

---

Australian Energy Market Commission

## CONSULTATION PAPER

# NATIONAL ELECTRICITY AMENDMENT (METER INSTALLATIONS - ADVANCED METER COMMUNICATIONS) RULE 2018

### PROONENT

Australian Energy Council

11 OCTOBER 2018

---

# RULE

## INQUIRIES

Australian Energy Market Commission  
PO Box A2449  
Sydney South NSW 1235

E [aemc@aemc.gov.au](mailto:aemc@aemc.gov.au)  
T (02) 8296 7800  
F (02) 8296 7899

Reference: ERC0246

## CITATION

AEMC, Advanced meter communications, Consultation paper, 11 October 2018

## 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.

This work is copyright. The Copyright Act 1968 permits fair dealing for study, research, news reporting, criticism and review. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included.

## CONTENTS

1	Introduction	1
2	Background	2
2.1	Competition in metering	2
2.2	Current framework for type 4A metering installation	5
3	Details of the rule change request	7
3.1	Issues raised in the request	7
3.2	Proposed solution	8
4	Assessment framework	9
4.1	Achieving the NEO	9
4.2	Proposed assessment framework	9
4.3	Making a more preferable rule	10
4.4	Applicability of the rule in the Northern Territory	10
4.5	Applicability of the rule in Victoria	10
5	Lodging a submission	11
	Abbreviations and defined terms	12
	<b>FIGURES</b>	
	Figure 2.1: Metering roles and responsibilities	4

# 1 INTRODUCTION

On 20 July 2018, the Australian Energy Council (AEC) submitted a rule change request to the Australian Energy Market Commission (AEMC or Commission) seeking to amend the 'Type 4A metering installation' rule in clause 7.8.4 of the National Electricity Rules (NER).<sup>1</sup>

Currently, under the NER, all new and replacement meters for small customers must be an advanced meter with remote communications activated (known as a type 4 meter), subject to two exceptions. One of those exceptions enables a metering coordinator to install an advanced meter with the remote communications capability deactivated if a small customer refuses to have remote communications capability *before installation*.<sup>2</sup> This deactivation of an advanced meter's communications capability creates a type 4A advanced meter (type 4A meter).

The rule change proposal seeks to allow metering coordinators to deactivate the remote communications capability on an *already installed* type 4 meter, if a small customer so requests. That is, the proposed rule would expand the circumstances in which a metering coordinator will be able to provide small customers with a type 4A meter without being in breach of the NER requirement for new or replacement meters to be type 4 meters.<sup>3</sup>

This consultation paper has been prepared to facilitate public consultation on the rule change request and to seek stakeholders' views. Submissions are to be lodged by Thursday, 8 November 2018.

This paper:

- provides background to the rule change request
- outlines the rule change request
- identifies key questions and issues for stakeholder comment
- explains how to lodge a submission.

---

1 AEC, *Meter communications rule change proposal, rule change request*, 20 July 2018. See: <https://www.aemc.gov.au/rule-changes/meter-installation-advanced-meter-communications>.

2 Clause 7.8.4 (e)-(g) of the NER details how a small customer refusal must be communicated and retained for a period of seven years. This is explored further in section 2.2.1.

3 This requirement is in clause 7.8.3(a) of the NER. It is a civil penalty provision.

## 2 BACKGROUND

### 2.1 Competition in metering

In 2015, the Commission made the *Expanding competition in metering and related services* final rule (Competition in Metering Rule), which involved significant amendments to the NER and the National Energy Retail Rules (NERR).<sup>4</sup> The new rules commenced on 1 December 2017 and introduced a competitive framework for metering services in the national energy market (NEM).

The rule sought to facilitate the market-led deployment of advanced electricity meters. The Commission anticipated that consumers would drive the uptake of advanced meters, and industry innovation, by choosing the new products and services the meters facilitate. The rule would also allow retailers to roll out advanced meters where they saw service benefits and efficiencies, for example, through possible cost savings achieved by remote meter reading.

#### 2.1.1 Types of electricity meters

Different electricity meter types measure usage in different ways.<sup>5</sup>

There are three electricity meter types generally used by small customers in the NEM classified under the NER.<sup>6</sup> They are:

- **Type 6 accumulation meters** - Currently most small customers use an accumulation meter. These record the total amount of energy used since the meter was installed, and must be read manually. Customers are billed on the additional usage since the last meter read, with meter reads usually occurring every three months. This basic method of recording electricity usage means that customers using type 6 accumulation meters are typically limited to being on a simple retail tariff, such as a flat rate for usage. It restricts customers' ability to understand or manage their energy usage to reduce their electricity bills.
- **Type 5 interval meters** - Interval meters measure electricity usage every 30 minutes. The usage data is stored on the meter until it can be collected manually.<sup>7</sup> Type 5 interval meters are common for small customers in some distribution networks. They can support some services for customers, such as different tariff arrangements. However, many cannot be remotely read and controlled and as such there is limited ability for customers with interval meters to understand and manage their electricity usage in real time.
- **Type 4 (advanced) meters** - Type 4 meters record electricity usage in intervals of 30 minutes or less. They are two-way digital communication systems which automatically send usage data to the required parties through their remote communications function. This automated communication ends the need both for estimated meter reads and

<sup>4</sup> See: AEMC, *Expanding competition in metering and related services*, Final Determination, 26 November 2015, Sydney.

<sup>5</sup> For electricity, there are seven different types of metering services classified under the NER. Large customers have advanced meters that are capable of capturing large volumes of electricity flow. That is, type 1, 2, 3 or 4 metering installations.

<sup>6</sup> Large customers have metering installations that allow electricity flows above 0.75 GWh per annum. Some large customers have current transformer meters, which measure a fraction of the current passing through the connection, with a multiplier applied to reflect the actual usage.

<sup>7</sup> In Victoria, type 5 interval meters can often be remotely read.

manual meter readings. These meters, and the products and services enabled by them, give customers greater control over their electricity usage, bills and choice in services. To be classified as this type of meter, the device must be capable of providing the services set out in the minimum services specification set out in the NER.

From 1 December 2017 every new meter installed — and all replacement meters — for small customers must be a type 4 meter (subject to two exemptions discussed below).<sup>8</sup>

- **Type 4A advanced meters (with deactivated communications)** - The Competition in Metering Rule provides that a type 4A meter can be installed in place of a type 4 meter in certain circumstances. A type 4A meter is a meter that is capable of providing the services in the minimum services specification but has its communications deactivated. That is, a type 4A meter is a type 4 meter with its communications ability deactivated and therefore cannot be remotely read and/or managed.

The category was created in consultation with stakeholders during the Competition in Metering Rule. Type 4A meters can be used in two situations. The first situation is where there is no telecommunications network that enables remote reading of the meter, so manual reading as a type 4A meter is permitted to avoid the significant costs that would be involved in extending the telecommunications network. The second situation is where the customer refuses to have a new meter with remote communications installed. The feedback received by the Commission at the time was that a small cohort of consumers held concerns due to the meter's ability to be read and/or managed remotely via a telecommunications network.<sup>9</sup>

### 2.1.2 Metering roles and responsibilities

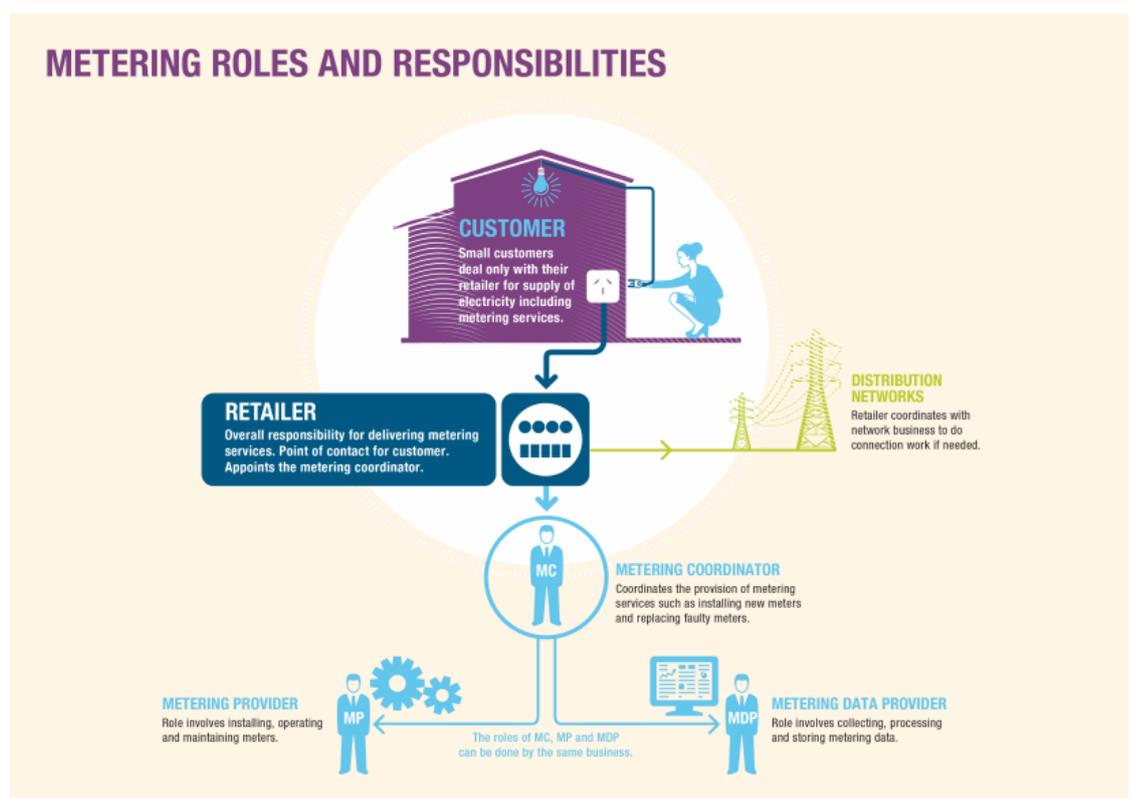
The parties responsible for looking after small customers' meters also changed from 1 December 2017. Prior to the commencement of the Competition in Metering Rule, the Distribution Network Service Provider (DNSP) was responsible for providing, installing and maintaining a small customer's meter in its role as the 'responsible person'. They also collected and delivered metering data to the customer's retailer as part of performing the roles of the metering provider and metering data provider.

In making the Competition in Metering Rule, the Commission considered that the metering services can be more effectively provided by entities operating competitively with each other. The rule therefore ended the effective monopoly of DNSPs over the provision of metering services for small customers. The metering services responsibility was moved from the DNSP to a 'metering coordinator' (a new type of registered participant that took over the previous responsibilities of the responsible person). Figure 2.1 shows the new arrangements.

<sup>8</sup> NER clause 7.8.3(a).

<sup>9</sup> An exemption to the metering coordinator's obligation to install a type 4 meter also exists (to allow instead the installation of a type 4A meter) where there is no existing telecommunications network. NER clauses 7.8.4(a)-(c).

**Figure 2.1: Metering roles and responsibilities**



### Retailers

Retailers are typically responsible for arranging metering services for their residential and small business customers.<sup>10</sup>

A retailer must appoint a metering coordinator for each of its customers' connection points.<sup>11</sup> In general, the retailer provides instructions to the metering coordinator for any metering work needed by the customer.

### Metering coordinator, metering provider and metering data provider

A metering coordinator has overall responsibility for all issues related to the metering installations for which it has been appointed.

<sup>10</sup> Under the competitive framework, the entity responsible for arranging metering services is the financially responsible market participant (FRMP). For small customers the FRMP is typically their retailer.

<sup>11</sup> Clause 7.2.1(a) of the NER. Under clause 7.6.2(a)(3) a large customer may appoint its own metering coordinator. For small customers, a retailer must also obtain a national metering identifier (NMI) for each meter. This involves applying to the distributor for a NMI and providing it to the metering coordinator within five business days of receiving it. Clause 7.8.2(c)(1) of the NER.

The metering coordinator is responsible for installing and maintaining the meter, and collecting, processing and delivering the customer's metering data.<sup>12</sup> They also hold additional responsibilities regarding the security of, and access to, advanced meters.

To undertake these functions, a metering coordinator appoints:

- a metering provider to install and maintain the metering installation<sup>13</sup>
- a metering data provider to collect and process metering data.<sup>14</sup>

Any person can perform one or more of these three metering roles provided that they are registered and accredited by Australian Energy Market Operator (AEMO) for the relevant roles. In practice, most metering coordinator businesses are also registered and accredited as metering providers and metering data providers.

## 2.2 Current framework for type 4A metering installation

Currently a metering coordinator must ensure that all new and replacement meters it installs for its small customers are a type 4 meters, subject to two exemptions.

### 2.2.1 Exemption to the requirement to install a type 4 meter

An exemption to a metering coordinator's obligation to install a type 4 meter is only available in limited circumstances, set out in clause 7.8.4 of the NER. Specifically, a metering coordinator can install a type 4A meter either where:

1. the metering coordinator demonstrates to the AEMO's reasonable satisfaction that there is no existing telecommunications network which enables remote access to the meter at the small customer's connection point<sup>15</sup>
2. in the metering coordinator's reasonable opinion the small customer has communicated their refusal to the installation of a type 4 meter (with the communications enabled).<sup>16</sup>

In either circumstance a metering coordinator may deactivate the communications on a type 4 meter, creating a 4A meter, at the time the meter is installed.

The second exemption to the metering coordinator's obligation to install a type 4 meter is the focus of this rule change.

### 2.2.2 Small customer refusal exemption

The Competition in Metering Rule set out the reasons for the exemption to the obligation on metering coordinators to install a type 4 meter when a small customer refuses. The Commission acknowledged in the final determination that there was likely a minority of small customers who would seek to prevent or refuse the installation of a type 4 meter, or have

12 These are all of the roles that were previously completed by the responsible person. Under the NER prior to 1 December 2017, the responsible person was the respective DNSP for that area.

13 For each connection point. Clause 7.3.2(a) and 7.8.1(c) of the NER.

14 NER clause 7.3.2(d).

15 Clause 7.8.4 (a)-(c) of the NER.

16 Clause 7.8.4 (d)-(i) of the NER.

one removed.<sup>17</sup> An example as to why this refusal would be given is the concerns that some consumers have about the meter's ability to be read/managed remotely via a telecommunications network.<sup>18</sup>

In the circumstances where the small customer refused the installation of a type 4 meter, for new connections or where the customer's existing meter was not working, the only recourse that would be available to a retailer without this exemption would be to estimate the customer's energy consumption for the purposes of billing and settlement. Eventually the customer's premises would be de-energised if access to the meter continued to be denied by the small customer.<sup>19</sup>

As this would have been a poor outcome for consumers, an exemption for metering coordinators' obligation to install a type 4 meter was provided.<sup>20</sup> That is, the final Competition in Metering Rule provided 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.

The final determination also stated:<sup>21</sup>

"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 obligation to install a meter that meets the minimum services specifications at the relevant site."

Therefore, the intention is for the exemption in NER clauses 7.8.4(d)-(i) to allow (rather than require) a metering coordinator to install a type 4A meter if the customer refuses a type 4 meter.

In terms of a small customer refusal, the Competition in Metering Rule set out:<sup>22</sup>

- how a customer may communicate a refusal<sup>23</sup>
- that a retailer and metering provider must notify the metering coordinator and provide details of a refusal<sup>24</sup>
- a requirement for the metering coordinator to maintain a written record of the refusal for a period of at least seven years.

---

17 AEMC, *Expanding competition in metering and related services*, Final Determination, 26 November 2015, Sydney, p. 320.

18 Ibid.

19 Under Rule 113 of the NERR.

20 Under Section 7.8.3 of the NER a metering coordinator must install a meter that meets the minimum services specifications which is classified as a type 4 meter.

21 AEMC, *Expanding competition in metering and related services*, Final Determination, 26 November 2015, Sydney, pp. 320-321.

22 Clause 7.8.4 (e)-(g) of the NER.

23 A small customer may communicate their refusal verbally, in writing or by conduct.

24 Failing to do so is a civil penalty provision.

## 3 DETAILS OF THE RULE CHANGE REQUEST

In its rule change proposal, the AEC requests an expansion to the metering coordinator's exemption to the obligation to install a type 4 meter, to cover situations when a small customer refuses a type 4 meter that has already been installed. The request proposes this occur by amending clause 7.8.4 of the NER.

### 3.1 Issues raised in the request

Currently, metering coordinators are exempt from the requirement to install a type 4 meter for any new or replacement small customer meter installation when they act on a customer's refusal to the type 4 meter, but only at installation. The issue raised by the AEC proposal has therefore arisen because there is no provision that enables the metering coordinator to deactivate the communications on a type 4 meter if a customer does not wish to retain their meter's communications on an already installed type 4 meter, for example where a customer moves into a house that already has a type 4 meter installed.

In its rule change request, the AEC provides the rationale for this rule change. A number of key points raised in the rule change request are summarised below:

- The cost of disabling meter communications on an installed type 4 meter is three to five times lower than replacing the meter entirely (as currently occurs with a meter exchange).
- In most cases, should the rule change be made, the deactivation of the type 4 meter communications will not require any interruption to the customer's supply of electricity (in comparison to meter exchanges, which may require supply to be interrupted).
- There will be a reduction in the cost and time retailers, customers and state ombudsmen spend on complaints regarding metering.

The rule change request includes a proposed rule and a copy of the rule change request may be found on the AEMC website, [www.aemc.gov.au](http://www.aemc.gov.au).<sup>25</sup>

The Commission wishes to seek stakeholder views on the issues raised in the rule change request.

#### QUESTION 1: ISSUES

1. What are stakeholders' views on the issues raised by the AEC in the rule change request?
2. How prevalent is the issue of a small customer refusing the use of an installed type 4 meter (i.e. an advanced meter with active remote communications)?
3. What reason/s are customers giving for their type 4 meter refusal?

<sup>25</sup> AEC, Meter communications rule change proposal, rule change request, 20 July 2018. See: <https://www.aemc.gov.au/rule-changes/meter-installation-advanced-meter-communications>.

## 3.2 Proposed solution

The solution proposed by the AEC in its rule change request seeks to provide the metering coordinator with the ability to deactivate the communications on an already installed type 4 meter (converting the installed type 4 meter to a type 4A meter). The rule, if made, would expand the ability of a metering coordinator to respond to a customer's refusal of a type 4 meter to cover more circumstances than is currently possible under the NER.

The rule change request states that:

"Once a small customer refusal has been registered, the relevant metering coordinator and retailer may then choose the most cost-effective and efficient manner to convert the type 4 meter to a type 4A meter, which may or may not involve a meter replacement."

To implement this solution the NER would need to be amended to expand the current exemption to the obligation for metering coordinators when installing type 4 meters for new and replacement meters (NER clause 7.8.4). That is, the NER would need to be amended to allow metering coordinators to deactivate communications on an existing type 4 meter where a customer has expressed that they do not want the communications to remain enabled.

### QUESTION 2: THE PROPOSED SOLUTION

1. What are the benefits of the solution proposed by the AEC?
2. What are the costs of the solution proposed by the AEC?
3. Are there any alternative solutions that may have greater benefits and/or lower costs?
4. What, if any, is the effect on the Power of Choice reforms<sup>26</sup> of allowing metering coordinators to deactivate communications of already installed type 4 meters? That is, to what extent, if any, would the expanded exemption reduce or delay the benefits of the roll-out of advanced meters, such as access to innovative tariffs and services?

<sup>26</sup> The Competition in metering rule was part of a broader package of reforms which came out of the 2013 *Power of Choice review*. For more information see: <https://www.aemc.gov.au/markets-reviews-advice/power-of-choice-stage-3-dsp-review>.

## 4 ASSESSMENT FRAMEWORK

### 4.1 Achieving the NEO

Under 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).<sup>27</sup> This is the decision making framework that the Commission must apply.

The NEO is:<sup>28</sup>

To promote efficient investment in, and efficient operation and use of, electricity services for the longer 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.

### 4.2 Proposed assessment framework

To determine whether the proposed rule would be likely to promote the NEO, the Commission will assess the rule change request against an assessment framework. The framework may be refined during the rule change process.

The relevant considerations of the objective are the promotion of efficient investment and operation of energy services for the long-term interests of consumers of electricity with respect to the price of electricity.

The rule change request suggests a number of options that may improve the customer service experience by allowing metering coordinators to deactivate the communications of a type 4 meter when requested. It is argued by the AEC that the rule, if made, will lead to increased efficiencies and therefore reduce the cost imposed on customers that wish to have a type 4A meter when they already have a type 4 meter installed.

The Commission will use the following criteria to assess whether the proposed rule is likely to promote the NEO.

- **Price:** The ability of the proposed rule, if made, to result in a decrease in the cost of providing a customer with a type 4A meter where a customer has requested the communications of an installed type 4 meter be deactivated. The magnitude of these cost reductions and any additional benefits will be critical to assessing the proposal.
- **Customer choice:** The extent to which the rule change request promotes customer choice by enabling customers to select a meter type consistent with their optimum level of service (that is, reflecting characteristics they value most).
- **Competition:** Assessing the potential impacts of the rule change on the current state, and likely future, of metering and retail competition in the NEM.

<sup>27</sup> Section 88 of the NEL.

<sup>28</sup> Section 7 of the NEL.

The proposed rule will be assessed against the relevant counterfactual of not making the proposed changes. That is, against the current arrangements that do not permit metering coordinators to deactivate installed advanced meter communications.

### QUESTION 3: ASSESSMENT FRAMEWORK

1. Is the proposed assessment framework appropriate for considering the rule change request?
2. Are there other relevant considerations that should be included in the assessment framework?

## 4.3 Making a more preferable rule

Under section 91A of the NEL, the Commission may make a rule that is different (including materially different) to a proposed rule (a more preferable rule) if it is satisfied that, having regard to the issue or issues raised in the rule change request, the more preferable rule will or is likely to better contribute to the achievement of the NEO.

## 4.4 Applicability of the rule in the Northern Territory

From 1 July 2016, the NEL, as amended from time to time, apply in the Northern Territory, subject to derogations set out in regulations made under the Northern Territory legislation adopting the NEL. Under those regulations, only certain parts of the NEL have been adopted in the Northern Territory.<sup>29</sup>

The proposed rule, if made, would not apply in the Northern Territory as it relates to parts of the NEL which have not been adopted in the Northern Territory.

## 4.5 Applicability of the rule in Victoria

The Victorian government has made significant derogations from the metering provisions in the NEL, with the result that key changes that were made in the Competition in Metering Rule do not currently apply in Victoria and metering services continue to be provided by distributors as a regulated monopoly service.

The proposed rule (if made) would not have any immediate effect in Victoria as it relates to a part of chapter 7 that does not currently apply in Victoria as a result of a Victorian Ministerial Order.<sup>30</sup>

<sup>29</sup> See the AEMC website for the NEL that apply in the NT. The NT legislation adopting the NEL is the *National Electricity (Northern Territory) (National Uniform Legislation) Act 2015*.

<sup>30</sup> Pursuant to clause 5 of the *National Electricity (Victoria) Act 2005 - 2017 Ministerial Order* under Section 16BA, (Victorian Government Gazette, No. S 346, 12 October 2017).

## 5 LODGING A SUBMISSION

Written submissions on the rule change request must be lodged with Commission by **Thursday, 8 November 2018** online via the Commission's website, [www.aemc.gov.au](http://www.aemc.gov.au), using the "lodge a submission" function and selecting the project reference code ERC0246.

The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated.

Where practicable, submissions should be prepared in accordance with the Commission's guidelines for making written submissions on rule change requests.<sup>31</sup> The Commission publishes all submissions on its website, subject to a claim of confidentiality.

All enquiries on this project should be addressed to James Hyatt on (02) 8296 0628 or [james.hyatt@aemc.gov.au](mailto:james.hyatt@aemc.gov.au).

---

<sup>31</sup> This guideline is available on the Commission's website [www.aemc.gov.au](http://www.aemc.gov.au).

## ABBREVIATIONS AND DEFINED TERMS

AEC	Australian Energy Council
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Commisison	See AEMC
DNISP	Distribution network service provider, as defined in the NER
FRMP	Financially responsible market participant, as defined in the NER
NEL	National Electricity Law
NEM	National energy market
NEO	National electricity objective
Type 4 meter	A metering installation meeting the specifications for type 4 set out in schedules 7.4 and 7.5 of the NER, also known as a smart meter
Type 4A meter	A type 4 meter with communications abilities deactivated