

Australian Energy Market Commission

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Ms Rosalyn Bell
Inquiry into data availability and use
Productivity Commission

By electronic submission: www.pc.gov/inquires/current/data-access

Dear Ms Bell

Submission to the Productivity Commission's Issues Paper on Data Availability and Use

Thank you for the opportunity to comment on the Productivity Commission's Issues Paper on Data Availability and Use.

The Australian Energy Market Commission (AEMC) is an independent, national body responsible to the Council of Australian Governments (COAG) Energy Council. We have two roles, as statutory rule maker for the energy market and expert advisor for federal, state and territory governments.

The AEMC has made a number of rule changes to the National Electricity Rules (NER) and National Energy Retail Rules (NERR) that support consumers in obtaining information about their electricity consumption and facilitating new services that enable consumers to monitor, manage and adjust their electricity consumption. These rule changes formed part of a program of electricity market reforms that was set out in the AEMC's Power of Choice review and included:

1. Customer access to information about their energy consumption

New rules made by the AEMC in November 2014 make it easier for consumers to obtain information about their historical electricity consumption. This information can help consumers make more informed decisions about switching retailers or choosing an electricity plan. Other people can also obtain this information with the customer's consent, which will help new energy service providers tailor their services to the customer's needs.

Retailers and Distribution Network Service Providers are required to comply with minimum requirements when responding to requests for electricity consumption data from customers or parties authorised by customers so that data is provided in a timely manner, in a standard, understandable format and at a reasonable cost.

2. Expanding competition in metering and related services

The Expanding competition in metering and related services final rule, which was made in November 2015, will facilitate a consumer driven, market led deployment of advanced meters. Advanced meters are an enabling technology which will help support choice in electricity products

and services. The new rules further assist third parties such as energy service companies providing services to consumers to access a customer's metering data from a range of sources with the customer's consent while protecting customers from unauthorised access to the data and services enabled by an advanced meter.

These rule changes recognise that decisions that drive investment and deployment of particular technologies are increasingly being devolved to consumers; and consumers are making choices based on their own interests or values – whatever those interests may be. They also recognise that consumers need information and tools to effectively engage with and participate in the electricity market.

I have attached a more detailed overview of these Power of Choice reforms and the regulatory framework for accessing electricity and gas data and two infographics explaining certain aspects of the Expanding competition in metering and related services rule change. Please feel welcome to contact Richard Owens, Senior Director, if you have any further questions.

Yours sincerely

John Pierce
Chair, Australian Energy Market Commission

Attachment A – Access to electricity and gas data
Attachment B – Infographic on roles and responsibilities under the new metering arrangements
Attachment C – Infographic on the Competition in metering and related services final determination

ATTACHMENT A – ACCESS TO ELECTRICITY AND GAS DATA

This attachment sets out the:

- types of data referred to in the National Electricity Rules (NER) and the National Energy Retail Rules (NERR);
- current arrangements for accessing data under the existing NER and related confidentiality obligations; and
- the arrangements for accessing data and new protections that will come into effect on 1 December 2017 as a result of the Expanding competition in metering rule change;
- the arrangements for accessing data associated with a gas customer's usage under the National Gas Rules (NGR) and NERR.

TYPES OF DATA REFERRED TO IN THE RULES

Different types of data are referred to in the NERR and NER including: energy data; metering data; NMI standing data; and settlements ready data.

Energy data is data held in the metering installation relating to a consumer's measured consumption of electricity at their premises.¹ Once energy data is collected from the metering installation it becomes *metering data*.²

Settlements ready data refers to metering data that has been collected and validated by AEMO³ and used for billing purposes.

Billing data refers to the electricity or gas usage data, which may be estimated, that is used to calculate charges.

NMI Standing Data is data related to a customer's connection point. The data includes information relating to (amongst other things) the physical location and properties of a customer's meter and the customer's applicable network tariff. It does not include the customer's consumption data.

CURRENT ARRANGEMENTS FOR ELECTRICITY

Who can access data under the existing rules?

The NER currently provides arrangements for accessing energy data and metering data in order to enable certain parties, such as retailers and distribution network service providers

¹ See the definitions of "energy data", "accumulated energy data" and "interval energy data" in Chapter 10 of the NER.

² See the definitions of "metering data", "accumulated metering data" and "interval metering data" in Chapter 10 of the NER.

³ AEMO was established by Council of Australian Governments under the National Energy Law to manage the National Electricity Market and gas markets. Its core functions include: electricity power system and market operator; gas markets operator; national transmission planner; transmission services; and energy market development.

(DNSPs)⁴, 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 or purchasing new value-added services.

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 register⁵ for a metering installation. These parties include:

- registered participants that have a financial interest in the metering installation or the energy measured by that metering installation, such as the retailer and DNSP at the connection point.
- AEMO and its authorised agents;
- an energy ombudsman, the Australian Energy Regulator⁶, and jurisdictional regulators in certain circumstances; and
- a retail customer of a retailer or DNSP, or the customer's authorised representative, in certain circumstances.

Delivery of data to registered participants for market and settlement functions

Parties such as the local retailer, retailer and DNSP require metering data to support their market and settlement functions. The Metering Data Provider must collect and provide these parties with metering data in accordance to procedures made AEMO. The Metering Data Provider also provides metering data to AEMO for settlement and the billing process.⁷

Customer access to data about their energy consumption

The AEMC made new rules in November 2014 to make it easier for consumers to obtain information about their electricity consumption.⁸ The requirements under the NER and NERR enable retail customers to access a minimum level of and consumption and billing data at no charge or at a reasonable cost.

⁴ Distribution network service providers own and manage the electricity distribution network.

⁵ The metering register forms part of the metering database maintained by AEMO and holds static information associated with metering installations such as the site location, the type of metering installation and details of the retailer and DNSP associated with the connection point. A more detailed list of the information contained in the metering register is included in clause S7.5.2 of the NER.

⁶ The Australian Energy Regulator (AER) regulates energy markets and networks under national energy market legislation and rules. See <https://www.aer.gov.au/about-us> for more detail on the AER's functions.

⁷ Clause 7.11.2 of the NER.

⁸ See <http://www.aemc.gov.au/Rule-Changes/Customer-access-to-information-about-their-energy> for detailed information on the Customer access to information about their energy consumption rule change process.

Customers can obtain their historical electricity consumption data from their DNSP or their retailer.⁹ Alternatively, any person authorised by a customer can obtain that customer's historical electricity consumption data from the customer's DNSP or retailer.¹⁰

Under the NERR, small retail customers or their customer authorised representative may obtain up to 2 years of historical billing data from their retailer on request, at no charge, up to four times in any 12 month period.¹¹

Retailers and DNSPs are required to comply with minimum requirements when responding to requests for electricity consumption data from customers or parties authorised by customers so that data is provided in a timely manner, in a standard, understandable format and at a reasonable cost.

Customers are able to obtain their electricity consumption data both in a detailed and a summary format from upon request to their retailer or DNSP. Where a detailed format is particularly useful for authorised parties to provide services to their customers, a summary format may be more appropriate for customers, especially small customers, to understand their electricity consumption data.

The minimum requirements for proving data are set by AEMO in metering data provision procedures.¹²

Protections in the NER and relevant laws

Confidentiality of data

Clause 8.6 of the existing NER sets out the obligations of Registered Participants regarding use of confidential information under the NER. Clause 7.10 of the existing NER specifies that energy data, metering data, NMI Standing Data, information included under a scheme for a NMI Standing Data Schedule as referred to in clause 3.13.12A, information in the metering register and passwords are confidential and are to be treated as confidential information in accordance with the Rules.

Consent requirements

The NER does not specify the nature of consent required by parties authorised by customers. When making the new rules in relation to access to data, the Commission considered that these issues are best addressed by other laws, including privacy legislation. The Commission considered that it would not generally be appropriate for energy market regulations to apply and potentially duplicate obligations found in existing laws. Under this approach, for example, it would be up to the retailer or DNSP to determine what it needs to do to so that it meets its privacy obligations. It is also up to the parties authorised by the customer to access the data to do so after having first done whatever may be required or otherwise necessary, where relevant, under any applicable privacy legislation (including if appropriate making relevant disclosures or obtaining relevant consents from *retail customers*).¹³

⁹ Existing clause 7.7(a)(7)(i) of the NER.

¹⁰ Existing clause 7.7(a)(7)(ii) of the NER.

¹¹ Existing rules 28 and 56A of the NERR.

¹² Under existing clause 7.16(a) of the NER AEMO must establish, maintain and publish the metering data provision procedures.

¹³ Clause 7.7

ARRANGEMENTS FOR ELECTRICITY UNDER THE NEW METERING REGULATORY FRAMEWORK

In November 2015, the AEMC made the final rule in relation to the Expanding competition in metering and related services rule change (the final rule)¹⁴ which will have an impact on how metering data services are delivered when the new framework for metering comes into effect on 1 December 2017.

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 investment in advanced meters that deliver services valued by consumers.

Under the new arrangements any party will be able compete to provide metering services as a Metering Coordinator, subject to satisfying applicable registration requirements. The rule establishes the role and responsibilities of the Metering Coordinator which will be appointed by the retailer.

The Metering Coordinator has primary responsibility for the provision of metering services including managing the security of, and access to, small customers' meters, the data they contain and the services they provide.

The attached infographic illustrates the roles and responsibilities of different parties under these new arrangements.

Who can access data under the new arrangements?

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. Under the final rule amendments were made to the to the existing access to data provisions to improve the clarity of the framework, while preserving existing entitlements with respect to which parties may be granted access to, or receive metering data and energy data under the NER.¹⁵ The new approach in the NER clearly sets out which parties may access which type of data.

Under the new arrangements, 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;

¹⁴ See <http://www.aemc.gov.au/Rule-Changes/Expanding-competition-in-metering-and-related-serv> for detailed information on the Expanding competition in metering and related services rule change process.

¹⁵ See Appendix A5 of the Final Determination on the Expanding competition in metering and related services rule change for a detailed overview of the changes to the access to data arrangements made under the final rule. <http://www.aemc.gov.au/Rule-Changes/Expanding-competition-in-metering-and-related-serv>

- 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.¹⁶

In addition, the final rule (consistent with the existing NER) provides that a retailer (including a retailer who is not the FRMP) may access and receive NMI Standing Data.¹⁷

Provision of data to registered participants and AEMO for market and settlement functions under the new arrangements

Parties such as the retailer and DNSP that require metering data to support their market and settlement functions will continue to be provided with metering data required to meet their statutory obligations under the new arrangements. Metering Data Providers have a clear obligation under the new arrangements to provide metering data to relevant parties as required by and in accordance with procedures authorised by AEMO.¹⁸

Provision of metering data services under the new arrangements – including to third parties for consumer services

The final rule sets out a minimum services specification¹⁹ that all new and replacement metering installations must be capable of providing except in certain defined circumstances. The minimum services specification includes the following services, amongst others:

- *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.
- *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.

Under the new arrangements, certain parties are authorised to access metering data services listed in the minimum services specification subject to commercially agreed terms with the party providing the service.

¹⁶ See clause 7.15.5(d) of the NER final rule.

¹⁷ See clause 7.15.5(e) of the NER final rule.

¹⁸ Clause 7.10.3(a) of the NER final rule.

¹⁹ Table S7.5.11 in the NER final rule.

The parties which may negotiate for access to remote on demand and scheduled meter read services include:

- the retailer;
- the DNSP; and
- parties with a small customer's prior consent.

The final rule does not regulate access, or the price to access, these services. There will be commercial incentives on the Metering Coordinator to provide metering services, including the provision of on demand and scheduled meter read services, at an efficient price.

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 new products and services enabled by advanced meters. These arrangements will facilitate the provision of services that require ongoing provision of data and which allow consumers to better understand their electricity use, and to adjust their electricity use, if they choose to. For example, the types of services that may be offered include services that display a consumer's energy use through in-home displays, web portals, or smart phone applications.

Large customers²⁰ will also benefit from being able to receive, or give an authorised representative consent to receive, data from its metering installation.

Protections in the NER and other relevant laws under the new arrangements

Confidentiality of data

The 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.²¹ However, metering data may be disclosed, used or reproduced with the consent of the retail customer.²²

Managing access by authorised parties

A key responsibility of the Metering Coordinator under the new regulatory framework is to ensure only parties authorised to access services from advanced meters under the NER are provided access to these services.

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

In particular, the Metering Coordinator must ensure that:

²⁰ Business customers who consume at or above an 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.

²¹ Clause 7.15.1 of the NER final rule.

²² For a more detailed explanation of how clause 7.15.1 and clause 8.62(c) of the NER final rule interact such that metering data may be disclosed, used or reproduced with the consent of the retail customer see page 256, AEMC, Final Determination Expanding competition in metering and related services, 2015.

- 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 metering data provided by a small customer metering installation is only given to:
 - an access party listed in Table S7.5.1.1 for the remote on demand and scheduled meter reads; 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, where, 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.²³

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.

ARRANGEMENTS FOR GAS

The regulatory framework for gas metering under the National Gas Rules differs to the regulatory framework for metering for the National Electricity Market. Generally, the party responsible for providing a customer's gas metering installation and ensuring that the metering data is held in a metering installation is protected from local or remote electronic access by suitable security electronic access controls is the gas distributor.

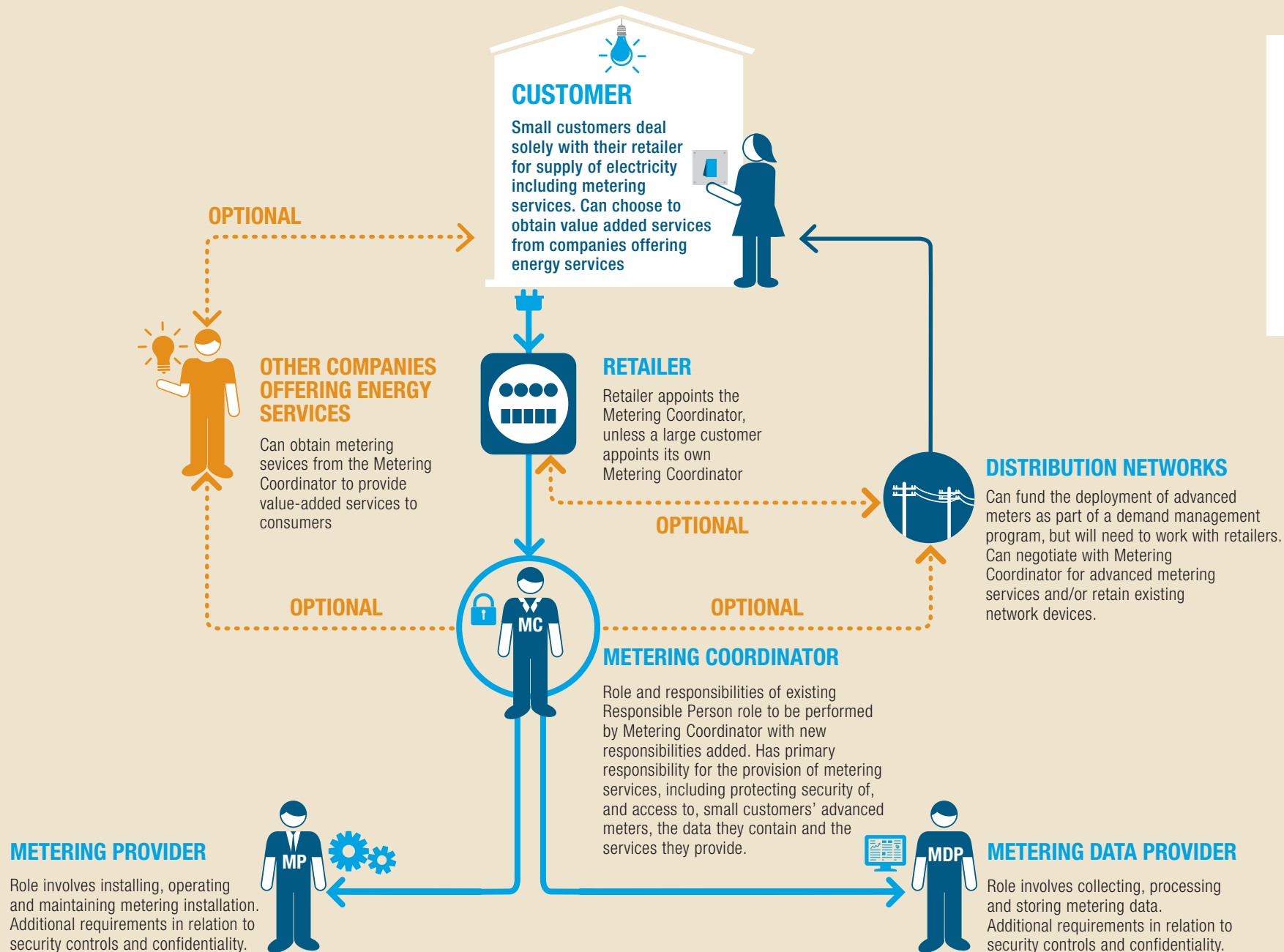
However, as with electricity, the requirements under the NERR enable retail gas customers and their authorised representatives to access a minimum level of and consumption and billing data at no charge or at a reasonable cost. Under the NERR, a small retail customer may obtain up to 2 years of historical billing data from their retailer on request, at no charge, once in any 12 month period in the case of gas.²⁴

²³ See clauses 7.15.4(a) and (b) of the NER final rule.

²⁴ Existing rule 28 of the NERR.

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.



None of these roles are new: all exist under the current rules but some new responsibilities have been added relating to advanced metering services.

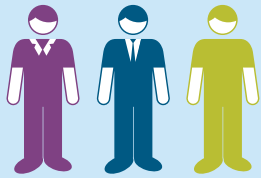
Any person could perform the Metering Coordinator, Metering Provider and Metering Data Provider roles subject to accreditation and registration requirements.

ENABLING NEW ELECTRICITY SERVICES

AEMC Competition in Metering and Related Services Final Determination 26 November 2015

WHAT THE NEW RULE DOES

Increased competition – any registered parties can provide metering services

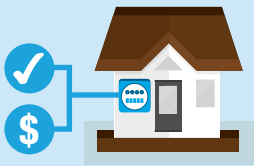


Enhanced consumer protections to keep access to meters and data secure

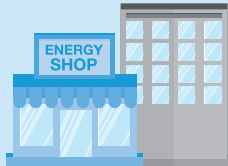


We are opening up metering services to competition

Minimum services that new or replacement meters must be able to provide



Households and small businesses can continue to deal with their retailer but reap the benefits of competition



If you want to keep your current working meter, you can. And if you do get a new meter, you don't have to take up any new services or pricing. It's up to each consumer to choose what works best for them.

Most Australians (except Victorians) have basic 1950s style meters that prevent us managing our electricity better.



THE POWER OF CHOICE

We are giving consumers more opportunities to access a wider range of energy services with new ways to monitor, manage and adjust their electricity consumption



SERVICES MADE POSSIBLE BY ADVANCED METERS



See what you use in real time



Compare retailers easily and switch faster



Better management of energy use



Time of use pricing for new ways to save



Easy access to detailed usage data

FUTURE SAVINGS



Consumers benefit from more efficient network investment decisions; lower cost automated meter reading; remote connections/disconnections; and faster response to outages.

THIS RULE IS PART OF A REFORM PROGRAM TO SUPPORT CHOICES TO MANAGE ELECTRICITY DEMAND



NETWORKS

New rules improve demand management incentives so network services are managed in the most efficient way. Rules now also incentivise networks to consider innovative alternatives to building more infrastructure.

HOUSEHOLDS

New rules will make prices reflect how much it costs to use electricity at different times to inform decisions on electricity use.

BUSINESSES

Some energy users want to generate their own power from new sources like renewables. New rules make it easier to connect to networks to sell excess electricity to the grid.