the costs and benefits.

¹³⁵⁰ This option was proposed by Farrier Swier as part of the ENA's submission. See ENA, submission on draft determination, Appendix B, p34.

¹³⁵¹ This option is a slight variation options proposed by Farrier Swier as part of the ENA's submission (see ENA, submission on draft determination, Appendix B) and SA Power Networks (see SA Power Networks, submission draft determination, p12.

¹³⁵² ENA, submission on the draft determination, Appendix B.

Negotiate/arbitrate framework

Overview of the approach

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 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 and who is permitted to access the relevant services under the final rule.
- 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 the Australian Competition and Consumer Commission (ACCC) or the Australian Energy Regulator), 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 address 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.¹³⁵³

¹³⁵³ Part IIIA of the Competition and Consumer Act provides an example of how pricing principles are used to guide decisions on access disputes.

Assessment of the approach

A negotiate/arbitrate model would address DNSPs' concerns regarding the "hold-up" problem by providing a mechanism for them to resolve disputes regarding the terms and conditions on which a Metering Coordinator would offer services. However, the model is unlikely to address the "split incentives" problem as it would not go so far as to require Metering Coordinators to provide access to services that they may not be able to provide, either because the meter does not have the necessary capabilities or because the Metering Coordinator does not have the appropriate accreditation.

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.

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.¹³⁵⁴ 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."¹³⁵⁵ 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.

¹³⁵⁴ Productivity Commission (2006) 'Review of the Price Regulation of Airport Services, Inquiry Report', No 40, 14 December, 2006, p90.

¹³⁵⁵ Productivity Commission (2006) 'Review of the Price Regulation of Airport Services, Inquiry Report', No 40, 14 December, 2006, p91.

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.

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

Overview of the approach

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 pipeline services on light regulation pipelines (light regulation services) under the National Gas Rules (NGR) must publish on their website:

- the prices on offer for light regulation services; and
- the other terms and conditions of access to those services.¹³⁵⁶

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

¹³⁵⁶ 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.

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 needs 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.

Assessment of the approach

Price monitoring provides an alternative option for addressing competition issues. However, this approach is unlikely to resolve DNSPs' concerns regarding either the "hold-up" problem or the "split incentives" problem as it would not provide a mechanism to determine prices or obtain access to particular services.

In addition, 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.¹³⁵⁷

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 costs and risks for potential investors in advanced meters, which could delay the development of the market.

Respond to information requests

Overview of the approach

This model was developed as a possible mechanism to regulate the negotiation process between Metering Coordinators and third parties. This approach would codify a requirement for Metering Coordinators to respond to information requests regarding the services they may be able to provide via a metering installation. Information requests could come from a DNSP, energy service company or retailer. Information requests could relate to a particular connection point (for example, if they are already engaged as Metering Coordinator for that connection point) or a network area (for example, if they intend to operate in that area).

At its most basic, this approach could require Metering Coordinators to provide a list of potential services that they may be willing to offer at a particular connection point or in a network area. The Metering Coordinator would not be obliged to provide those services or to make an offer.

This obligation could go a step further by requiring Metering Coordinators to also provide a list of terms and conditions, including price, associated with each of the services it may be willing to provide. Again, it would not be obliged to make an offer.

We have not assessed an option for Metering Coordinators to be obliged to make an offer because:

- without an enforcement mechanism to require access this provision would be meaningless, as a Metering Coordinator could make an offer that it knows the access seeker would never accept; and
- with an enforcement mechanism this would essentially become a negotiate/arbitrate model, which is discussed above.

Assessment of the approach

The purpose of this requirement would be to encourage negotiations between Metering Coordinators and other parties. While not purporting to completely resolve either the "split incentives" problem or the "hold up" problem, it would contribute to both by encouraging negotiations both prior to a meter being installed as well as where a meter is already in place. However, given Metering Coordinators are not obliged to make an offer, this would be limited in its effectiveness.

This approach is unlikely to be burdensome on Metering Coordinators. We would expect Metering Coordinators to have a list of services that they are able to provide and probably a standard set of terms and conditions on the basis of which they are willing to provide those services. Consequently, in the absence of unreasonably frequent requests and provided that the available services and associated terms and conditions

1357 See for example, ACCC submission to the Productivity Commission's inquiry into the economic regulation of airport services, March 2011.

were the same across multiple connection points, it is unlikely to be significantly costly to Metering Coordinators.

However, this approach is likely to be limited in its effectiveness for the following reasons:

- The Metering Coordinator may not have been appointed as Metering Coordinator at a particular connection point. Therefore it may not be certain about the type of meter that it is likely to install and the services that it may be able to offer, and also may not be certain about the terms and conditions for providing those services. Any obligation on the Metering Coordinator about the nature of the information that must be provided would therefore need to be so general as to make the provision difficult to enforce and potentially meaningless.
- Metering Coordinators already have incentives to respond to information requests from DNSPs and energy service companies about services they may be able to offer. Providing services to DNSPs and energy service companies, as well as retailers, provides an additional source of revenue. Consequently the approach would simply regulate something that Metering Coordinators already have incentives to do and so is unlikely to result in any change in behaviour or outcome.

Require a Metering Coordinator to contact a DNSP

Overview of the approach

This approach was proposed in the ENA's submission on the draft determination.¹³⁵⁸ It would require a Metering Coordinator to contact a DNSP once it has entered into contractual arrangements with a retailer for the provision of metering services in a particular network area. The approach is premised on the assumption that retailers are likely to have contractual arrangements in place with a preferred Metering Coordinator, particularly once the new arrangements come into effect and they will be obliged to appoint a new Metering Coordinator when an existing meter (for which a DNSP will be the initial Metering Coordinator) is faulty or otherwise requires replacement.

At its most basic this approach could simply require a Metering Coordinator to inform the DNSP that they have an agreement with a retailer to provide metering services in a particular area. There would be no obligation on the Metering Coordinator to provide any further information.

Alternatively the notification requirement could be combined with the approach set out above, and require a Metering Coordinator to also inform the DNSP of the services it may be able to offer and potentially provide a set of terms and conditions under which those services may be offered.

¹³⁵⁸ ENA, submission on the draft determination, Appendix B, p34.

Metering Coordinators could also have an obligation to inform DNSPs whenever they are appointed at a particular connection point.

Assessment of the approach

Similar to the above approach, the purpose of requiring notification is to encourage negotiations between DNSPs and Metering Coordinators. As such, this approach would contribute to resolving the "split incentives" problem but is unlikely to resolve the "hold-up" problem.

As above, this approach is likely to be limited in its effectiveness since Metering Coordinators already have incentives to approach DNSPs about providing services from which they may gain additional revenue.

Since there is no concept of a "preferred Metering Coordinator" in the NER, it would not necessarily be clear whether a Metering Coordinator had entered into such an agreement with a retailer. Consequently this provision would be difficult to enforce.

Similar to the above approach, until the Metering Coordinator has been appointed at a particular connection point it may not be clear what services the Metering Coordinator is able to offer the DNSP. Again, this makes the provision difficult to enforce and less likely to address DNSPs' concerns.

The final rule requires AEMO to publish information relating to the process by which people can apply for registration as Metering Coordinator by 1 March 2017.¹³⁵⁹ We anticipate AEMO would begin accepting registrations shortly after this time. Once registered, the identity of Metering Coordinators will be available on AEMO's website. Therefore it is likely that DNSPs will be able to identify Metering Coordinators and begin negotiating with them before the new rule takes effect on 1 December 2017. Early negotiations are likely to maximise the opportunities DNSPs have to arrange for the services that they value to be included in meters. Any obligations on Metering Coordinators would not take effect until after 1 December 2017, delaying DNSPs' opportunities to negotiate with Metering Coordinators under DNSPs' proposed approach.

To be enforceable, the obligation for Metering Coordinators to inform DNSPs of their appointment would need to occur when they are actually appointed at a particular connection point. The Commission considers this would be overly burdensome for both Metering Coordinators and DNSPs as there could potentially be hundreds or thousands of notifications each day. Where a meter is faulty or otherwise requires replacement it may be too late for DNSPs and Metering Coordinators to negotiate for services to be included in the meter as Metering Coordinators will have obligations to replace the meter as soon as practicable. It is also not clear how non-compliance would be demonstrated.

Further, DNSPs will have access to the identity of the Metering Coordinator at a particular connection point through the MSATS database. The Commission

¹³⁵⁹ Clause 11.78.6(d) of the NER.

understands that DNSPs are able to receive a notification where a role changes in MSATS. This existing mechanism appears to provide the same outcome without introducing additional regulations or administrative burdens on Metering Coordinators or DNSPs, to the extent that DNSPs would need to change their systems to receive notifications directly from Metering Coordinators.

The Commission also notes that this approach is unlikely to be able to apply to energy service companies. Unlike DNSPs, of which there is only one operating in any given geographic area, there may be multiple energy service companies operating. It would be unreasonable to require Metering Coordinators to identify all the energy services companies operating in the area. Therefore while it may go part way to assisting DNSPs overcome perceived market power, it would not provide energy service companies with any additional power.

Require a Metering Coordinator to negotiate in good faith

Overview of the approach

This approach is a variation on proposals by Farrier Swier as part of the ENA's submission¹³⁶⁰ and SA Power Networks.¹³⁶¹ It would require a Metering Coordinator, once it has been appointed at a particular connection point, to negotiate in good faith with a party that wishes to access services provided by its metering installation. Specifically, the Metering Coordinator would be required to negotiate in good faith to reach agreement on the terms and conditions on which the Metering Coordinator will grant access to services. There would be no requirement on the Metering Coordinator to make an offer and no recourse to dispute resolution. This is because offering a dispute resolution mechanism would essentially require a negotiate/arbitrate model. The reasons why the Commission does not consider such a model to be appropriate are discussed above.

There would also need to be a reciprocal obligation on the DNSP to negotiate in good faith with the Metering Coordinator for the provision to be effective.

Assessment of the approach

The purpose of this approach would be to encourage negotiation and provide DNSPs with greater certainty that Metering Coordinators will be required to negotiate. It would be unlikely to resolve the “split incentives” problem, as the obligation would not be triggered until the Metering Coordinator was appointed at a particular connection point, however it could theoretically contribute to resolving the “hold-up” problem.

This approach is more intrusive than the previous two approaches in that the Metering Coordinator would have an additional requirement to negotiate in good faith, which implies making some attempt to negotiate. However, like the above approaches, it is likely to be difficult to enforce in practice.

¹³⁶⁰ ENA, submission on draft determination, Appendix B.

¹³⁶¹ SA Power Networks, submission draft determination, p12

Requirements to negotiate in good faith under contract law have traditionally been considered unenforceable because of a lack of certainty about what this obligation requires of parties to a contract. However, Courts have in some cases been prepared to give meaning to an obligation to negotiate in good faith where the relevant contract provides an objective “yardstick” against which compliance with the obligation can be assessed. This could include, for example:

- finite limits for the obligation (eg a time period over which the negotiation must take place); and
- a deadlock resolution mechanism (such as resort to arbitration).

Including a deadlock resolution mechanism to make this obligation more likely to be enforceable would make it similar to the negotiate/arbitrate model.

Further, the circumstances in which Courts have given meaning to obligations to negotiate in good faith have been in the context of existing contracts where the parties have agreed to negotiate on specified unresolved matters. In this context, the purpose of an obligation to negotiate in good faith is to require the parties to the contract to negotiate in a manner that gives effect to the ‘bargain’ represented by the contract. An obligation to negotiate in good faith to form a contract is less likely to be enforceable due to lack of certainty as to what the obligation requires the parties to do given there is no existing bargain between the parties to give effect to.

E.4.4 Final decision

The market for metering services at the mass market level is new and, as such, there is inevitably a degree of uncertainty about how the market is going to develop. The Commission has had to weigh up the expected costs and benefits of two different scenarios. First, if access regulation is imposed, there is a risk that investment in advanced metering is stifled, in which case consumers, retailers, DNSPs and energy service companies may not realise any benefits of advanced meters for many years. Second, if access regulation is not imposed at the beginning of the market, there is a risk that the advanced meters that are rolled out are limited in their capabilities and DNSPs and energy services companies are unable to access services provided via the meter at efficient costs, although consumers and retailers would still receive some benefits.

In assessing these two possible outcomes, the Commission has given consideration to the factors that may mitigate market power concerns and examined a number of different potential approaches to regulating access to services provided by Metering Coordinators. Some of these possible regulatory interventions are less likely to impact investment decisions by Metering Coordinators and therefore pose less risk to the development of the metering services market. The Commission has also drawn on evidence from other jurisdictions, particularly New Zealand where advanced meters have been rolled out via a competitive, retailer-led process.

The Commission has concluded that the risks associated with imposing regulation on access to metering services are likely to outweigh the benefits at this early stage of the market. We consider that the factors identified in the discussion above are likely to curb any market power that Metering Coordinators may have, including:

- the ability for DNSPs to retain and install new network devices, except in certain circumstances;
- DNSPs are a monopsony buyer of many services and so have significant bargaining power; and
- retailers and Metering Coordinators have an incentive to negotiate with DNSPs and energy service companies to obtain revenue to fund the deployment of advanced meters and reduce costs for customers.

The Commission accepts there is a risk that DNSPs and energy services companies will not be able to agree commercial terms with Metering Coordinators to provide the services they want at a price they are willing to pay. For this reason we consider it important to review the state of competition in the metering services market three years after the commencement of the new Chapter 7 of the NER, once the market has had time to develop. The possibility of regulation will also place some pressure on Metering Coordinators to work cooperatively with DNSPs and energy service companies.

Overall, we consider the risks of this new market failing to emerge are greater than the risks associated with DNSPs not being able to reach commercial agreements with MCs for certain network-related services, noting that DNSPs:

- can continue to perform load control via a network device (except in certain circumstances);
- will have access to the data they require to meet their regulatory obligations without having to reach a commercial agreement with MCs; and
- in most jurisdictions are currently operating their networks reliably and meeting their regulatory obligations without access to advanced metering services.

E.4.5 AEMC response to stakeholder proposals

This section sets out the Commission's response to each of the proposals to regulate access to, or the process for negotiating access to, Metering Coordinator services.

Table E.1 Stakeholder views and AEMC response

Proposal by stakeholder	AEMC response
<p>Regulate to compel notice and time-bound opportunity for DNSP and Metering Coordinator negotiation</p> <p>Regulation could require a Retailer to:</p> <ul style="list-style-type: none"> • notify the DNSP when it has selected its preferred Metering Coordinator; and • allow a reasonable period of time (to be specified) after the provision of notice for the DNSP and Metering Coordinator to agree the terms of a network service agreement. (ENA, Attachment B, p35; Victorian DNSPs p35) 	<p>The Commission agrees that it would be beneficial if retailers notified DNSPs if they select a preferred Metering Coordinator and provide an opportunity for DNSPs to negotiate a service agreement. However, the Commission does not consider that this approach should be codified in the NER for two reasons. First, it is likely to be difficult to enforce since: (1) retailers are not required to select a “preferred” Metering Coordinator under the NER; and (2) Metering Coordinators may not be certain about the services they will be able to offer or the terms and conditions on which services may be provided. Second, to make it enforceable would require the DNSP to be informed once the Metering Coordinator has been appointed at a particular connection point, however this could result in hundreds of notifications per day and may also conflict with requirements for a Metering Coordinator to replace a meter as soon as practicable if it faults. DNSPs can already obtain that information from MSATS. See the discussion in section E.4.3 for further discussion on these points.</p>
<p>Regulate Metering Coordinator appointment</p> <p>A retailer must not trigger a retailer-Metering Coordinator contracting process without giving reasonable notice to DNSPs. (Victorian DNSPs p35)</p>	<p>The Commission agrees that it would be beneficial if retailers provided DNSPs with an opportunity for DNSPs to negotiate a service agreement.</p> <p>However, the Commission does not consider that this approach should be codified in the NER for the same reasons as set out above. This approach could also have the effect of slowing down the customer transfer process.</p>
<p>Provide a forum where DNSPs can escalate concerns</p> <p>There could be an agreed industry forum, possibly with some regulatory basis, where a DNSP could escalate concerns for debate. Addresses issues with uncertainty about the extent of market power concerns, balanced against cost of arbitration. (ENA, Attachment B, p.36, Victorian DNSPs p35)</p>	<p>The Commission agrees this could be a good outcome for DNSPs as well as other third party providers such as energy services companies. However we do not consider it appropriate for this approach to be Rules-based. It is not clear what purpose such an industry forum would have in the NER, which set out obligations and requirements with associated compliance/dispute resolution processes. If there were to be obligations on participants in relation to the industry forum (eg attendance) and associated compliance/dispute</p>

Proposal by stakeholder	AEMC response
	resolution processes then this option would essentially be a form of negotiate/arbitrate regulation. The reasons why the Commission does not consider negotiate/arbitrate regulation to be appropriate at the commencement of the market are outlined in section E.4.3.
<p>Constrained rights for DNSPs to seek directions</p> <p>There could be an industry expert or panel where a DNSP could escalate concerns for direction and guidance. Allows regulation to evolve as and when the need is clear; is likely to significantly improve the incentives on Retailers and Metering Coordinators to cooperate with DNSPs to achieve better long term outcomes for customers. (ENA, Attachment B, p36)</p>	See comments above.
<p>Compel MCs to negotiate with DNSPs, offer dispute resolution</p> <p>Regulation would compel Metering Coordinators to:</p> <ul style="list-style-type: none"> • negotiate in good faith with DNSPs in relation to network services, and • have in place appropriate, published dispute resolution arrangements. (ENA, Attachment B, p36) 	<p>To be effective, this would essentially be a negotiate/arbitrate model. The reasons why the Commission does not consider negotiate/arbitrate regulation to be appropriate at the commencement of the market are outlined in section E.4.3.</p> <p>The Commission considered an alternative form of requirement on Metering Coordinators to negotiate in good faith, without the dispute resolution process. This is also discussed in section E.4.3.</p>

Proposal by stakeholder	AEMC response
<p>A statutory-based negotiate and arbitrate model</p> <p>The elements of a negotiate and arbitrate framework are set out in the draft rule determination. A statutory-based negotiate and arbitrate model, would provide:</p> <ul style="list-style-type: none"> • an obligation on Metering Coordinators to offer network services • the right for DNSPs to request services from the nominated Metering Coordinator • an obligation on the Metering Coordinator to negotiate in good faith to supply those services if it is able • access to arbitration if the DNSP and Metering Coordinator are unable to reach agreement, and • both parties bound by the arbitrator's decision. (ENA, Attachment B, p37) 	<p>The reasons why the Commission does not consider negotiate/arbitrate regulation to be appropriate at the commencement of the market are outlined in section E.4.3.</p>

Proposal by stakeholder	AEMC response
<p>Readiness review, ability to defer start date, credible threat of regulation</p> <p>The components of this option are:</p> <ul style="list-style-type: none"> • By administrative actions: <ul style="list-style-type: none"> — Establish governance arrangements and allocate resources for reform implementation and a market and systems readiness review. — Commission a market and systems readiness review, with review components that include satisfactory negotiation of contracts for network services. • In the NER: <ul style="list-style-type: none"> — Deferral mechanism - Include a mechanism to allow the COAG Energy Council to defer the competitive metering market start date — Create regulatory fall back - Create the ability to extend, by an administrative act negotiate/arbitrate provisions to apply to Metering Coordinators and access seekers including DNSPs involved in negotiating for network services. (ENA, Attachment B, p38-39) 	<p>This approach may incentivise some parties to not cooperate in order to hold up implementation of the new chapter 7. This approach would also create significant uncertainty for stakeholders that make investments and enter into arrangements to offer new services based on the stated commencement date for the new Chapter 7, but face the risk that the commencement date could be deferred at the last minute by an administrative act with limited or no consultation.</p> <p>Instead, the Commission considers it appropriate that a review of the need for access regulation be undertaken three years after the commencement of the new Chapter 7 provisions.</p>

Proposal by stakeholder	AEMC response
<p>Regulate Metering Coordinator appointment</p> <p>Require:</p> <ul style="list-style-type: none"> the FRMP appointment of a Metering Coordinator to be subject to a DNSP's consent; and that the DNSP's consent must not be unreasonably withheld. <p>Dispute resolution may be required where a DNSP's consent is unreasonably withheld. (ENA, Attachment B, p49)</p>	<p>The Commission has a number of reservations about this approach. In particular, it could result in adverse outcomes for customers if the FRMP and DNSP cannot agree on Metering Coordinator, particularly if the disagreement resulted in formal dispute resolution. Extended disputes could also be used to game the negotiations. The FRMP is likely to need any dispute to be resolved quickly to meet its obligations under the NER and the NERR and to maintain its customer relationship. For example, if a new Metering Coordinator is required to be appointed in order to replace a faulty meter (eg where the DNSP was the initial Metering Coordinator for a type 5 or 6 metering installation), this requirement could result in the customer being without a working meter for an extended period of time. In contrast, the DNSP may have less pressure to resolve the dispute in a timely fashion.</p> <p>Further, it is unclear what would constitute "unreasonably withheld" consent in this context. Provided the FRMP and Metering Coordinator have an agreement to provide metering services in place, then the rules requirements should be met. In contrast, there is no obligation on the Metering Coordinator to offer services to the DNSP. The test of "reasonableness" would therefore have to be applied to the commercial terms and conditions on offer between the DNSP and the Metering Coordinator. However, this implies some form of access right for the DNSP to services provided by the Metering Coordinator on "reasonable" terms and conditions, which is essentially a form of access regulation.</p>
<p>Regulate process for making a network service agreement</p> <p>Compel the new Metering Coordinator to accept assignment or novation of the previous contract terms that existed at the relevant network supply point. Dispute resolution may consider whether the actual (or implied) terms and conditions were commercially reasonable. (ENA, Attachment B, p49-51)</p>	<p>The Commission is concerned that this approach imposes risks on Metering Coordinators that they are not able to manage, namely through the requirement to take on contracts that they have not been involved in negotiating and which reflect a risk allocation agreed by unrelated parties with different risk profiles or appetites for risk. While they could resort to dispute, it is unclear how a dispute resolution body could determine the reasonableness of the terms of an agreement without considering the characteristics of the relevant parties and specific guidance under the rules.</p> <p>Further, this approach could have perverse outcomes that could be</p>

Proposal by stakeholder	AEMC response
	<p>detrimental to competition in both the market for metering services and the retail market. For example, retailers may avoid providing retail services to customers with particular Metering Coordinators if they consider those Metering Coordinators did not negotiate well with networks. Metering Coordinators may seek to manage their risks by refusing to provide services in relation to a connection point unless they are first provided with the previous Metering Coordinator's contracts and given an opportunity to consider them, which could delay the retail transfer process and the replacement of faulty meters.</p> <p>Finally, this approach represents a fairly extreme form of regulatory intervention. This is because it:</p> <ul style="list-style-type: none"> • forces a complete form of terms and conditions on parties who are operating in a competitive market; • creates an advantage for the initial Metering Coordinator/retailer who negotiates the terms of contract; • creates significant uncertainties for prospective parties; and • requires a dispute mechanism that would likely be difficult and costly to implement.

Proposal by stakeholder	AEMC response
<p>A new national metering objective and/or decision making principles</p> <p>For example, principles that require MCs to provide metering services that:</p> <ul style="list-style-type: none"> • are in the long term interest of consumers; • meet the reasonable needs of retailers and LNSPs; and • encourage smart integrated systems and processes at lowest sustainable cost. (Jemena p2; Victorian DNSPs p33) 	<p>The Commission considers it is not appropriate that commercial entities be subject to such objectives. Metering Coordinators are not well placed to make such assessments, particularly given their potentially conflicting obligations to their shareholders/owners. Similarly, it would not appear to be realistic for Metering Coordinators to know the “reasonable needs of retailers and LNSPs”, or how to trade-off any conflict between the two, or between these needs and the long term interest of consumers. Finally, the requirement for Metering Coordinators to “encourage smart integrated systems and processes at lowest sustainable cost” would need to be applied to all participants in the market to have the desired effect.</p>
<p>Negotiate in good faith with dispute resolution</p> <p>Requests to access meter services shall not be unreasonably withheld, and the MC and the requesting party must negotiate in good faith to arrive at commercial terms that are fair, reasonably reflect the cost to the MC to provide access, and do not have the effect of unreasonably discriminating between parties seeking access to meter services.</p> <p>Third parties could rely on the dispute resolution provisions in rule 8.2 of the NER. (SA Power Networks p12, Networks NSW p14.)</p>	<p>Similar to the above discussion on “unreasonably withheld” consent, it is not clear on what basis the reasonableness or otherwise of access to meter services being withheld would be assessed. A requirement that the Metering Coordinator and the requesting party must “arrive at commercial terms that are fair” and “reasonably reflect the cost to the MC to provide access”, combined with a NER-based dispute resolution process, is akin to negotiate/arbitrate access regulation.</p> <p>We have considered an alternative approach whereby an Metering Coordinator and DNSP are required to negotiate in good faith but without requiring the Metering Coordinator to provide services on specified terms, and without arbitration by an independent body on the terms and conditions of access.</p> <p>This option is discussed in more detail in section E.4.3. In summary, we concluded that unless the obligation has clear criteria against which compliance could be assessed (e.g. specified requirements to elect representatives who will negotiate; finite periods for negotiation, a deadlock mechanism), such an obligation is unlikely to be enforceable. Even with further prescription, it is unlikely to be workable in circumstances where the MC has not yet been appointed at a connection point.</p>

F Arrangements for Victoria

Summary

The final 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 AMI metering services cease to be classified as a direct control service.
- The existing derogation in rule 9.9C of the NER will be extended by eleven 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 AMI 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, provided both the network device and the new meter can be accommodated within the metering facility if they choose to do so, for example if they cannot negotiate a satisfactory arrangement with the Metering Coordinator to access the services enabled by an advanced meter at a connection point.¹³⁶²
- 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 final rule will not apply in Victoria, eg opt out rights for small customers in the event of a new meter deployment and the ability of retailers to arrange planned interruptions. The Victorian Government and Essential Services Commission should consider whether to make amendments to

¹³⁶² Network devices are discussed further in Appendix D4.

the Energy Retail Code for consistency with the amendments to the NERR contained in the final rule.

F.1 Introduction

This appendix provides an overview of the transitional arrangements for Victoria under the final 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, the draft rule determination and in stakeholder workshops; and
- the Commission's analysis of the key issues and reasons for its final rule.

F.2 Existing 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 2.75 million meters installed across the state.¹³⁶³

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;¹³⁶⁴ 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;¹³⁶⁵
 - 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

¹³⁶³ State Government of Victoria, Smart Meters website, viewed 29 October 2015, <http://www.smartmeters.vic.gov.au/installation>.

¹³⁶⁴ This Order in Council was made on 12 November 2007.

¹³⁶⁵ The original date was 31 December 2012.

- set out the regulatory framework in accordance with which the AER must determine:
 - 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.¹³⁶⁶ The derogation made Victorian DNSPs exclusively responsible for providing AMI and related services¹³⁶⁷ 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.¹³⁶⁸ 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.¹³⁶⁹ 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.¹³⁷⁰

In reaching this decision, the Commission noted that the derogation would be in the long term interests of consumers because:

¹³⁶⁶ AEMC, Victorian Jurisdictional Derogation, Advanced Metering Infrastructure Roll Out, Rule Determination, 29 January 2009.

¹³⁶⁷ For example, remote connection, disconnection and energisation and direct load control services.

¹³⁶⁸ The exclusivity provided for under the derogation is metering installation type specific and applies to customers consuming 160 MWh pa or less.

¹³⁶⁹ Minister for Energy and Resources (Victoria), AMI Rule Change Request (Jurisdictional Derogation - Victoria), 18 June 2013.

¹³⁷⁰ AEMC, Victorian jurisdictional derogation, Advanced Metering Infrastructure, rule determination, 28 November 2013, p44-47.

- 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;
- 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.¹³⁷¹

The derogation provisions are set out in existing rule 9.9C of the NER and provide for a derogation from what is prescribed in existing 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 existing 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 2020.¹³⁷²

Victoria has currently not adopted the NERL as a law of Victoria. Accordingly, the NERR does not apply in Victoria. The Energy Retail Code applies instead of the NERR. In 2014, the Essential Services Commission made amendments to the Energy 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

¹³⁷¹ AEMC, Victorian jurisdictional derogation, Advanced Metering Infrastructure, rule determination, 28 November 2013, pii.

¹³⁷² This has been given effect through clauses 11.17.6(b) and (c) of the NER.

defined period (the exclusivity period). The exclusivity period may be established by the Victorian Government through a jurisdictional instrument.

- 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.¹³⁷³

F.4 Stakeholder views

F.4.1 Consultation paper and initial workshops

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.

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.¹³⁷⁴ 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

¹³⁷³ COAG Energy Council, rule change request, October 2013, p33-34.

¹³⁷⁴ 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.

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.¹³⁷⁵

- 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.¹³⁷⁶
- 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”.¹³⁷⁷
- The AER, AGL, EnergyAustralia, Origin, Simply Energy, ERAA, Metropolis and EDMI opposed any extension beyond the existing derogation.¹³⁷⁸

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.¹³⁷⁹ AGL, on the other hand, expressed some concerns about the Victorian Government’s commitment to end the exclusivity period.¹³⁸⁰

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.

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:

¹³⁷⁵ Victorian DNSPs, submission on consultation paper, p24; ENA, submission on consultation paper, p33.

¹³⁷⁶ CALC, submission on consultation paper, p3.

¹³⁷⁷ Vector, submission on consultation paper, p21.

¹³⁷⁸ 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.

¹³⁷⁹ Victorian DNSPs, submission on consultation paper, p24; ENA, submission on consultation paper, p33; Vector, submission on consultation paper, p21.

¹³⁸⁰ AGL, submission on consultation paper, p11.

“...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.

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.¹³⁸¹”

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.¹³⁸²”

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.¹³⁸³

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:

¹³⁸¹ 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.

¹³⁸² Victorian DNSPs, submission on consultation paper, p13-14.

¹³⁸³ ENA, submission on consultation paper, p27-28.

- implementing some form of light-handed regulation to ensure that access to data and services is provided at an efficient cost;
- 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.¹³⁸⁴

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.

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.¹³⁸⁵

F.4.2 Draft determination and operational workshop

Responses to the draft rule determination focussed on similar issues to those raised in the response to consultation paper. An overview of the views expressed by stakeholders on these issues is provided below.

Exclusivity Arrangements

Consistent with views outlined in submissions to the consultation paper, stakeholders were supportive of Victorian DNSPs assuming the role of the initial Metering Coordinator.

¹³⁸⁴ Victorian DNSPs, submission on consultation paper, p19-22; ENA, submission on consultation paper, p1,7-8.

¹³⁸⁵ Victorian DNSPs, submission on consultation paper, p23.

Numerous stakeholders expressed support for the Victorian derogation expiring at the commencement of the new rules, and sought further clarity that the derogation would not be extended beyond the transitional arrangements outlined in the draft rule.¹³⁸⁶

Active Stream considered there is no reason why the new connections market in Victoria cannot move to contestability now, and was of the view that the final rule should enable competition in new connections immediately.¹³⁸⁷

ERM Power submitted that the transition of Victoria to a national framework will ultimately benefit all consumers by reducing the barriers to entry in all jurisdictions. New competitive pressure in the Victorian market, including the threat of meter replacement, is likely to drive efficiencies and innovation that otherwise may not occur.¹³⁸⁸

However, CALC proposed that the derogation be extended so that DNSPs in Victoria remain as the Metering Coordinator for the life of all AMI meters. CALC considered that this would "ensure that the risks of installing new meters where they are not required are minimised".¹³⁸⁹

Exit fees in Victoria

The ENA and the Victorian DNSPs considered that cost recovery for advanced meters rolled out under the AMI program must be ensured.¹³⁹⁰ The Victorian DNSPs expressed concern that the introduction of contestability creates uncertainty regarding their ability to recover the residual costs of investments made under the AMI program. To address this, the Victorian DNSPs considered that a rule could be included that enables cost recovery for AMI meters installed prior to the commencement of the new rules, in the event that the AER classified metering services as unregulated.¹³⁹¹

Origin Energy was the only other stakeholder to comment on exit fees in Victoria. Origin considered that the AMI cost recovery order adequately defined the costs for an exit fee, but proposed that an exit fee should not apply where an advanced meter has not been installed, cannot be remotely read or does not support the services in the AMI minimum services specification.¹³⁹²

1386 Active Stream, submission on the draft rule determination, p.3; AGL, submission on the draft rule determination, p.11; Origin, submission on the draft rule determination, p.10; Vector, submission on the draft rule determination, p.4

1387 Active Stream, submission on the draft rule determination, p.3.

1388 ERM Power, submission on the draft rule determination, p.4.

1389 CALC, submission on the draft rule determination, p.8.

1390 ENA, submission on the draft rule determination, p.30; Victorian DNSPs, submission on the draft rule determination, p.26.

1391 Victorian DNSPs, submission on the draft rule determination, p.26.

1392 Origin, submission on the draft rule determination, p.10.

Access to advanced metering enabled services and functions

Origin was the only stakeholder to comment on access to advanced metering enabled services and functions. Origin considered that more focus should be put on the incentives for Victorian DNSPs to negotiate with a Metering Coordinator for access to network services. Origin expressed concern that if a DNSP retains its AMI meters as network devices, this may reduce customer access to alternative and more efficient services. To resolve this, Origin proposed that if a DNSP wishes to retain its devices, it should have to demonstrate why retention of the device is necessary, particularly where a customer expresses a preference for an alternative.¹³⁹³

Minimum functionality specification

Victorian DNSPs considered that customers receiving a meter under a contestable framework should have access to the same range of services as customers who received a meter under the AMI program. They considered that there is a strong case for maintaining the Victorian minimum services specification and expressed concern that a lower minimum services specification would undermine the realisation of network benefits to Victorian consumers.¹³⁹⁴

The Victorian DNSPs noted that if the minimum services specification is lower than the Victorian services specification, they would not have access to the same level of information and visibility over network performances at sites where a contestable meter is installed. They therefore argued that they would not be able to derive the same level of network benefits at these sites.¹³⁹⁵

Origin was the only other stakeholder to comment on the minimum services specification as it applies in Victoria. Origin supported the draft rule and considered that there should not be a separate minimum services specification for Victoria.¹³⁹⁶

F.5 Commission's analysis

Changes between the draft and final rule

The Victorian derogation has been extended until 1 December 2017. This is to correspond with changes made to the implementation timeframe for the new Chapter 7.¹³⁹⁷

There are no further changes between the draft and final rule on this issue.

¹³⁹³ Origin, submission on the draft rule determination, p.10.

¹³⁹⁴ Victorian DNSPs, submission on the draft rule determination, p.12,15.

¹³⁹⁵ Victorian DNSPs, submission on the draft rule determination, p.14,15.

¹³⁹⁶ Origin, submission on the draft rule determination, p.10.

¹³⁹⁷ The implementation timeframe is outlined in further detail in Chapter 5 of this final rule determination.

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 the final rule needs to:

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

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; and
- issues arising from the fact that the NERR does not currently apply in Victoria.

The Commission's views on each of these matters is set out below along with its decision on the transitional arrangements that will need to be put in place in Victoria to deal with these specific issues.

F.5.1 Competition for the provision of Metering Coordinator services

Based on the feedback provided by stakeholders it seems likely 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.¹³⁹⁸

- 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 the interest the Victorian DNSPs have shown in retaining their meters as a bypass option (see below).¹³⁹⁹

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.¹⁴⁰⁰ 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.

¹³⁹⁸ 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.

¹³⁹⁹ 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.

¹⁴⁰⁰ For example, more dynamic and innovative products that promote demand side participation and consumer choice and other efficiencies.

F.5.2 Exit fees in Victoria

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 Essential Services Commission)¹⁴⁰¹ must apply when determining the exit fee through to the end of 2020.¹⁴⁰² 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)),¹⁴⁰³ 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.¹⁴⁰⁴

¹⁴⁰¹ 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.

¹⁴⁰² 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.

¹⁴⁰³ 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.

¹⁴⁰⁴ For example in its final decision for the ACT and NSW DNSPs, published on 30 April 2015, the AER did not approve an upfront exit fee to recover residual costs when a consumer switches to a competitive metering service. The AER determined that the ACT and NSW DNSPs could recover residual metering costs through two types of alternative control service charges: an upfront capital

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.

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.¹⁴⁰⁵”

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 existing 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 D4, have the option to continue to use the meters they deployed under the AMI program as network devices, provided both the network device and the new meter can be accommodated within the metering facility if they choose to do so, for example if they cannot negotiate a satisfactory

charge for all new and upgraded meters installed after 1 July 2015 and an annual charge comprising two components: a capital charge recovered from all consumers who had a DNSP-provided type 5 or 6 meter at 1 July 2015; and a non-capital charge to be recovered from customers that continue to receive a regulated metering service from the DNSP.

¹⁴⁰⁵ AEMC, Rule Determination - National Electricity Amendment (Victorian Jurisdictional Derogation - Advanced Metering Infrastructure) Rule 2013, 28 November 2013, p. 31.

arrangement with the Metering Coordinator to access the services enabled by an advanced meter at a connection point.¹⁴⁰⁶ Therefore Victorian DNSPs will be able to continue to access similar services and functions via the existing AMI meter. This option also places a competitive discipline on Metering Coordinators in their negotiations with DNSPs to provide network-related services.

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;¹⁴⁰⁷ or
- a negotiated or unregulated service, in which case the AER will have no role in approving the exit fee.

¹⁴⁰⁶ A DNSP may not install a network device if the installation or maintenance of the network device: (1) adversely impacts on the operation of the metering installation, including its compliance with the Rules and procedures authorised under the Rules; (2) damages the metering installation; or (3) prevents the metering installation being maintained or removed, as required, by or on behalf of the Metering Coordinator.

The Commission considers that once the AMI Cost Recovery Order expires, it is appropriate that the new framework treat the cost recovery of AMI meters in the same manner as regulated meters installed by DNSPs in other jurisdictions, i.e. the AER will determine whether services provided by way of AMI meter are a direct control service and therefore regulated. Therefore, the Commission does not consider that the final rule should include a provision that enables for the recovery of costs of AMI meters, in the event that the AER classified metering services as unregulated, as was proposed by the Victorian DNSPs.¹⁴⁰⁸

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'.
- 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.¹⁴⁰⁹

F.5.3 Exclusivity arrangements

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.

Similar concerns were outlined in a recent report by the Victorian Auditor-General. The Victorian Auditor-General's report, *Realising the Benefits of Smart Meters*, forecast

¹⁴⁰⁷ See Appendix D2.

¹⁴⁰⁸ The Victorian DNSPs' proposal is outlined in section F.4.2.

¹⁴⁰⁹ Note that this change is only required for consistency with the final 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, except in certain circumstances.

that only 80 per cent of the expected benefits of the AMI program are likely to be realised at a greater cost to consumers than was initially forecast.¹⁴¹⁰

The Victorian Auditor-General considered that the introduction of national arrangements for competition in metering put the realisation of the AMI program benefits further at risk. It recommended that the Victorian Department of Economic Development, Jobs, Transport and Resources engage with the AEMC and the AER to introduce competition in metering "in a way that the benefits of competition can be realised with minimal impact on the ability of distributors, and ultimately consumers, to realise network efficiency benefits."¹⁴¹¹

The Commission is conscious that the introduction of a national framework for competition in metering may have implications on the realisation of expected benefits of the AMI program. As part of this rule change process, the Commission has given thought to whether an extension of the exclusivity period is required to ensure that the expected benefits of the AMI program can be realised.

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.¹⁴¹²

The Commission considers that the expiry of the Victorian derogation at the commencement of the national framework for competition in metering and related services remains appropriate. 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, provided both the network device and the new meter can be accommodated within the metering facility 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

¹⁴¹⁰ Victorian Auditor-General, *Realising the Benefits of Smart Meters*, September 2015, p.iii. Available: <http://www.audit.vic.gov.au/publications/20150916-Smart-Meters/20150916-Smart-Meters.pdf>.

¹⁴¹¹ *Ibid.*, p.49.

¹⁴¹² 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.¹⁴¹³

As the new Chapter 7 of the NER will commence 1 December 2017, there is a twelve month gap between the expiry of the current Victorian derogation and the commencement of the new arrangements under the final rule.

The final rule addresses this issue by extending the current derogation until 1 December 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 Access to advanced metering enabled services and functions

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 DNSPs may not be able to access network-related services at an efficient cost. The final rule therefore allows the Victorian DNSPs to continue to use the meters they installed as part of the AMI program as a network device, provided both the network device and the new meter can be accommodated within the metering facility, 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 final rule also provides that DNSPs may install new network devices (subject to some restrictions on the use and accommodation of the metering installation), which will provide DNSPs with a bypass option in relation to customers that do not currently have an AMI meter, e.g. at greenfield sites.

Network devices are discussed further in Appendix D4.

The Commission also recommends a review of the state of competition in the metering services market three years after the commencement of the new Chapter 7 of the NER.

¹⁴¹³ Refer to Appendix C2.

F.5.5 Minimum services specification

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
- 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.¹⁴¹⁴

Some stakeholders expressed a concern about potential differences between the minimum services specification under the final 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.¹⁴¹⁵

Under the final rule, the minimum services specification will take effect in Victoria when the new Chapter 7 of the NER commences. All new and replacement metering installations installed at small customers' connection points after that date will be installed under the new competitive framework, not as part of 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 Energy Retail Code.

Accordingly, the NERR amendments contained in the final rule will not apply in Victoria. In particular, the following will not apply in Victoria unless it adopts the NERR at a later date:

¹⁴¹⁴ See clauses 14.1(a), 14.3(b)-(e) and 14AA.4 of the AMI Cost Recovery Order.

¹⁴¹⁵ AEMO, Minimum functionality of advanced meters, Advice to COAG Energy Council, November 2014, p4.

- the opt out rights for small customers in the event of a new meter deployment;
- the amended NERR provisions on disconnections and reconnections; and
- the ability of retailers to arrange for a retailer planned interruption for the purpose of installing, maintaining, repairing or replacing an electricity meter.

The current version of the Energy Retail Code (version 11) was modelled on the NERR but contains Victorian specific amendments. One of these specific amendments is that the Energy Retail Code only applies to small customers.¹⁴¹⁶ This means if Victoria implements the retailer planned interruption provisions set out in the NERR final rule, these will not apply to large customers in Victoria unless Victoria extends the application of the Energy Retail Code to all customers.

A number of provisions in the NERR amendments contained in the final rule only apply to "small customers". In jurisdictions such as Victoria that have not currently adopted the NECF, the final rule adopts the same load size threshold between large and small customers as applied under other jurisdictional electricity legislation.¹⁴¹⁷

The Victorian Government and Essential Services Commission should consider whether to make amendments to the Energy Retail Code for consistency with the amendments to the NERR contained in the final rule.

F.5.7 Jurisdictional consumption thresholds

Under the Victorian jurisdiction AMI scheme all customers that consume below 160 MWh per annum must have an AMI meter. Customers that consume more than 160 MWh per annum must have a type 1 to 4 meter installed under the NER.

In the final rule, the requirement to install a metering installation that meets the minimum services specification is linked to the definition of a "small customer". In most jurisdictions the consumption threshold for small customers under the NERR is 100 MWh per annum. However, in Victoria, small customers are defined under the Energy Retail Code as consuming below 40 MWh per annum.¹⁴¹⁸

Under both the existing NER and the final rule, jurisdictions may set the consumption thresholds over which a customer cannot have a type 5 or type 6 meter. These are known as "x" and "y" values, respectively. In Victoria these thresholds are currently both set at 160 MWh per annum, implying that customers that consume less than 160 MWh

¹⁴¹⁶ Rule 3B(1) of the Victorian Energy Retail Code.

¹⁴¹⁷ 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.

¹⁴¹⁸ Any person who purchases energy principally for personal, household or domestic use at the relevant supply point is also defined as a small customer. The 40 MWh threshold therefore only applies to business customers.

per annum can have a type 5 or 6 meter installed. However, these thresholds currently do not have any effect in practice in Victoria since all customers that consume below 160 MWh per annum are currently required to have an AMI meter installed.

Once the Victorian derogation expires and the new arrangements take effect, small customers, i.e. all residential customers plus business customers that consume less than 40 MWh per annum, will be required to have a metering installation that meets the minimum services specification installed. Customers that consume more than 160 MWh per annum must still have a type 1 to 4 meter. However, business customers that consume between 40 and 160 MWh per annum could, under the rules, have a type 5 or 6 meter installed. While this is not intended under the new arrangements, the Commission is not able to rectify the gap as it arises as a result of thresholds set out in jurisdictional instruments.¹⁴¹⁹

The Victorian Government should consider whether amendments should be made to remove this gap.

F.5.8 AEMC response to stakeholder views

This table sets out additional stakeholder comments and the Commission's response to related issues that were not addressed above.

Table F.1 Stakeholder views and AEMC response

Stakeholder	Issue	AEMC response
Victorian DNSPs	<p>The Victorian DNSPs were supportive of the proposal that the Victorian DNSPs become the initial Metering Coordinator for meters installed under the AMI program. However, they considered that the draft rule created uncertainty in the scenario where after the DNSP has been appointed as the initial Metering Coordinator for an AMI meter, a new Metering Coordinator is appointed but the Metering Provider or Metering Data Provider roles continue to be undertaken by the DNSP. The Victorian DNSPs considered that it is unclear:</p> <ul style="list-style-type: none"> • whether the metering services remain regulated services; • what the implications are for 	<p>The LNSP would need to be appointed by the MC under a commercial arrangement to perform the Metering Data Provider and Metering Provider roles. The LNSP would not be providing regulated metering services in this scenario as the Metering Coordinator would be ultimately responsible for providing these services.</p> <p>Ring-fencing arrangements may apply.</p>

¹⁴¹⁹ This issue also arises in the ACT for customers that consume between 100 and 160 MWh per annum because the small customer threshold is set at 100 MWh per annum but the consumption thresholds for type 5 and 6 meters are set at 160 MWh per annum.

Stakeholder	Issue	AEMC response
	regulated exit fees; and <ul style="list-style-type: none"> • whether the meter continues to be deemed a type 5 meter.¹⁴²⁰ 	
Victorian DNSPs	The Victorian DNSPs recommended that AMI meters which are currently subject to regulated metering arrangements under derogation be grandfathered as type 5 meters. ¹⁴²¹	This issue is outside the scope of this rule change as such a provision would, in effect, be a new jurisdictional derogation. The Commission can only make a jurisdictional derogation pursuant to a jurisdictional derogation rule change request from the relevant jurisdictional Minister. This means that once the existing Victorian derogation expires, AMI meters will be treated in accordance with the new Chapter 7 of the NER.
Victorian DNSPs	The Victorian DNSPs proposed that a similar rule to 9.9C.6 is implemented in Chapter 7 or 11 of the NER. ¹⁴²²	Clause 7.10.7(c) already allows AEMO to relax performance standards specified in the metrology procedures when AEMO and the Metering Coordinator agree on a lower performance standard that does not place a material risk on AEMO's ability to meet its settlements and prudential requirements and obligations under the rules.

¹⁴²⁰ Victorian DNSPs, submission on the draft rule determination, p26, 27.

¹⁴²¹ Victorian DNSPs, submission on the draft rule determination, p26.

¹⁴²² Victorian DNSPs, submission on the draft rule determination, p26.

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 final 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;¹⁴²³
- the AEMC's *Power of Choice review* final report to the COAG Energy Council;
- submissions received during consultation on the rule change request, submissions received in relation to consultation on the implementation timetable, submissions received in response to the draft rule determination, and submissions received in response to the additional consultation paper;
- comments made by stakeholders in stakeholder workshops and forums 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 final determination;
- AEMO's advice to the COAG Energy Council on the minimum services specification; and
- the Commission's analysis as to the ways in which the final 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.

¹⁴²³ 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.

Under the final rule, the Financially Responsible Market Participant or, if applicable, a large customer, Non-Market Generator or exempt Generator at a connection point, may appoint a party other than the distribution network business to be the Metering Coordinator for that connection point.¹⁴²⁴ 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 final rule falls within the subject matter about which the Commission may make rules.

The NER final rule falls within section 34 of the NEL as it relates to:

- regulating the operation of the national electricity market;¹⁴²⁵
- regulating the operation of the national electricity system for the purposes of the safety, security and reliability of that system;¹⁴²⁶
- regulating the activities of persons (including Registered participants) participating in the national electricity market or involved in the operation of the national electricity system;¹⁴²⁷
- regulating the provision of connection services to retail customers;¹⁴²⁸ and
- facilitating and supporting the provision of services to retail customers.¹⁴²⁹

The NERR final 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;¹⁴³⁰ and
- regulating the activities of persons involved in the sale and supply of energy to customers.¹⁴³¹

¹⁴²⁴ For further details see Appendix A1.

¹⁴²⁵ Section 34(1)(a)(i) of the NEL.

¹⁴²⁶ Section 34(1)(a)(ii) of the NEL.

¹⁴²⁷ Section 34(1)(a)(iii) of the NEL.

¹⁴²⁸ Section 34(1)(a)(iv) of the NEL.

¹⁴²⁹ Section 34(1)(aa) of the NEL.

¹⁴³⁰ Section 237(1)(a)(i) 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 final 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 final 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 effective operation of the NEM or relates to security and/or confidentiality of customer data or 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 Tables G.1 and G.2. The clauses of the NERR that the Commission recommends should attract a civil penalty are set out in Table G.3.

Table G.1 Civil penalty provisions in chapter 7 of the NER

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
<i>Amended clauses that we recommend should continue to attract a civil penalty</i>			
7.3.2(a)	7.2.5(a)	Metering Coordinator	Retain
7.3.2(b)	7.2.5(b)	Metering Coordinator	Retain
7.3.2(d)	7.2.5(c1)	Metering Coordinator	Retain
7.3.2(e)	7.2.5(d)	Metering Coordinator	Retain
7.5.1(d)(1)	7.2.4A(e)(1)	financially responsible Market Participant	Retain
7.6.3(c)	7.2.3(c)	Local Network Service Provider	Retain
7.6.4(c)	7.2.3(e)	financially responsible Market Participant	Retain
7.8.1(a)	7.3.1A(a)	Metering Coordinator	Retain
7.8.1(c)	7.4.1(a)	Any person	Retain
7.8.2(a)	7.3.1(a)	Metering Provider	Retain
7.8.2(d)(1)	7.3.1(e)	Local Network Service Provider	Retain
7.8.2(d)(2)	7.3.1(f)	Local Network Service Provider	Retain
7.8.7(a)	7.3.2(a)	Metering Coordinator	Retain
7.8.8(c)	7.3.4(d)	Metering Coordinator	Retain

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
7.8.10(a),(c)-(d)	7.3.7(a), (c)-(d)	Metering Coordinator	Retain
7.8.11(a)	7.8.3(a)	Metering Coordinator	Retain
7.8.11(b)	7.8.3(b)	Metering Coordinator	Retain
7.8.11(c)	7.8.3(c)	Metering Coordinator	Retain
7.8.13(a)	7.2.4(b)	Market Participants	Retain
7.9.1(a)	7.6.1(a)	Any person who carries out testing	Retain
7.9.1(e)	7.6.1(e)	Metering Coordinator	Retain
7.9.2(a)	7.6.2(a)	Metering Coordinator	Retain
7.9.3(e)-(e1)	7.6.3(d)	Metering Coordinator	Retain
7.10.5(a)-(c)	7.11.5(a)-(c)	Metering Data Provider	Retain
7.10.6(a)	7.12(a)	Metering Data Provider	Retain
7.10.7(a)-(c)	7.11.1(b)	Metering Coordinator	Retain
7.10.7(d)	7.11.1(d)	Metering Coordinator	Retain
7.11.3	7.8.4	Metering Coordinator	Retain
7.12.2(b)	7.5.2(b)	Metering Coordinator	Retain
7.15.2(a)	7.8.1(a)	Metering Coordinator	Retain

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
7.15.3(a)	7.8.2(a)	Metering Coordinator	Retain
7.15.3(b)	7.8.2(b)	Metering Provider	Retain
7.15.3(c)	7.8.2(c)	Metering Provider	Retain
7.15.3(d)	7.8.2(d)	Metering Provider	Retain
7.15.3(e),(i) and (j)	7.8.2(e), (i) and (j)	Metering Provider/ Metering Data Provider	Retain
7.15.5(a)	7.7(b)	General	Retain
7.16.2(c)	7.2.8(d)	Registered Participants/ Metering Providers/ Metering Data Providers	Retain
<i>Amended clauses that we recommend should now attract a civil penalty</i>			
7.2.1(a)	7.1.2(a)	financially responsible Market Participant	This clause should be classified as a civil penalty provision as the obligation imposed on the FRMP to ensure a Metering Coordinator has been appointed with respect to a connection point is key to the effective operation of the NEM.
7.3.2(h)	7.2.5(g)	Metering Coordinator	This clause should be classified as a civil penalty provision as the obligations imposed on the Metering Coordinator are key to the operation of the market.
7.9.1(h)-(i)	7.6.1(h)-(i)	Metering Coordinator/ AEMO	This clause should be classified as a civil penalty provision as the obligation imposed on the Metering Coordinator or AEMO (as the case may be) in relation to testing is key to the effective operation of the NEM.
7.10.3(a)	7.7(c)	Metering Data Provider	This clause should be classified as a civil penalty provision as the obligation imposed on the Metering Data Provider to

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
			only provide certain data to certain persons required by the Rules and procedures is key to the protection of customer data.
<i>New clauses that we recommend should attract a civil penalty</i>			
7.3.2(f)	n/a	Metering Coordinator	This clause should be classified as a civil penalty provision as the obligation imposed on the Metering Coordinator to ensure that energy data is retrieved from a small customer metering installations via remote acquisition is key to the effective operation of the NEM.
7.3.2(g)	n/a	Metering Coordinator	This clause should be classified as a civil penalty provision as the obligation imposed on the Metering Coordinator not to hinder the Local Network Service Provider from locally assessing a metering installation is key to the effective operation of the NEM.
7.3.2(i)	n/a	Metering Coordinator	This clause should be classified as a civil penalty provision as the obligation imposed on the Metering Coordinator to ensure that access to services listed in the minimum services specification is restricted and managed in accordance with Chapter 7 is key to the protection of customer data. It also imposes an obligation on the Metering Coordinator not to arrange to disconnect or reconnect a metering installation or arrange a planned interruption except in specific circumstances which is an important consumer protection provision.
7.7.1(a)	n/a	financially responsible Market Participant	This clause should be classified as a civil penalty provision as the key obligation imposed on the financially responsible Market Participant to ensure a new Metering Coordinator has been appointed where an Metering Coordinator default event occurs or the contract appointing the Metering Coordinator is

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
			terminated is key to the effective operation of the NEM.
7.7.1(b)	n/a	financially responsible Market Participant	This clause should be classified as a civil penalty provision as the obligation imposed on the financially responsible Market Participant to ensure a new Metering Coordinator (after a Metering Coordinator default) is appointed as soon as practicable is key to the effective operation of the NEM.
7.8.3(a)	n/a	Metering Coordinator	This clause should be classified as a civil penalty provision as the obligation imposed 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 is key for the efficient operation of the NEM.
7.8.4(f)	n/a	financially responsible Market Participant/ Metering Provider	This clause should be classified as a civil penalty provision as the obligation imposed on the financially responsible Market Participant or Metering Provider to provide information to the Metering Coordinator about a small customer's refusal is key to the effective operation of the NEM.
7.8.4(h)	n/a	Metering Coordinator	This clause should be classified as a civil penalty provision as the obligation imposed on the Metering Coordinator to ensure a type 4A metering installation is installed if paragraph (d) applies is key to the effective operation of the NEM.
7.8.6(a)(1) and (a)(2)	n/a	Local Network Service Provider	This clause should be classified as a civil penalty provision as the obligations imposed on the Local Network Service Provider when installing and maintaining a network device are key to the effective operation of the NEM.

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
7.8.6(d)(2)	n/a	Metering Coordinator	This clause should be classified as a civil penalty provision as the obligations on the Metering Coordinator not to remove, damage or adversely impact the operation of a network device or prevent the LNSP maintaining or removing it except with the consent of the Local Network Service Provider or where permitted under the NER are key to the effective operation of the NEM.
7.8.6(g)	n/a	Metering Coordinator	This clause should be classified as a civil penalty provision as the obligations imposed on the Metering Coordinator to provide notice of the removal of the network device and to keep records of determinations where a network device has been removed are key to the effective operation of the NEM.
7.10.2(a)(3) and (4)	n/a	Metering Data Provider	This clause should be classified as a civil penalty provision as the obligations imposed on the Metering Data Provider to in relation to data management, data storage and access to data are key to the effective operation of the NEM and the protection of customer data.
7.15.4	n/a	Metering Coordinator/ Metering Provider	This clause should be classified as a civil penalty provision as the obligations imposed on the Metering Coordinator and Metering Provider in relation to security controls for small customer metering installations are key consumer protections.

The NER final rule omits the following clauses from the existing NER that are currently classified as civil penalty provisions and therefore the Commission recommends that the relevant Regulations are amended to remove references to these provisions:

- 7.2.3(h)(2);
- 7.4.1A(a);
- 7.4.2(c);
- 7.4.2(ca); and
- 7.13(b).

Table G.2 Civil penalty provisions in the NER transitional provisions

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
<i>New clauses that we recommend should attract a civil penalty</i>			
11.86.7(a)	n/a	financially responsible Market Participant	This paragraph should be classified as a civil penalty provision as the obligation imposed on the financially responsible Market Participant to ensure a Metering Coordinator has been appointed is key to the effective operation of the NEM.
11.86.7(b)	n/a	financially responsible Market Participant	This paragraph should be classified as a civil penalty provision as the obligation imposed on the LNSP to provide standard terms and conditions to the financially responsible Market Participant is key to the effective operation of the NEM.
11.86.7(d)	n/a	Local Network Service Provider	This paragraph should be classified as a civil penalty provision as the obligation imposed on the LNSP to include certain provisions in its standard terms and conditions to the financially responsible Market Participant is key to the effective operation of the NEM.
11.86.7(g)(3)	n/a	Metering Coordinator	This paragraph should be classified as a civil penalty provision as the obligation to notify the financially responsible Market Participant of a metering installation malfunction is key to the effective operation of the NEM. In the absence of this notice, the financially responsible Market Participant has no obligation to take steps which will enable the meter to be replaced.

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
11.86.7(h)	n/a	financially responsible Market Participant	This paragraph should be classified as a civil penalty provision as the obligation imposed on the financially responsible Market Participant to appoint a new Metering Coordinator when the financially responsible Market Participant has received the notice of the metering installation malfunction is key to the effective operation of the NEM. In the absence of the new appointment, there is no Metering Coordinator who is obliged to replace the defective meter.
11.86.7(i)	n/a	Metering Coordinator	This paragraph should be classified as a civil penalty provision as the obligation imposed on the Metering Coordinator to replace the meter is key to the effective operation of the NEM. This is also consistent with the recommendation that clause 7.8.10(a) should be classified as a civil penalty provision.

Table G.3 Civil penalty provisions in the NERR

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
<i>Amended clauses that we recommend should continue to attract a civil penalty</i>			
19(2)(a)-(b)	19(2)	Retailers	Retain
56(1)	56(1)	Retailers	Retain
90	90	Distributors	Retain.
106	106	Retailers and Distributors	Retain
121(1)	121(1)	Retailers	Retain
124(1) – (2)	124(1) – (2)	Retailers	Retain
125(2)	125(2)	Distributors	Retain
135(1)	135(1)	Retailers	Retain
<i>New clauses that we recommend should attract a civil penalty</i>			
59A(1)	n/a	Retailers	This clause should be classified as a civil penalty provision as it sets out the opt out requirements for new meter deployments which is a key consumer protection.
59A(2)	n/a	Retailers	This clause should be classified as a civil penalty provision as it imposes an obligation on the retailer to give the customer two notices in writing of the proposed new meter deployment within a specified period which is a key consumer protection.

New clause reference	Old clause reference	Who the obligation is imposed upon	Recommendation
59A(3)	n/a	Retailers	This clause should be classified as a civil penalty provision as it imposes an obligation on the retailer to include specific information in a notice informing the small customer of a proposed new meter deployment which is a key consumer protection.
59A(7)	n/a	Retailers	This clause should be classified as a civil penalty provision as it imposes a key obligation on retailers not to proceed with the new meter deployment in customer churn circumstances which is a key consumer protection.
59C(2) – (5)	n/a	Retailers	These subrules should be classified as civil penalty provisions as they mirror rule 90 (distributor planned interruptions) which is currently classified as a civil penalty provision.
99A(3)	n/a	Distributors	This subrule should be classified as a civil penalty provision as it mirrors rule 99(4), which is currently a civil penalty provision, and requires retailers to refer the customer to the retailer and provide information in respect of distributor planned interruptions.
106A(1)-(6)	n/a	Retailers and Distributors	This rule should be classified as a civil penalty provision, consistent with classification of rule 106 as a civil penalty provision.
124A(1)	n/a	Retailers	This subrule should be classified as a civil penalty provision as it mirrors rule 99(4), which is currently a civil penalty provision, and requires retailers to refer the customer to the retailer and provide information in respect of distributor planned interruptions.

G.4 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 final rule is compatible with AEMO's declared network functions as it has no impact on these functions.

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
FRMP	Financially Responsible Market Participant
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