Australian Energy Market Commission
Rule Determination

National Electricity Amendment Integration of NEM Metrology Requirements Rule 2008

Rule Proponents
NEMMCO

6 March 2008

Signed:.....

John Tamblyn
Chairman
For and on behalf of
Australian Energy Market Commission

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AEMC, National Electricity Amendment Integration of NEM Metrology Requirements Rule, 6 March 2008, Sydney

About the AEMC

The Council of Australian Governments, through its Ministerial Council on energy, established the Australian Energy Market Commission (AEMC) in July 2005 to be the Rule maker for national energy markets. The AEMC is currently responsible for Rules and policy advice covering the National Electricity Market. It is a statutory authority. Our key responsibilities are to consider Rule change proposals, conduct energy market reviews and provide policy advice to the Ministerial Council as requested, or on AEMC initiative.

Contents

Summary

The Australian Energy Market Commission (Commission) makes this Rule determination and attached Rule on National Electricity Market Management Company Ltd. (NEMMCO)'s proposal relating to the integration of National Electricity Market (NEM) requirements in accordance with sections 102 and 103 of the National Electricity Law (NEL). The Rule will commence operation on 6 March 2008.

On 30 April 2007 the Commission received a package of Rule change proposals from NEMMCO which primarily relate to the harmonisation of first tier metering installation requirements into the National Electricity Rules (Rules). The package of Rule change proposals submitted by NEMMCO was the second package of Rule changes submitted to the Commission in relation to metrology. This package continued the ongoing reform to the metrology provisions largely contained in Chapter 7 of the Rules as recommended in the Joint Jurisdictional Review of the Metrology Procedures Final Report (JJR Report).

By way of background, the JJR Report was completed in October 2004 and recommended that NEMMCO lead a series of reforms and recommendations as proposed in that report. On 3 February 2006 NEMMCO submitted the first metrology Rule change package which sought the following changes to the Rules in relation to second tier loads:

- A single Metrology Procedure to replace the separate existing national and jurisdictional Metrology Procedures (Chapter 7);
- Various amendments to Chapter 7 that adopted recommendations from the JJR Report;
- Editorial changes within Chapter 7 that improved the readability, corrected errors, and recognised the creation of the National Measurement Institute; and
- Providing for the Local Network Service Provider (LNSP) to be deemed the responsible person, responsible for type 5, type 6 and type 7 metering installations, given that, the jurisdictional derogations in Chapter 9 on this matter were due to expire on 31 December 2006.

The Commission largely adopted the proposed amendments subject to modifications and alterations and the *National Electricity Amendment (Metrology) Rule 2006 No.17* was made on 9 November 2006. The Rule applied to connection points through which Market Participants purchased any market load and connection points through which market customers sold any second tier load.

This Rule Change Proposal (referred to as the Integration of NEM Metrology Requirements) seeks to:

- Incorporate and harmonise metrology requirements for first tier connection points, which are currently under the responsibility of individual participating jurisdictions, within the NEM metrology framework;

- Consequential upon the Commission accepting the above changes, the Rule changes aim to harmonise current jurisdictional metrology requirements for first tier connection points with existing requirements for second tier connection points to the maximum extent possible, consistent with jurisdictional policy;

- Remove duplication of requirements within the existing Rules;

- Address NEM efficiency issues identified as a consequence of the industry consultation undertaken as part of NEMMCO's integration of first tier metrology project;

- Address a metering installation audit issue identified by NEMMCO; and

- Address minor editorial changes identified when developing the change proposals above.

The Commission is satisfied that the Rule is likely to contribute to the National Electricity Objective (NEO)[1], and that it satisfies the Rule making test. For this reason, the Commission has determined to make this Rule determination and accompanying Rule under section 102 of the NEL.

In this Rule determination, the Commission has generally accepted NEMMCO's proposed metrology Rule changes with some modifications and enhancements. As a result of submissions received, the Commission's analysis, and a review of the wording of the proposed Rule, the Commission has made a number of drafting amendments and made modifications on some specific matters of the proposed Rule that have operational implications. The key modifications made by the Commission are:

- Integrating type 5, 6, and 7 first tier load metering installations into the framework that currently exists for type 5, 6, and 7 second tier metering installations thereby retaining the role of the LNSP for those installations (Rule Proposal No.3, see p.31);

- Integrating alterations and enhancements to metering installations requested by financially responsible Market Participants into the existing framework in clauses 7.3.1, 7.3.4 and 7.3.6 (including cost recovery) (Rule proposal No.4, see p.40);

- Not adopting the measurement of losses between the connection point and the metering point as part of this round of metrology Rule changes (Rule proposal No. 6, see p.50);

- Clarifying the roles and arrangements for requesting and witnessing tests of metering installations (Rule proposal No.8, see p.65);

[1] In the draft Rule determination this was known as the national Electricity market Objective but has been renamed following amendments made to the National Electricity Law.

- Clarifying the conditions for a metering installation to be classified as a type 7 metering installation (Rule proposal No.15, see p.110);

- Moving the identification of Australian and International Standards to the Metrology Procedure with the scope of power to identify standards clearly contained in the Rules; and

- Various savings and transitional arrangements largely included to accommodate the integration of first tier metering installations into the NEM (see p.157).

This Rule determination sets out the Commission's reasons in accordance with the requirements of the NEL and sets out the Commission's assessment in relation to the above proposed changes. The Rule, which has been made in accordance with this assessment, is attached.

1 NEMMCO's Rule proposal

On 30 April 2007 the Commission received a package of Rule change proposals from NEMMCO which primarily related to the harmonisation of first tier metering installation requirements into the Rules. NEMMCO stated that these Rule change proposals sought to achieve the following objectives:

- Consistency with the NEL and the NEM[1] objective;
- Alignment with the JJR Report recommendations without re-visiting the assessments made in their review;
- Include technical metrology provisions for first and second tier customers;
- Ensure that, where necessary, existing first tier metering is "grandfathered" with respect to compliance with technical metering standards; and
- Non technical matters that are to apply in each jurisdiction, such as consumer protection requirements are to continue to be the responsibility of each jurisdictional regulator or the Australian Energy Regulator (AER).

NEMMCO stated in its proposal that in developing the first tier metrology Rule change proposals that it had consulted with Jurisdictional Regulators and industry. Consultation with industry was through the Metrology Reference Group (which has industry representation at an operational level) and the Retail Market Executive Committee (which has industry representation at an executive level).[2] Through this consultation NEMMCO received submissions from industry requesting where possible that the existing numbering in the Rules remain unchanged. The reason for this request from industry was to minimise the significant amount of time and cost required to update compliance systems and amend procedures that refer to clauses in the Rules.

NEMMCO's 26 Rule change proposals arising out of the "Integration of First Tier Metrology" project can be divided into 6 categories in terms of what these are attempting to achieve.

NEMMCO list these categories as: [3]

Group 1 - Incorporate and harmonise metrology requirements for first tier connection points, which are currently under the responsibility of individual jurisdictions, into the NEM metrology framework and include the following Rule change proposals:

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[1] At the time of submitting the Rule change proposal the National Electricity Objective was known as the National Electricity Market Objective or NEM objective. On 1 January 2008 the NEM objective was renamed the National Electricity Objective (NEO).

[2] NEMMCO Rule change proposal, Attachment A, p.1.

[3] NEMMCO Rule change proposal, Attachment A, p.5.

- Number 1 – Extend the scope of Chapter 7 of the Rules to include metrology for all connection points in the national grid; and

- Number 2 – Grandfathering of existing first tier requirements.

Group 2 - Consequential upon accepting these changes above, these Rule changes harmonise current jurisdictional metrology requirements for first tier connection points to the maximum extent possible, consistent with jurisdictional policy. The Rule change proposals under this group are:

- Number 3 – Jurisdictional variations in the election of the responsible person;

- Number 4 – Recognition of arrangements to provide facilities in addition to those normally provided by the responsible person;

- Number 5 – Data storage capacity of type 6 metering installations;

- Number 6 – Management of losses between connection point and metering point;

- Number 7 – Metering standards for non-market generation;

- Number 8 – Process for the conduct of a participant requested meter test;

- Number 9 – Record keeping;

- Number 10 – Rights of access to metering data;

- Number 11 – On site meter testing;

- Number 12 – Metering databases;

- Number 13 - Metering installation malfunctions;

- Number 14 – Security seals; and

- Number 15 – Type 7 metering installations.

Group 3 - Remove duplicate requirements within the existing Rules and includes the following Rule Change proposal:

- Number 16 – Data validation, substitution and estimation.

Group 4 - Address NEM efficiency issues identified as a consequence of the industry consultation undertaken as part of NEMMCO's Integrate First Tier Metrology project and include the following Rule Change proposals:

- Number 17 – Incorporate Queensland's minimalist transition approach to full retail competition (FRC) in the Rules;

- Number 18 – Use of standard set of terms and conditions;

- Number 19 – Time setting;

- Number 20 – Design standards;
- Number 21 – Recognition of International Laboratory Accreditation Cooperation (ILAC);
- Number 22 – Timeframes for inspection and testing of various metering installation types;
- Number 23 – Review of overall accuracy tables (Rules Schedule 7.2); and
- Number 24 – Single table of requirements (Rules Schedule 7.3).

Group 5 - Address a metering installation audit issue identified by NEMMCO and includes the following Rule change proposal:

- Number 25 – NEMMCO audit of meter 'test results'.

Group 6 – Address the minor editorial changes identified when developing the Rule change proposals and includes the following Rule change proposal:

- Number 26 – Editorial changes within Chapter 7.

A detailed analysis of each individual Rule change proposal is included in this paper in section 5 below.

1.1 How NEMMCO considers the Rule change proposal meets the National Electricity Market Objective[4]

1.1.1 Promotion of efficient use of electricity services and the management of risk

NEMMCO stated that the continued harmonisation of metrology requirements as proposed in its package of Rule change proposals is expected to reduce the number of regulatory instruments applying to metrology. NEMMCO stated that the package of Rule change proposals also brings together similar regulatory requirements contained in separate jurisdictional instruments into a common location. Furthermore NEMMCO stated that the removal of jurisdictional variations in metrology requirements would reduce the regulatory risk to industry participants in relation to compliance and therefore encourage those industry participants to operate outside their home jurisdiction. NEMMCO therefore concluded that the proposed changes should lead to increased competition within geographic areas of the NEM and assist retailers and service providers to manage compliance across jurisdictional boundaries.[5]

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[4] As of 1 January 2007 amendments to the National Electricity Law renamed the National Electricity Market Objective to the National Electricity Objective

[5] NEMMCO Rule change proposal, Attachment A, p.3.

1.1.2 Promotion of efficient investment

NEMMCO stated that the harmonisation of metrology requirements across the NEM and the identification and removal of jurisdictional differences will greatly assist equipment manufacturers to deliver common products that meet NEM wide requirements. NEMMCO also stated that the Rule change proposal would facilitate investment by Metering Providers and Metering Data Providers by reducing the risks of investing and operating across jurisdictional boundaries.[6]

NEMMCO stated in its Rule change proposal that a single metrology framework for first and second tier metering installations would facilitate the transfer of consumers between Local Retailers and second tier retailers without the need for changes to the metering installation. NEMMCO stated that this is expected to lead to a reduction in meter churn, and a greater willingness upon service providers to invest in metering equipment. NEMMCO then concluded that this would be expected to promote more efficient investment in metering installations.[7]

1.1.3 Support retail competition and the long term interests of consumers

NEMMCO stated that the harmonisation of the second tier metrology requirements through NEMMCO's first package of metrology Rule changes promoted competition in the NEM. NEMMCO proposed that this package of Rule change proposals would be expected to deliver further levels of harmonisation. NEMMCO stated that the reduced industry costs, achieved through harmonisation would eventually flow to consumers through the benefits of competition, and are therefore in the long term interests of consumers.[8]

1.1.4 Good regulatory practice and consistency with public policy settings

NEMMCO proposed that bringing the current multiple jurisdictional metrology requirements into a single national harmonised framework would create a more predictable and stable regulatory environment. It also stated that this would increase the transparency of the operation of the NEM and reduce differences between government regulators or at a minimum, make differences between government regulators more visible.[9]

NEMMCO also stated that the package of Rule change proposals seeks to establish a set of national metrology requirements that are likely to be consistent with the Ministerial Council on Energy's Retail Policy Working Group's activities to develop a national framework for distribution and retail regulation.

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6 Ibid

7 Ibid

8 NEMMCO Rule change proposal, Attachment A, p.3.

9 NEMMCO Rule change proposal, Attachment A, p.4.

2 Background

This Rule change proposal relates to metering and the move to provide cost effective metering to the market, by integrating the requirements for first tier loads into the metrology framework provided for in Chapter 7 of the Rules.

By way of background to the NEMMCO proposal, the two key structural features of metering in the NEM are explained below:

- The 'tier' structure for connection points (i.e. first tier and second tier) in section 3.1; and
- Metering installation 'types' in section 3.2.

In addition, a history of the development of metrology reforms prior to this Rule change proposal is provided in section 3.3.

2.1 Tier structure for connection points

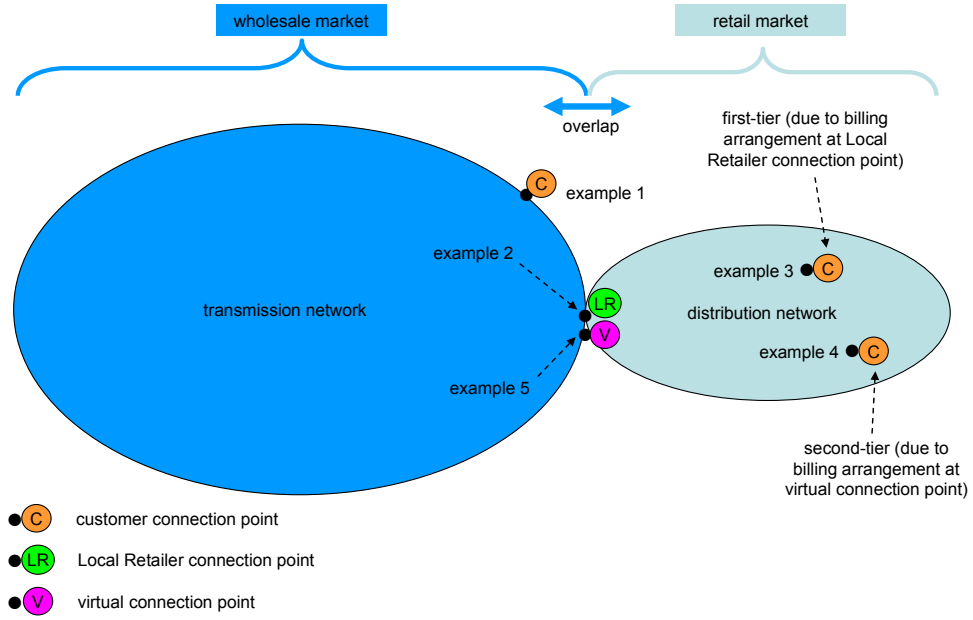
A 'connection point' is an agreed point of supply established between parties on the transmission network or the distribution network. There are several different ways to configure connection points for customers[10]:

1. On the transmission network for an end-use customer (example1);
2. On the transmission network for a licensed retailer (examples 2 & 5); and
3. On the distribution network for an end-use customer (examples 3 & 4).

These are shown graphically in Figure 2.1.

[10] Connection points also apply to generating units, but these are not represented in this explanation.

Figure 2.2.1 Various configurations for a customer 'connection point



A connection point in some instances is a physical concept and in other instances a virtual concept. Physically, a connection point receives its electricity from the transmission network, either directly (examples 1 and 2) or via the distribution network (examples 3 and 4). Alternatively, a connection point receives its electricity by virtue of a referred distribution connection point (example 5).

Overlayed on the 'connection point' is the NEM wholesale billing function. In examples 1 and 2, the customer must be registered as a wholesale participant with NEMMCO, and is billed for its electricity consumption directly by NEMMCO. In example 3, the customer is billed by the Local Retailer, who is in turn billed by NEMMCO due to its example 2 connection point. In this combination, the load consumed at the example 3 connection point is classified as a 'first-tier load'[11]. Hence, the connection point is generally referred to as first-tier. In examples 4 and 5, the customer is billed by a retailer[12] who has a virtual connection point (example 5), who in turn is billed by NEMMCO due to this virtual connection point. That is, the example 4 connection point is referenced to the example 5 connection point. In this combination, the load consumed at the example 4 connection point is classified as a 'second-tier load'[13]. Hence, the connection point is generally referred to as second-tier.

11 If this customer were to choose to register with NEMMCO, then the customer would be classified as a 'First-Tier Customer'.

12 Often referred to as a 'second-tier retailer' or a FRMP.

13 If this customer were to choose to register with NEMMCO, then the customer would be classified as a 'Second-Tier Customer'.

2.2 Metering installation types

Another of the NEM's structural features is that each connection point must have a metering installation. The components of a metering installation include measurement transformers[14], measurement devices[15], and data transport facilities[16]. The characteristics of these devices vary with the quantity of electricity flowing through the connection point and the quantity separates the metering installation into the following four types:

- Flows greater than 1,000 GWh per annum (type 1);
- Flows between the range of 1,000 GWh and 100 GWh per annum (type 2);
- Flows between the range of 100 GWh and 0.75 GWh per annum (type 3); and
- Flows less than 0.75 GWh[17] per annum (type 4).

In regard to measurement, the characteristics of the devices vary across these 4 types, and are largely differentiated by increasing accuracy requirements for higher electricity flows.

For all these types, the data transport facilities are called on to provide 2 distinct functions. One function is to provide actual measurement data for use in NEM prudential calculations[18]. The other function is to provide measurement data for use in the NEM settlements process[19].

To provide measurement data for NEM prudential calculations on a daily basis, the data transport facilities of a metering installation need to be electronic and remotely accessible. The need for electronic remote access to measurement data for type 1, 2 and 3 load groups is undisputed. That is, all electricity flows greater than 750 MWh per annum must have remote electronic access to their measurement data.

For the type 4 load group, there is a range of views on the quantity at which remote electronic data transport facilities become economic. According to the JJR report there appears to be general agreement amongst the Jurisdictional Regulators[20] that this quantity should decrease over time as technological innovation occurs in the market. For this reason, the principle that one load type be available to support remote electronic transport of measurement data down to zero MWh has been

14 Namely, current transformer and voltage transformer.

15 Namely, a meter which may have an internal storage register or external storage register for the measured data.

16 Can be electronic or manual, each with there own set of quality controls.

17 Most commonly known as 750 MWh which is (identical to 0.75 GWh).

18 The data required for NEM prudential calculations is required to be submitted to NEMMCO on a daily basis. NEMMCO will generally accept estimated data where the data collection process has failed or is not otherwise available on any one day.

19 The NEM settlements process has a weekly cycle, with four revisions over time to enable actual measurement data to be progressively provided to NEMMCO. The timeframe for NEM settlements measurement data is much longer than the time frame for NEM prudential calculations.

20 See JJR report, Section 4.4.1, page 49.

adopted, with additional flexibility introduced to cater for local practices where manual data transport facilities are supported by a jurisdiction.

As agreed by all participating jurisdictions at the commencement of FRC in 2002 for Victoria and NSW, 3 local practices were identified:

- Where the device is an interval meter and the data transport facility has a manual collection step - type 5;
- Where the device is an accumulation meter and the data transport facility has a manual or electronic collection step - type 6; and
- Where there is no measurement device and hence no data transport facility - type 7.

For continuity with the type 1, type 2, type 3 and type 4 categories, these 3 conditions were designated as type 5, type 6 and type 7, with the quantity of electricity to which they apply set as a flexible cap. For type 5 and type 6, the maximum value of the cap was 750 MWh, and the minimum value of the cap was zero MWh[21].

Type 5 currently applies for quantities in a range between 0 MWh and 160 MWh in each of the jurisdictions excluding Queensland where the range is 0 MWh to less than 100 MWh. The lower the range, the greater the coverage for type 4 metering installations. This flexibility will permit jurisdictions to gradually reduce the influence of the type 5 and 6 practices in their jurisdictions over time.

The type 7 metering installation applies to unmetered loads only. A number of typical connection point locations where the 7 types would be installed are shown in Figure 2.2:

[21] If set at 750 MWh, the type 5 effectively replaces the type 4. If set at zero MWh, then effectively the type 5 would not be permitted, and all loads would need a type 4 arrangement.

Figure 2.2 Typical connection point locations for types 1 to 7 metering installations[22]

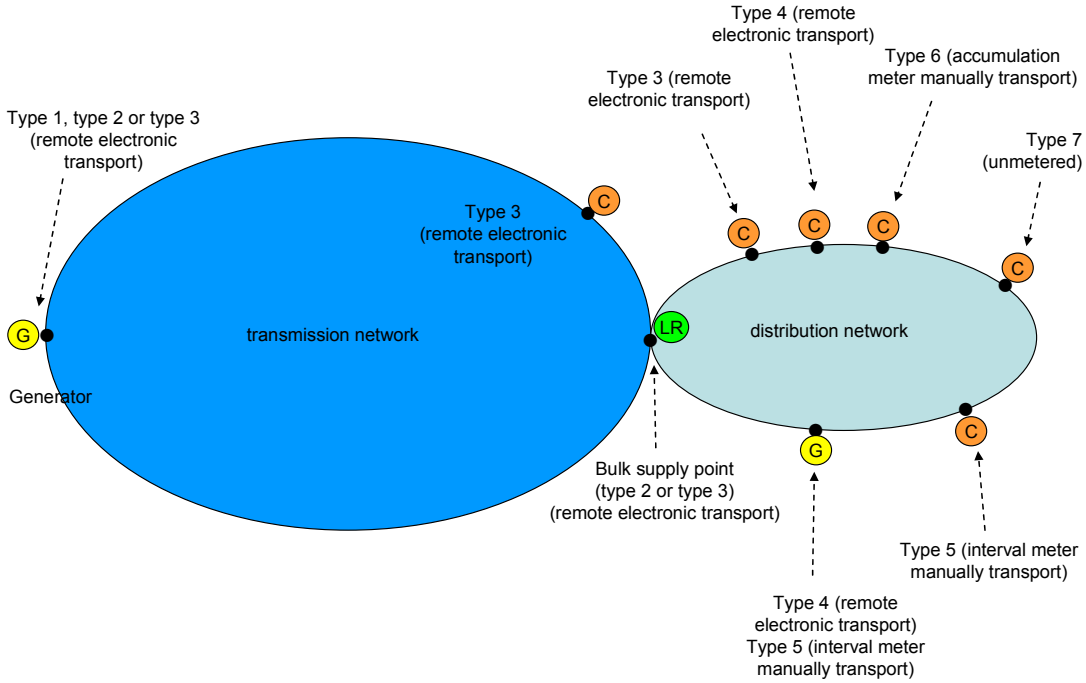


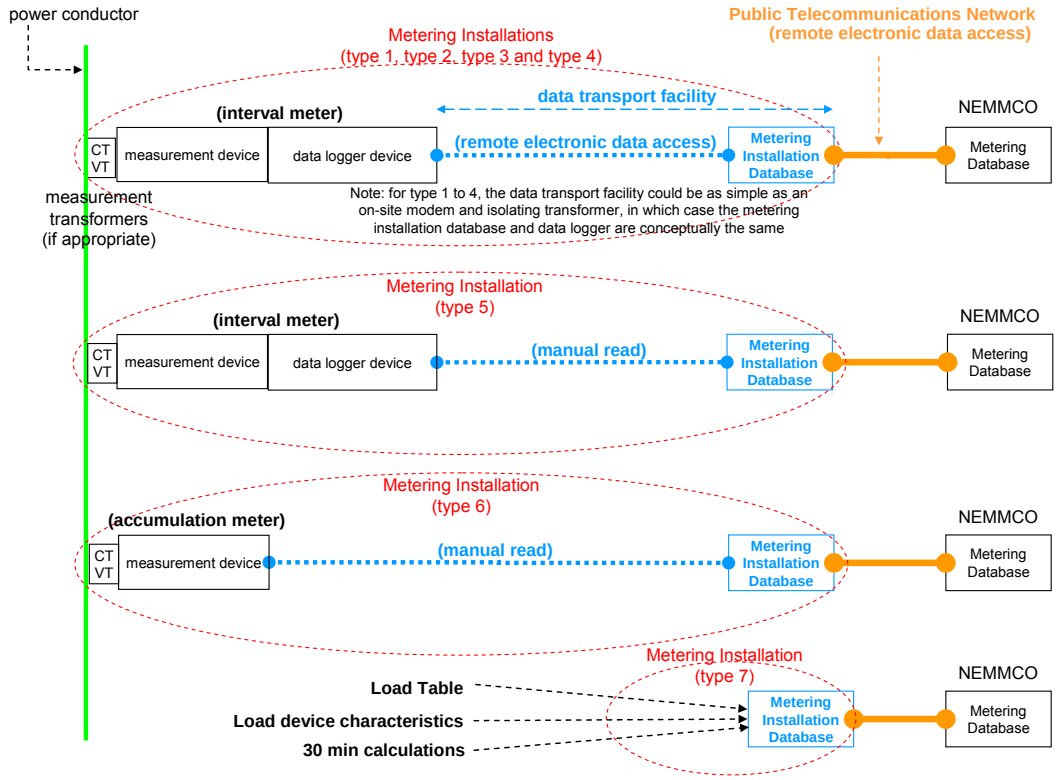
Figure 2.2 shows that a type 5, type 6 and type 7 metering installation would only be located in the distribution network. The diagram also shows that customers who have a type 3 or type 4 connection point may be connected to a distribution network. A customer who has a type 3 connection point may also be connected directly to the transmission network. Each Local Retailer would have at least one transmission network connection point, typically classified as type 2 or type 3, but there is nothing preventing the connection point from being type 1.

The different arrangements of components of a metering installation[23] are shown for metering installation types 1 to 7 in Figure 2.3.

[22] For completeness, the diagram includes generator connection points as well as customer connection points.

[23] It should be noted that the examples are indicative and for the purpose of explanation only.

Figure 2.3 Components of Metering Installation types 1 to 7



Note that for types 1 to 4 metering installations, the data transport facility may be as simple as an on-site modem and isolation transformer[24]. This basically means that a telephone line (representing the Public Telecommunications Network) is connected to the meter allowing anyone who has been provided with a meter password (including the Metering Data Agent, Metering Provider, NEMMCO and a Customer) to access the data in the meter. In this example, the metering installation database and the data logger device would be the same device.

2.3 Development of Metrology Reforms

Prior to the incorporation of NEMMCO's first metrology package into the Rules in 2006 the metrology procedures for 5 to 7 metering installations were the responsibility of Metrology Coordinators (assigned to Jurisdictional Regulators). These changes were introduced into Chapter 7 of the Code at the commencement of FRC in 2002.

At this time, NEMMCO produced 4 metrology procedures (for each of the types 1 to 4 metering installations). Each Jurisdictional Regulator produced one metrology

[24] Or an on-site modem and a mobile phone.

procedure to cover their combined types 5, 6 and 7 metering installation responsibilities. In total, there were 9 separate metrology procedures in operation in the NEM.

At the commencement of FRC in Victoria and NSW[25] changes were made to Chapter 7 of the Code to support the contestability of small volume connection points.[26] As part of these arrangements derogations were provided to deem the LNSP as the responsible person for metering installations types 5, 6 and 7 in specified circumstances.

The changes were carefully constructed to enable a jurisdiction's historical practices[27] to be accommodated across an undefined transition period. For example, Victoria had one distribution company that handled metering services while NSW had a number of distributors and therefore a number of metering service providers.

The three major practices[28] were identified and included in the changes to Chapter 7 of the Code at that time. To give confidence that these major practices would be fairly and consistently applied by each jurisdiction, controls were established in Chapter 7. The major controls were:

- To appoint a 'Metrology Coordinator' to be responsible for these 3 practices;
- To require these practices to be documented in a transparent 'metrology procedure';
- To impose a review on the type 5 and type 6 metering installations and jurisdictional metrology procedures to be completed by December 2003; and.
- To impose a limit above which these types could not apply. The first limit chosen was 160MWh, as set by the jurisdictions.

The practices and their controls did not interfere with the existing rights for a retailer to choose to be the responsible person for type 1, type 2, type 3 and type 4 metering installations, nor the LNSP to perform this role if the retailer so chose.

However, it was recognised that the manual meter reading arrangements associated with two of these practices (interval and accumulation meters) could benefit from economies of scale where the process is managed by the LNSP. The third practice (for unmetered supplies) was closely aligned to LNSP responsibilities within the Distributor.

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25 Victoria and NSW were the first of the Australian States to introduce FRC to consumers in January 2002.

26 In this context, 'contestable' means that a person who receives electricity at a connection point has the choice of which licensed retailer will supply that electricity.

27 In addition to Victoria and NSW, QLD, SA, ACT and Tasmania were also keen to have an undefined transitional period in which to unwind their historical metering practices.

28 There were 3 major practices: accumulation meters that were manually read (classified as type 6 metering installations), interval meters that were manually read (classified as type 5 metering installations), and unmetered connection points (classified as type 7 metering installations).

On application by each jurisdiction, the ACCC had authorised one or more derogations that had introduced FRC enabling the LNSP to be the deemed responsible person for type 5, 6 and 7 metering installations.[29] These derogations were included in Chapter 9 of the Code.

NEMMCO advised that prior to conversion to the Rules on 1 July 2005, the Code included a clause[30] which required the Jurisdictional Regulators to jointly conduct a review of metering installations types 5 and 6, and of the metrology procedures. The JJR report published in October 2004 was the jurisdictional regulators' response to this requirement.

On 3 February 2006 NEMMCO submitted the first metrology Rule change package which sought the following changes to the Rules with respect to second tier loads:

- A single Metrology Procedure to replace the separate existing national and jurisdictional metrology procedures (Chapter 7);
- Various amendments to Chapter 7 that adopted recommendations from the JJR report;
- Editorial changes within Chapter 7 that improved the readability, corrected errors, and recognised the creation of the National Measurement Institute; and
- Provisions for the Local Network Service Provider (LNSP) to be deemed the responsible person for type 5, type 6 and type 7 metering installations given that the jurisdictional derogations in Chapter 9 on this matter were due to expire on 31 December 2006.

The Commission largely adopted the proposed amendments subject to some modifications and alterations. The *National Electricity Amendment (Metrology) Rule 2006 No.17* was made on 9 November 2006. The Rule applied to connection points through which Market Participants purchased any market load and connection points through which market customers sold any second tier load.

The Rule change package that has led to this draft determination is the second of a series of NEMMCO Rule change packages regarding metrology that aims to make changes to Chapter 7 of the Rules that align with the recommendations of the JJR report.[31] This Rule change package aims to integrate first tier loads into the Chapter 7 framework.

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29 There had been 2 sets of derogations for Victoria and NSW and one set for SA and ACT. The first derogation for NSW and Vic expired on 31 December 2003. The second derogation for Vic and NSW was due to expire on 31 December 2006 as were the derogations for SA and ACT.

30 Clause 7.13(f)

31 NEMMCO's response to the JJR report, entitled "The Metrology Harmonisation and Data Management Programme Plan" was published on 9 May 2005.

3 Rule Determination

3.1 The Commission's power to make the Rule

The NEMMCO Rule change proposal raises matters about which the Commission may make a Rule (NEL s.94(1)(b)). In particular, the proposed Rule falls under the matters set out in the NEL s.34(1), as it relates to:

- The operation of the national electricity market; and
- The activities of persons participating in the national electricity market or involved in the operation of the national electricity system.

In addition the proposed Rule change falls under the following items in Schedule 1 of the NEL:

- Paragraph 27 which relates to the metering of electricity to record the production or consumption of electricity;
- Paragraph 28 which relates to the registration of metering installations used to meter electricity; and
- Paragraph 29 which relates to the regulation of persons providing metering services relating to the metering of electricity.

3.2 Submissions at the first stage of consultation

On 31 May 2007 the Commission published a notice under section 95 of the NEL which commenced first round consultation on the package of Rule change proposals. The Commission received ten submissions on the Rule change package from:

- Energy Australia;
- AGL;
- Origin Energy;
- United Energy Distribution/Alinta;
- Citipower/Powercor;
- SPAusNet;
- Ergon Energy;
- TransGrid;
- ActewAGL; and
- Metering Dynamics.

3.3 Supplementary submission and extension of time

On 14 September 2007 the Commission received a supplementary submission from NEMMCO in response to questions raised by the Commission as a result of its analysis of the Rule change proposals submitted by NEMMCO. This submission has been published on the Commission's website in conjunction with this draft Rule determination. The Commission considered that it was in the public interest for the Commission to take the time to sufficiently address the complex issues raised by the proposal in relation to the integration of first tier loads. Accordingly on 20 September 2007 the Commission issued a notice under s.107 of the NEL extending the time for publishing the draft determination to 18 October 2007.

3.4 Submissions at the second stage of consultation

On 18 October 2007, the Commission gave notice under section 99 of the NEL of the making of a draft Rule determination and draft Rule on this Rule change proposal.

The draft Rule generally accepted NEMMCO's proposed metrology Rule changes with some modifications and enhancements. The Commission also sought feedback on a number of policy issues from interested stakeholders that have been identified through the analysis of the NEMMCO proposal and submissions.

The Commission invited submissions on this draft Rule determination by 13 December 2007. At this second stage of consultation the Commission received ten submissions from:

- TransGrid;
- Energex;
- NEMMCO;
- Ergon Energy;
- EnergyAustralia;
- ETSA Utilities;
- Citipower/Powercor;
- AGL;
- United Energy Distribution/Alinta;
- SP AusNet

3.5 Extension of time for final Rule determination and final Rule

On 20 December 2007 the Commission published a notice under section 107 of the NEL to extend the publication of the final Rule determination on this proposal to 21 February 2008. The Commission considered that it was in the public interest to

extend the publication of the final Rule determination in order to sufficiently analyse and address complex issues raised in the second round submissions.

On 21 Febraury 2008 the Commission published a notice under section 107 of the NEL to extend the publication of the final Rule determination on this proposal to 6 March 2008. The Commission considered that is was necessary to extend the publication of the final Rule determination in order to sufficiently analyse and address complex issues raised in relation to the Rule to be made.

3.6 Second supplementary submission

On 22 February 2008 the Commission received a second supplementary submission from NEMMCO advising an extension of time for the commencement of the Rule. The reason provided by NEMMCO for the request was due to a delay in the publication of the Rule to be made and to preserve a three month period between the date when the Metrology Procedure is published and the date the Metrology Procedure comes into effect. NEMMCO requested for the Rule to commence on 31 July 2008.

The Commission considered that the date of commencement of the final Rule did not require a change but rather amended the date by which amendments to the Metrology Procedure were required to be completed. These amendments are now required to be complete by 31 July 2008 in the Rule to be made rather than 30 June 2008 as provided for in the draft Rule determination and draft Rule. The Commission considers that giving NEMMCO an additional month to complete the update to the Metrology Procedure as a result of the Rule to be made is appropriate.

3.7 Relevant MCE statements of policy principles

The NEL requires the Commission to have regard to any statements of policy principles in applying the Rule making test. The Commission notes that currently, there are no specific Ministerial Council on Energy (MCE) statements of policy principles that directly relate to the metering of first or second tier loads contained in the Rules.

3.8 Factors that the Commission may consider in interpreting the National Electricity Objective

The Rule making test set out in section 88 of the NEL requires the Commission to be satisfied that a Rule that it proposes to make will, or is likely to, contribute to the achievement of the National Electricity Objective (NEO) [32]. The NEO, is set out in s 7 of the NEL.

[32] The National Electricity Objective (NEO) was known as the National Electricity Market Objective (NEM objective) in the draft Rule determination. The NEM objective was renamed the National Electricity Objective as of 1 January 2008. This renaming does not affect the Rule making test in relation to this Rule change proposal.

4 Rule Making Test and National Electricity Objective

The Rule Making Test requires the Commission to be satisfied that a Rule that it proposes to make will contribute to the NEO. The NEO is defined in section 7 of the NEL. Chapter 7 of the NEL states;

> "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."[33]

In its draft Rule determination the Commission assessed the Rule change proposal according to the National Electricity Market Objective. As of 1 January 2008 the National Electricity Market Objective was renamed as the National Electricity Objective. Some minor amendments were made to the drafting of the National Electricity Objective but the substance of the objective is unchanged.

The Commission has applied the Rule Making Test to NEMMCO's proposal and has also taken into consideration alterations made by the Commission to the Rule to be made from outcomes of analysis and discussion in Chapter 5. These modifications have been compared to the provisions contained in the Rules.

In its proposal NEMMCO stated that it considered that the Rule change package as a whole promoted the NEM objective by:

- promoting the efficient use of electricity services and the management of risk;
- promoting efficient investment;
- supporting retail competition and the long term interests of consumers; and
- represented good regulatory practice and consistency with public policy settings.

The Commission, having analysed the amendments, and having in some cases provided deviations to those proposed amendments, concur with NEMMCO. The Commission also confirms that these amendments promote the NEO.

The Rule change package has sought to integrate first tier metrology requirements in to the Rules. In achieving this goal six groups of Rule changes have been assessed. The promotion of the NEO will be assessed in relation to these six groups. The six groups of amendments are:

- Group 1 - Incorporating and harmonising metrology requirements for first tier connection points, which are currently under the responsibility of individual jurisdictions into the NEM metrology framework. This included assessing

[33] National Electricity Law section 7

extending the scope of Chapter 7 of the Rules to include the metrology for all connection points in the national grid and the grandfathering of existing first tier requirements.

- Group 2 - Harmonising current jurisdictional metrology requirements for first tier connection points with existing requirements for second tier connection points. This included the analysis of:

  – Jurisdictional variations in the election of the responsible person;

  – Recognition of arrangements to provide facilities in addition to those normally provided by the Responsible Person;

  – Data storage capacity of type 6 metering installations;

  – Management of losses between connection point and metering point ;

  – Metering standards for non-market generation;

  – Process for the conduct of a participant requested metering installation test;

  – Record keeping;

  – Rights of access to metering data;

  – On-site metering installation testing;

  – Metering databases;

  – Metering installation malfunctions;

  – Security seals; and

  – Type 7 metering installations (for unmetered loads).

- Group 3 - Removing duplicate requirements within the existing Rules which involved analysing data validation, substitution and estimation.

- Group 4 – Addressing NEM efficiency issues identified as a consequence of the industry consultation undertaken as part of NEMMCO's integrate first tier metrology project. This involved examination of the following issues;

  – Incorporating Queensland's minimalist transition approach to FRC in the Rules;

  – Use of standard set terms and conditions;

  – Time setting;

- Design standards;
- Recognition of International Laboratory Accreditation Cooperation (ILAC);
- Timeframes for inspection and testing of various metering installation types;
- Review of overall accuracy tables;
- Single table of requirements;

- Group 5 – Addressing a metering installation audit issue identified by NEMMCO which involved the analysis of NEMMCO audit of metering installation "test results".
- Group 6 – Address minor editorial changes identified when developing the change proposals.

4.1 Group 1 - Incorporate and Harmonise Metrology Requirements for First Tier connection Points into the NEM Metrology Framework

In its draft Rule determination the Commission considered that removing the restriction of the application of Chapter 7 to first tier customer loads would promote the NEM objective by improving the efficiency of the NEM. Removing such restrictions continues to contribute to harmonisation of NEM Metrology requirements and removes the need for jurisdictions to separately maintain metrology standards for first tier metering installations. Consequently, changes to metrology at the first tier level are coordinated with changes at the second tier level.

In its draft Rule determination the Commission also accepted that the NEM objective would be promoted as compliance costs for Market Participants may be reduced, as compliance will be with only one Metrology Procedure rather than various jurisdictional instruments. The Commission considered that the reduction of compliance with duplicate requirements contained in the multiple documents was a further benefit.

In its draft Rule determination the Commission further accepted that the integration of first tier metrology allowed for a larger market with a common standard of metering equipment. The Commission considered that this promoted the NEM objective by allowing for further competition and facilitating the increased operation across jurisdictional boundaries by Market Participants. In particular the Commission considered that the Rule changes allowed for more transparency in entering markets in other jurisdictions and reducing compliance costs and risk to those Market Participants.

The Commission further stated in its draft Rule determination that this part of the Rule change package allowed for the introduction of a single common metrology standard for first and second tier metering installations. The Commission considered that this promoted the NEM objective by providing certainty in relation to technical standards to be applied to first and second tier metering installations without

affecting future policy decisions in relation to interval metering installations or the replacement of superseded equipment.

The Commission confirms the reasoning of its draft Rule determination in this final Rule determination, and confirms that this part of the Rule change package meets and promotes the NEO for the same reasons as outlined above. The Commission confirms that the amendments made to the draft Rule determination and draft Rule also promote the NEO in accordance with the reasoning provided above.

4.2 Group 2 - Harmonising Current Jurisdictional Metrology Requirements for First Tier Connection Points with Existing Requirements for Second Tier Connection Points

In its draft Rule determination the Commission stated that harmonising the various jurisdictional instruments into the existing second tier arrangements provided for greater compliance efficiency and standardisation of processes across jurisdictional boundaries thus allowing for greater competition. The Commission further stated in its draft Rule determination that consolidating provisions for; additional metering facilities, non-market generation, participant requested metering installation tests, and on site metering installation testing, realised these harmonisation benefits thus promoting the NEM objective.

Furthermore the Commission stated in its draft Rule determination that allowing for some jurisdictional variations regarding the limited exclusivity of the responsible person in Victoria did not detract from benefits. Providing for the alteration of metering installations provided efficiency benefits to Market Participants that exceeded the risks to power system security. Harmonising record keeping and rights of access to metering data improved the veracity of data used in settlements; simplified and standardised compliance requirements and reduced compliance costs thus promoting the NEM objective. Harmonising provisions relating to metering databases, security seals and type 7 metering had the effect of providing greater clarity and guidance to Market Participants in addition to the benefits gained through harmonisation.

The Commission confirms the reasoning of its draft Rule determination in this final Rule determination and confirms that the provisions that promoted the NEM objective in its draft Rule determination promote the NEO in this final Rule determination. The Commission confirms that the amendments made to the draft Rule determination and draft Rule also promote the NEO in accordance with the reasoning provided above.

The Commission however stated in its draft Rule determination that the proposal relating to providing for losses between the connection point and metering point did not satisfy the NEM objective as it had the potential to impose substantial costs on certain Market Participants without providing benefits that exceeded these costs. The Commission confirms its reasoning of its draft Rule determination in this final Rule determination and confirms that this provision that did not promote the NEM objective in the draft Rule determination does not promote the NEO in this final Rule determination.

4.3 Group 3 - Removing duplicate requirements within the Existing Rules

In its draft Rule determination the Commission considered that consolidating the processes for data validation, substitution and estimation into the Rules reduced the risk of non alignment of the common element of these procedures between the types of metering installation. While the Commission has made amendments in its final Rule determination regarding this area the Commission remains of the view that the provisions provide a single reference point for service providers which serves to increase efficiencies. The Commission also remains of the view as stated in its draft Rule determination that the consolidation of the provisions into one instrument promotes the NEM objective by creating efficiencies through the removal of duplication of amending documents for Market Participants, and promoting consistency and efficiency.

The Commission confirms that the provisions promote the NEO in this final Rule determination. The Commission confirms that the amendments made to the draft Rule determination and draft Rule also promote the NEO in accordance with the reasoning provided above.

4.4 Group 4 - Addressing NEM Efficiency Issues Identified as a Consequence of the Industry Consultation Undertaken as Part of NEMMCO's Integrate First Tier Metrology Project

In its draft Rule determination the Commission determined that provisions in this group of changes promoted the NEM objective in various ways. The Commission considered that the use of standard terms and conditions would set up a framework for efficient and timely transfer of retailers and allow for efficiency and competition benefits. The Commission considered that providing for Queensland's Minimalist Transitioning Approach to full retail contestability facilitated the move to full retail contestability and simultaneously allowed for the introduction of integrated metrology requirements.

The Commission further considered in its draft Rule determination that the provisions relating to time setting design standards and a single table of requirements improved clarity and certainty of these requirements for Market Participants, consolidated the procedures applying to these areas and improved their presentation.

The Commission considered that provisions relating to the timeframes for testing various installation types provided added flexibility for Market Participants to manage testing requirements and allowed for management efficiencies. The Commission considered that adopting ILAC accreditation promoted the NEM objective by allowing for an increased number of products to be available to metering providers hence allowing for competition benefits, and provided for further efficiencies in the area of testing.

The Commission considered that the review and amendment of accuracy tables provided for a less technically onerous regime without reducing quality and

accuracy of metering installations. The Commission therefore considered that the new accuracy tables would reduce costs for metering providers.

The Commission also considered that the amendments arising out of the result of this area of the Rule proposal package were necessary to achieve the harmonisation of first tier requirements. For all the reasons mentioned the Commission considered that these amendments to the Rules promoted the NEM objective.

The Commission confirms these views in this final Rule determination and confirms that these amendments promote the NEO. The Commission confirms that the amendments made to the draft Rule determination and draft Rule also promote the NEO in accordance with the reasoning provided above.

4.5 Group 5 - Addressing a Metering Installation Audit Issue Identified by NEMMCO

In relation to the audit of metering installation test results the Commission considered in its draft Rule determination that the removal of an unnecessary burden on NEMMCO to check the results of every metering installation tested would reduce its costs (and therefore improve the efficiency of the NEM) without reducing the overall accuracy of the metering installation population. In this regard the Commission was satisfied that the proposal promoted the NEM objective.

The Commission confirms these views in this final Rule determination and confirms that these amendments promote the NEO. The Commission confirms that the amendments made to the draft Rule determination and draft Rule also promote the NEO in accordance with the reasoning provided above.

4.6 Group 6 - Addressing Minor Editorial Changes Identified When Developing the Change Proposals

In its draft Rule determination the Commission considered that the Rule amendments included in this part of the proposal sought to correct minor errors and improve the readability of Chapter 7. The Commission considered that this achieves the objective of clarifying the Rules relating to metrology and makes them easier to understand. The Commission was therefore satisfied this part of the proposal promoted the NEM objective and were necessary for the harmonisation of first tier metrology requirements.

The Commission confirms these views in this final Rule determination and confirms that these amendments promote the NEO. The Commission confirms that the amendments made to the draft Rule determination and draft Rule also promote the NEO in accordance with the reasoning provided above.

5 Analysis of individual Rule change proposals

5.1 Rule Change Proposal Number 1 – Incorporate first tier metrology requirements into the NEM - extend the scope of Chapter 7 of the Rules to include the metrology for all connection points in the national grid

5.1.1 NEMMCO proposal

NEMMCO stated that this Rule change proposal is to establish a 'head of power' in the Rules for a single common metrology standard to apply to metering installations regardless of whether energy is purchased through the Local Retailer, a second tier retailer or directly from the NEM.

NEMMCO stated that the Rule change proposal aims to broaden the application of Chapter 7 by amending clause 7.1.1 of the Rules. It stated that currently clause 7.1.1 restricts the application of Chapter 7 to a Market Customer or a Local Retailer to specific classes of connection points and is of the view that broadening the application to Registered Participants, metering providers and NEMMCO at any connection point will result in a single standard of metrology being applicable to all connection points within the national grid.

NEMMCO therefore proposed to amend clause 7.1.1(a) to provide for the application of Chapter 7 to Registered Participants, metering providers and NEMMCO. NEMMCO proposed to remove the restriction placed on market customers in respect of connection points through which it purchases any market load and sells any second tier load. It also proposed to remove restrictions on the Local Retailer in respect of connection points classified as first tier loads to the extent required by the market settlement and transfer solution procedures and B2B (Business to Business) procedures.

NEMMCO stated that the proposed changes contribute to the efficiency of the NEM by replacing the need for jurisdictions to separately maintain metrology standards for first tier metering installations, and to ensure that changes at the first tier level are coordinated with changes at the second tier level.

NEMMCO stated that service providers will benefit as they will be able to avoid the maintenance of separate compliance registers for first and second tier metering installations. Furthermore, NEMMCO stated that the alignment of first tier metrology standards across jurisdictions will simplify the training arrangements for personnel who are operating across jurisdictional boundaries. NEMMCO also stated that the Rule change proposal will remove the need for service providers to participate in jurisdictional consultations where there is only a low level of participation in that jurisdiction.

NEMMCO stated that the harmonisation process would create the opportunity to significantly reduce duplication within regulatory instruments. Furthermore, NEMMCO stated that the creation of a common metrology standard would facilitate competition within the metering equipment area because there would be a larger

market for a common standard of metering equipment. NEMMCO stated that a single metrology instrument for all metering installations would make the differences in Metrology requirements (to the extent that they continue) between the different first tier and second tier metering installations more transparent. The differences in metrology requirements between the different jurisdictions of the NEM would also be made more transparent with the introduction of a single Metrology Procedure. NEMMCO also stated that the Rule change proposal would be expected to reduce compliance costs and risk to retailers and service providers who wish to operate across the different jurisdictions of the NEM.

5.1.2 Views in submissions

Energex stated (second round):

> "Clause 7.1.1 as it is now drafted contains no reference to the role of NEMMCO with respect to the provision and management of metering within the NEM"[34].

In their second round submissions both NEMMCO and SP AusNet agreed with the Commission's draft Rule[35].

5.1.3 Commission's considerations and decision

In its draft Rule determination the Commission considered that broadening the application of Chapter 7, so that it not only applies to Market Customers and Local Retailers in specified circumstances, is integral to the integration of first tier NEM requirements.

The Commission notes Energex's submission but considers that the amendment is not necessary as Chapter 7 of the Rules is no longer intended to have limited application. NEMMCO and the Registered Participants are bound to comply with Chapter 7 as set out in the relevant provisions of Chapter 7 (and other chapters of the Rules) and as specified in the National Electricity Law (clause 49(1)(a)).

The Commission has therefore not deviated from its position in its draft Rule determination.

5.1.4 Differences between proposed Rule and Rule to be made

The Commission considers that given that Chapter 7 is no longer intended to have limited application, clause 7.1.1 is no longer necessary. The Commission has not accepted NEMMCO's proposed amendments to this clause as it considers it does not provide for any additional requirements not already covered by Chapter 7. The clause has therefore been deleted in the Rule to be made.

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[34] Energex submission, (Second round), p.3.

[35] NEMMCO submission, (Second round), p.2, and SP AusNet submission, (second round), p.3.

The Commission has taken the opportunity created by deleted clause 7.1.1 to move the purpose clause in clause 7.1.2 to 7.1.1. This move improves the consistency with the other Chapters in the Rules where the purpose clause is the first clause of the Chapter. Clause 7.1.4 has been renumbered as clause 7.1.2 as a result. The Commission notes NEMMCO's comments on renumbering and considered the minor implications of renumbering in this regard is justified on the basis of the clarity and consistency that the renumbering of rule 7.1 provides.

5.2 Rule Change Proposal Number 2 – Incorporate first tier metrology requirements into the NEM – grandfathering of existing first tier requirements

5.2.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that Recommendation 3.2(b)[36] from the JJR Report recommends that, where necessary, existing first tier metering requirements are to be grandfathered with respect to compliance with technical metering standards.

NEMMCO stated that the discussion in the JJR Report makes it clear that to the extent that current metrology standards for first tier metering might be inferior to the NEM metrology standards, it is not the intention of the JJR Report recommendations to require an immediate replacement of those existing first tier metering installations. Rather, NEMMCO stated that the JJR Report proposes that a "ratchet" approach be adopted whereby maintenance or replacement of an existing first tier metering installation would require the upgrade of the metering installation to the NEM standard.

NEMMCO proposed to introduce provisions to allow first tier metering installations that were installed prior to an effective date to be deemed compliant with the Rules if they met the applicable jurisdictional requirements at that effective date. NEMMCO proposed such amendments to the mechanism to adopt the JJR Report recommendation.

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[36] Recommendation 3.2 of the JJR report states "A single National Metrology Procedure should be developed which should:
- (a) Include technical metrology provisions for first and second tier customers;
- (b) Ensure that, where necessary, existing first tier metering is grandfathered with respect to compliance with technical metering standards…;
- (c) Exclude non technical provisions, such as consumer protection, which will continue to be the responsibility of the jurisdictions;
- (d) Be similar to the approach adopted in the CATS Procedures, whereby:
  - (i) The jurisdictions continue to be responsible for the key policy decisions underpinning the Metrology Procedure; and
  - (ii) Jurisdictional policy differences are identified in tables in the Metrology Procedure; and
- (e) seek to ensure that obligations that are duplicated on other NEMMCO procedures and/or the Code are harmonised so that wherever possible the obligations only appear once in the combined metrology requirements.

NEMMCO stated that metering installations that are compliant with the current standards as of 30 June 2008 should be grandfathered. NEMMCO stated that it has chosen this date on the basis that it is sufficiently in the future that industry participants are forewarned of the need to run down stocks of meter installations or other equipment that might not be compliant. Further it stated that this date approximates the time when the complementary amendments to the associated NEM Metrology Procedure will be effective.

NEMMCO stated that the proposed Rule change will facilitate the introduction of a single common metrology standard for first and second tier metering installations. NEMMCO stated that the proposed Rule will also provide the opportunity to commence the accrual of benefits from this harmonisation without the need for a significant investment for the rollout of new metering equipment.

NEMMCO stated that this approach provides certainty in relation to the technical standards to be applied without impinging on future decisions on metering installation rollouts to be made either as a policy decision (for interval meters) or as an investment decision (for the replacement of superseded equipment).

5.2.2 Views in submissions

Ergon Energy stated (first round):

> "Ergon Energy supports the proposed introduction of a mechanism to permit the grandfathering of existing first tier metering requirements. In this context, Ergon Energy considers the proposed sunset date of 1 January 2008 to be appropriate, provided that the existing grandfathering for type 6 metering installations permitted under section 2.3.6 of the draft Metrology Procedure is retained".
>
> "Section 2.3.6 currently provides that:
>
> "Meters for a type 6 metering installation, which have been installed, or which are held in stock for the reasonable person, prior to the effective date of the Metrology Procedure, and which met the requirements of a participating jurisdiction at that time, are deemed to meet the requirements of this Metrology Procedure.
>
> "That is, Ergon Energy wished to confirm that Schedule S7.2.1 of the NER and section 2.3.6 of the draft Metrology Procedure are not considered inconsistent." [37]

United Energy and Alinta stated (second round):

> "…The businesses are comfortable with the effective date of 30 June 2008 for grandfathering."

[37] Ergon Energy Submission, (First round), p.3.

> "We do not support a transition or end date rule change as we believe that the retailers and distributors will be able to come to an alternative arrangement at the appropriate time. Allowing the industry to make arrangements regarding the natural end to the grandfathering is a more efficient process and will contribute more effectively to the NEM objective than a rule imposition at this point in time.
>
> "The MCE/COAG are considering a national smart meter roll out and may make decisions on the roll out approach and whether a roll out should proceed on a national basis sometime in 2008… The drafting of any transitional arrangement or end date to the grandfathering should take into account these national smart meter roll out timeframes."[38]

United Energy and Alinta also made reference to the Ministers review of type 5 and 6 metering installations in their submission (second round). United Energy and Alinta further stated that this review would include the review of grandfathering arrangements and stated:

> "…we suggest that the end date on grandfathering remain flexible at this stage, there are sufficient commercial drivers or review processes that any rule amendment is considered unnecessary."[39]

Energex stated (second round):

> "Energex believes that the 30 June 2008 is an appropriate date for grandfathering of first tier metering installations."
>
> "Energex would argue that the final versions of the jurisdictional metrology procedures available on the NEMMCO website should be sufficient for grandfathering purposes rather than including all the jurisdictional requirements into the Metrology Procedure. This will avoid making the Metrology Procedure too cumbersome. As such, clause 11.20.3(c) in the draft Rules should be amended to reflect that jurisdictional requirements must be made available on the NEMMCO website."[40]

Ergon Energy stated (second round):

> "Ergon Energy supports in principle the grandfathering of existing first tier metering requirements…"
>
> "Ergon Energy notes, however, that the current wording of clause 11.20.5, when read in conjunction with the Minimalist Transitioning Approach

[38] United Energy and Alinta submission, (Second round), pp.4-6.

[39] Ibid

[40] Energex submission, (Second round), p.3.

provisions may have the unintended consequence of requiring Ergon Energy to replace existing first tier metering installations…

"…Ergon Energy notes that under its Minimalist Transitioning Approach it is not required to register metering installations that have a NMI classification of SMALL and where the LNSP has not received a valid request from a Market Customer for the NMI to be registered with NEMMCO. This means that the grandfathering provisions may not apply to Ergon Energy's first tier metering installations that have been installed, but not registered, prior to the effective date. The implication for Ergon Energy is this would require a replacement of existing first tier metering installations contrary to the policy intent. This would impose a very considerable cost on Ergon Energy and would be inconsistent with the requirements for other LNSPs.

"Ergon Energy strongly submits that clause 11.20.5 be amended to ensure that Ergon Energy's metering installations are captured by the grandfathering provisions in accordance with the accepted policy position.

"Ergon Energy does not support the inclusion of the existing jurisdictional requirements that will apply to grandfathered first tier metering installations in the Metrology Procedure… Ergon Energy would support the inclusion of a reference to the jurisdictional requirements in the Metrology Procedure but not their inclusion in full. The jurisdictional requirements could be published as separate documents on the NEMMCO website."[41]

NEMMCO stated (second round):

"…NEMMCO supports the proposed effective date of 30 June 2008."

"In relation to the Commission's proposal outlined in clause 11.20.3(c) for superseded jurisdictional requirements to be included in the Metrology Procedure, while NEMMCO understands that referencing these requirements may prove useful, incorporating the legacy requirement into the Metrology Procedure may prove problematic.

"In light of the above NEMMCO proposes that grandfathered jurisdictional requirements should be managed outside the NEM Metrology Procedure.

"…NEMMCO proposes allowances should not be made for a meter installation to remain non-compliant. If the relevant participant becomes aware of a non-compliant metering installation(s) the participant should be required to repair or replace the metering installation to meet the relevant standards of the Rules as per the current process."[42]

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[41] Ergon Energy submission, (Second round), p.3.

[42] NEMMCO submission, (Second round), p.2.

CitiPower and Powercor stated (second round) that 30 June 2008 is an appropriate date for the grandfathering of first tier metering installations. CitiPower and Powercor also submitted (second round) that the inclusion of transitional provisions in the Rules for non-compliant metering installations:

> "…seem unnecessary as the installation should be brought into compliance with the jurisdictional rules or the National Rules, whichever is the more cost effective, and the issue would be further addressed by the review of type 5 and type 6 metering to be conducted by the ministers of participating jurisdictions by 30 June 2009." [43]

SP AusNet stated (second round):

> "…incorporating the jurisdictional requirements in the Metrology Procedure is not considered to be appropriate… [Rather,] an obligation should be placed on NEMMCO to archive the jurisdictional metrology documents on their website."[44]

SP AusNet further stated (second round):

> "[that] the effective date for grandfathering does not require a lead time…[and that]… no participant would reasonably purchase equipment to the current jurisdictional documents between now and 1 July 2008."[45]

Sp AusNet further stated (second round):

> "[In relation to transitional arrangements for currently non compliant metering installations that transitional arrangements should not be required as no installation should be currently non compliant.] If a current installation had escaped industry and audit oversight and it was non-compliant then it would need to be repaired or replaced in accordance with the Rules. The timeframe for repair is set by clause 7.11.2."[46]

SP AusNet further stated (second round):

> "[that the sun-setting of the grandfathering arrangements would create a dangerous and unwarranted precedent…] Hence there is absolutely minimum to be gained with respect to metrology accuracy, and significant costs, in "forcing" current installations to align in detail with the Metrology Procedure at a future point in time."[47]

SP AusNet further stated (second round):

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[43] CitiPower and Powercor submission, (Second round), p.3.

[44] SP AusNet submission, (Second round), pp.3-4.

[45] Ibid

[46] Ibid

[47] Ibid

" that moving the metrology grandfathering to Chapter 11 is not considered to be in the best interests of presenting Participants, including the service provider, with a succinct view of metrology obligations... [It is suggested that it be left] in Chapter 7 as it is not transitional in the same manner as other items in Chapter 11."[48]

5.2.3 Commission's considerations and decision

In its draft Rule determination the Commission considered that the adoption of a grandfathered provision is consistent with the general principles of reform and represents good regulatory practice. Accordingly, the Commission supported the intent of the proposed change, which is to provide a grandfathered provision for metering installations that are compliant with current jurisdictional arrangements at a specified date (30 June 2008 in the Draft Rule). This would avoid requiring the immediate replacement of first tier metering installations following the inclusion of first tier metering standards within the Rules.

Ergon Energy raised a concern in the first stage of consultation regarding the consistency between the Metrology Procedure and Rules. In its draft Rule determination the Commission did not substantially deviate from the provisions proposed by NEMMCO, however the Commission made amendments (specifically noted in the next section). The Commission noted that it has no control over changes to the Metrology Procedure, as this can only be undertaken by NEMMCO as provided in the Rules. However, the Commission further noted that the Metrology Procedure cannot be inconsistent with the Rules.

In its final Rule determination the Commission however has accepted that Ergon Energy should not be precluded from the application of the grandfathering arrangements provided for in the draft Rule by virtue of it being compliant with the Queensland Minimalist Transitioning approach in relation to full retail contestability in Queensland. The draft Rule has therefore been amended to ensure the grandfathering provisions apply to metering installations under the Queensland Minimalist Transitioning provisions.

In its draft Rule determination the Commission modified NEMMCO's proposal to improve transparency and regulatory certainty in relation to the requirements that are to apply to first tier loads that meet applicable jurisdictional requirements. The Commission considered that the requirement that first tier metering installations meet "applicable jurisdictional requirements" was not a sufficiently transparent reason as the basis for not having to comply with the requirements in the Rules. The Commission therefore included a requirement for NEMMCO to publish the relevant jurisdictional requirements that are to apply to first tier metering installations.

Submissions to the draft Rule determination were not supportive of this amendment however as they considered the inclusion of jurisdictional arrangements into the

[48] SP AusNet submission, (Second round), pp.3-4.

Metrology Procedure would be problematic and impractical[49]. The Commission has therefore amended the draft Rule in a manner suggested by NEMMCO whereby the applicable jurisdictional requirements must be listed in a separate document to be prepared and published by NEMMCO. This document is intended to be a reference document, and not intended to replace the jurisdictional instruments. The document is also to be developed by NEMMCO in consultation with the relevant participating jurisdictions. This document is required to be completed by 30 June 2008 in accordance with the grandfathering provisions.

The Commission considers that this approach as suggested in submissions provides a balance between a sufficiently transparent and robust transition to the Rules requirements and a sufficiently practical solution for industry.

In its draft Rule determination the Commission did not accept NEMMCO's proposed date of 1 January 2008 as the date when first tier metering installations will be grandfathered if they meet the appropriate requirements, as it was unlikely the Rule would be made before that date. The Commission sought comment on whether 30 June 2008 is the appropriate date for the grandfathering of first tier metering installations.

Four submissions to the draft Rule determination were supportive of 30 June 2008 as the appropriate date.[50] One submission was not in favour of a future date and argued that a lead time was inappropriate as all metering equipment should be already compliant with jurisdictional requirements.[51]

The Commission considers that a future date provides parties with sufficient lead time to review their records so as to ensure that they are fully aware of the condition of their metering equipment and to act on any matters that need attention prior to the nominated date. The Commission has therefore incorporated this date into its final Rule, with a slight modification.

In its draft Rule determination the Commission noted that the draft Rule did not contain transitional arrangements for metering installations that are not compliant with the current jurisdictional arrangements or the requirements in the Rules as at 30 June 2008. The Commission therefore invited comment from stakeholders as to whether transitional arrangements should be included in the Rule to be made and if so, the timing for those arrangements.

Three submissions commented on this issue and submitted that a provision to control non-compliant metering installations was unnecessary as metering installations should be brought into compliance (by repair or replacement)

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[49] NEMMCO submission, (Second round), p.2; SP AusNet submission (Second round), pp.3-4, Ergon Energy submission, (Second round), p.3, Energex submission (Second round), p.3.

[50] United Energy and Alinta submission, (Second round), p.3; Energex submission, (Second round), p.3, NEMMCO submission, (Second round), p.3, Citipower and Powercor submission, (Second round), p.3.

[51] SP AusNet submission, (Second round), pp.3-4.

immediately after 30 June 2008.[52] In response to submissions the Commission has not deviated from its draft Rule in relation to this issue.

5.2.4 Differences between the proposed Rule and the Rule to be made

In adopting the policy intent of the draft Rule the Commission was of the view that the grandfathering arrangements represented transitional provisions and were therefore more appropriately located in Chapter 11 of the Rules. The Commission has also included a requirement for NEMMCO to publish a list of the relevant jurisdictional requirements that will apply to grandfathered first tier metering installations in the Metrology Procedure. In the Rule to be made, the Commission amended this requirement such that NEMMCO is required to publish a list of applicable jurisdictional requirements in a separate document called "first tier jurisdictional requirements publication." NEMMCO is required to prepare this document in consultation with participating jurisdictions.

5.3 Rule Change Proposal No. 3 – Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – Jurisdictional variations in the election of the responsible person

5.3.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that the current Rules limit the election of the responsible person by the Financially Responsible Market Participant (FRMP) to type 1-4 metering installations only. NEMMCO stated that the current Rules define the LNSP as the responsible person for types 5-7 metering installations. NEMMCO however stated that two jurisdictions in their first tier metering instruments have allowed for variations in who can be the responsible person for first tier connection points for some type 5 and 6 metering installations.

NEMMCO therefore proposed to provide a head of power to permit the responsible person for first tier type 5 and type 6 metering installations to be determined in the same manner as for type 1-4 metering installations if authorised in the Metrology Procedure.

NEMMCO also sought to improve the readability of clauses 7.2.2 and 7.2.3 in relation to the cross referencing of clause 7.2.4 which deals with joint metering installations.

NEMMCO stated that the proposed Rule change reflects the outworking of previous consultations undertaken by the Essential Services Commission of South Australia (ESCOSA) and the Essential Services Commission (Victoria) (ESC). NEMMCO stated that through this process, ESCOSA and the ESC established that a variation in the requirements for the election of the responsible person resulted in a benefit as determined in accordance with jurisdictional policy.

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[52] NEMMCO submission, (Second round), p.2.; SP AusNet submission, (Second round), pp.3-4.

NEMMCO stated that the inclusion of these policies into the national framework maintains the efficiencies and improvements previously determined by these jurisdictions.

5.3.2 Views in submissions

5.3.2.1 Clause 7.2.2(a)

ActewAGL stated (first round):

> "ActewAGL believes that this statement will undermine the Distribution company's investment into smart metering installation technologies, and seems to also contradict clause 7.2.3(a)(2). We are also concerned about stranding assets, thus increasing costs."[53]

Ergon Energy stated (first round):

> "Ergon Energy believes that the triggers for a Market Participant electing to act as the responsible person should be clarified. In particular:
>
> - The reference to "Metrology Procedure for first tier loads" implies that the metrology arrangements for first tier loads will exist independently of the Metrology Procedure.
>
> - The trigger for the election in clause 7.2.2(a)(2) is ambiguous and should be amended to read respectively.
>
> "… another type of metering installation for first tier loads if allowed in the Metrology Procedure.
>
> "A Market Participant is the responsible person for a type 1,2,3 or 4 metering installation, or another type of metering installation for first tier loads if allowed in the Metrology Procedure."[54]
>
> "This would be consistent with the proposed drafting in clause 7.2.3(b)."[55]

CitiPower and Powercor stated (first round):

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53 ActewAGL submission, (First round), section 2.2.

54 Ergon Energy submission, (Second round), p.3.

55 Ergon Energy submission, (First round), p.3.

"there is no reason for clause 7.2.2 to be subject to clause 7.2.4 because clause 7.2.4 should not alter the primary responsibilities prescribed in clause 7.2.2. It would be more appropriate for clause 7.2.4 to be subject to clause 7.2.2."

"the addition of subclause (2) leaves it up to the Metrology Procedure to prescribe the responsibility without any limitation. This seems to be inconsistent with the usual Rules and Metrology Procedure hierarchy. This could also lead to the situation where responsibilities are different for first and second tier metering.

"Consider deleting subclause (a)(2)

"Consider providing a grandfathering provision for any type 5 or 6 metering installation installed under jurisdictional arrangements before a certain date where the responsible person is not the LNSP." [56]

SP AusNet stated (first round):

"It is appropriate that the determination of the responsible person be a matter to be documented in the Rules as it is a fundamental aspect of the arrangements for metrology. It impacts on the basis of fundamental obligations of participants. Including on the basis of the regulatory obligations and price arrangements for Distributors."

"It would therefore seem inappropriate that the determination of the responsible person for first tier loads (which are still the majority of market energy) are left to be determined by the Metrology Procedure rather than the Rules as proposed in this change.

"Although this is only meant to apply to loads greater than 160 MWh in Victoria, it is wrong that this vital qualification on the broad requirements of the Rules with respect to responsible person allocation for first tier loads is left to the Metrology Procedure." [57]

United Energy and Alinta stated (first round):

"…are concerned that the changes as drafted provide for the Metrology Procedure to specify where responsibility lies for first tier metering installations without any limitations or constraints. The businesses consider that the Rules, rather than the Metrology Procedure, are the appropriate instrument in which responsibility for metering installations should be specified. A grandfathering approach could be used to cater for any existing situations where the responsible person role has been elected based on the existing jurisdictional arrangements for first tier metering installations, similar

56 Powercor submission, (First round), p.2.

57 SP AusNet submission, (First round), p.3.

to that adopted in clause S7.2.1(c). This is preferred over the existing jurisdictional decisions for first tier metering which are inconsistent with the Rules."

United Energy and Alinta recommended the removal of this clause.[58]

5.3.2.2 Clause 7.2.2(b)

Ergon Energy stated (first round):

"Ergon Energy believes that the triggers for a Market Participant electing to act as the responsible person should be clarified. In particular:

- The trigger for the election in clause 7.2.2(b) is ambiguous and should be amended to read …

  … another type of metering installation for first tier loads if allowed in the Metrology Procedure

  A Market Participant is the responsible person for a type 1,2,3 or 4 metering installation, or another type of metering installation for first tier loads if allowed in the Metrology Procedure."

This would be consistent with the proposed drafting in clause 7.2.3(b)." [59]

CitiPower and Powercor stated (first round):

"Clause 7.2.2(b) clarifies the responsibilities for type 1, 2, 3 and 4 metering installations under certain circumstances. The words provided by the NEMMCO proposal should be deleted as they refer to other metering types 5 or 6."

"An additional clause (c) should be included, to provide for the grandfathering of existing type 5 or 6 metering installations for first tier loads.....[clause provided]." [60]

SP AusNet stated (first round):

"If under clause 7.2.4 the installation is a "shared metering installation" then a party other than the Market Participant may be the responsible person."

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58 United Energy and Alinta submission, (First round), p.2.

59 Ergon Energy submission, (First round), p.3.

60 CitiPower and Powercor submission, (First round), p.3.

SP AusNet recommend an additional sub-paragraph (3)." [61]

United Energy and Alinta stated (first round):

- "Recommend deleting the words proposed by NEMMCO; and
- Recommend adding a new clause 7.2.2(c) to grandfather existing sites." [62]

5.3.2.3 Clause 7.2.3(a):

Ergon Energy stated (first round):

"Ergon believes that the triggers for a Market Participant electing to act as the responsible person should be clarified. In particular:

- The operation of clause 7.2.3(a) should be made subject to an election by a Market Participant under clause 7.2.2." [63]

CitiPower and Powercor stated (first round):

"There is no reason for this clause to be subject to clause 7.2.4 because clause 7.2.4 should not alter the responsibilities prescribed in clause 7.2.3. It would be more appropriate for clause 7.2.4 to be subject to clause 7.2.3." [64]

SP AusNet stated (first round):

"It would appear that this clause should not be subject to clause 7.2.4 because that clause does not contemplate the LNSP being nominated by NEMMCO, only one of the Market Participants.

"The wording proposed by NEMMCO should be deleted." [65]

5.3.2.4 Clause 7.3.2(i)

CitiPower and Powercor stated (first round):

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61 SP AusNet submission, (First round), p.4.

62 United Energy and Alinta submission, (First round), p.2.

63 Ergon Energy submission, (First round), p.3.

64 CitiPower and Powercor submission, (First round), p.3.

65 SP AusNet submission, (First round), p.4.

"This clause creates a significant uncertainty about the arrangements that are to prevail in relation to the selection of the responsible person and should be deleted. The issue is dealt with under clause 7.2.2." [66]

SP AusNet stated (first round):

"The Metrology Procedure change associated with this Rules change proposal as it is currently drafted by NEMMCO does not define what the basis is of the relationship for those situations where the Market Participant has the choice of provider of a type 5/6 meter.

"If this clause is to stand as drafted then this detail must be added by NEMMCO to the associated Metrology Procedure revisions." [67]

SP AusNet suggested that:

"Remove [the] clause (depending on SA situation) or NEMMCO must ensure that the basis of the offer is included under the Metrology Procedure revisions." [68]

United Energy and Alinta stated (first round):

"recommend removing clause 7.2.3(i)." [69]

5.3.2.5 General comments on proposed changes

Metering Dynamics stated (first round):

"this is not seen as harmonising but enabling jurisdictional variations again."[70]

In its supplementary submission NEMMCO stated (first round):

"Rules change proposal No.3 in the package proposes that the Rules in certain circumstances allow the Metrology Procedure to set out which Market Participant may be responsible for first tier metering installations."[71]

"The purpose of the proposed Rules was to allow arrangements the Essential Services Commission of South Australia (ESCOSA) and the Essential Services Commission (Victoria) (ESC) has in place to continue. These arrangements

66 CitiPower and Powercor submission, First round), p.4.

67 SP AusNet submission, First round), p.6.

68 SP AusNet submission First round), p.6.

69 United Energy and Alinta submission, (First round), p.2.

70 Metering Dynamics submission, (First round), p.1.

allowed the retailer to choose to be the responsible person for certain first tier customers with type 5 and 6 metering installations. This jurisdictional policy is not consistent with the responsibility arrangements currently in the Rules for second tier customers.

"Following further consultation with the relevant jurisdictions, South Australia indicated their special arrangement is accommodated and therefore they do not require the proposed Rule.

"Victoria has indicated that while this Rule is necessary in transition, there is not an ongoing requirement for the Rule in Victoria. That is, under the current jurisdictional arrangements for first tier market loads greater than 160 MWh per annum with type 5 or 6 metering there is between 100 to 150 sites for which the retailer is the responsible person, these meter types for large customers are not consistent with the Rules, but are intended to be grandfathered until a change is necessitated. At the time of such a change, type 4 metering would be required and the retailer may assume the responsible person role.

"NEMMCO has continued to work with the jurisdictions to harmonise the Metrology Procedure and is now of the view that the Rules Change Proposal No. 3 should be varied so that the Rule becomes a transitional arrangement under Chapter 11, clearly indicating that the arrangement is not permanent and that it is to accommodate arrangements in place that should continue when the metrology arrangements are harmonised but will not continue as a permanent arrangement." [72]

United Energy and Alinta (second round) supported the Commission's transitional approach but suggested a drafting amendment to improve the clarity of the transitional arrangements to ensure it aligned with its intent.[73]

United Energy and Alinta also stated (second round):

"… we suggest that the end date on grandfathering the local retailer as the responsible person for a type 5 or type 6 metering installation remain flexible, there are sufficient commercial drivers or review processes than any rule amendment considered is unnecessary."[74]

Energy Australia (second round) also supported the Victorian transitional arrangements and further submitted:

"It is difficult to identify any rationale for placing an arbitrary end date on this transitional arrangement, consistent with the National Electricity Market

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[72] NEMMCO supplementary submission(First round), pp.1-2.

[73] United Energy and Alinta submission (Second round), pp.6-7.

[74] Ibid

Objective. We would therefore support a provision requiring NEMMCO to report to the AEMC in the event the transitional arrangements are no longer required – i.e. after the last existing meter in the transitional group has been removed – so that this provision can be removed entirely from the Rules."[75]

Energex stated (second round):

"Energex believes that the grandfathering provision applying to the Victorian jurisdiction in relation to a Market Participant other than the LNSP being the responsible person for a type 5 or 6 metering installation should have an end date of 5 years except that an earlier customer transfer should result in the reversion of the responsible person to the LNSP."76

NEMMCO stated (second round):

"…NEMMCO believes the approach detailed in clause 11.X.4(b) for managing superseded jurisdictional requirements, would be better achieved through an alternate mechanism."[77]

CitiPower and Powercor stated (second round):

"At this stage an end date seems unnecessary because there will be a natural reduction in such cases as meters are replaced because customers switch to other retailers or metering obsolescence."[78]

SP AusNet (second round) supported the wording of the draft Rule.[79]

5.3.3 Commission's considerations and decision

In its draft Rule determination the Commission considered that the underlying policy question associated with this Rule change proposal is whether a Market Participant (such as a retailer) may choose to be the responsible person for type 5 and type 6 metering installations, or whether the LNSP should exclusively be the responsible person for these metering installations with respect to first tier loads. This question arises out of NEMMCO's proposed amendments to clause 7.2.3 which propose to allow Market Participants to be the responsible person for type 5 and 6 first tier metering installations in accordance with the Metrology Procedure. The Commission noted in its draft Rule determination that a Market Participant may elect to be the responsible person for first tier loads with types 1-4 metering installations, consistent with the arrangements for second tier loads.

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[75] EnergyAustralia submission, (Second round), p.2.

[76] Energex submission, (Second round), p.3.

[77] NEMMCO submission, (Second round), p.3.

[78] CitiPower and Powercor submission, (Second round), p.3.

[79] SP AusNet submission, (Second round), pp.4-5.

The Commission also noted in its draft Rule determination that the LNSP is responsible for types 5 and 6 metering installations on first tier loads in all NEM jurisdictions besides Victoria and South Australia. The Commission noted in its draft Rule determination that jurisdictional positions have arisen due to the historical development of metering in the NEM (see section 2.3, p.24).

In addition the Commission noted in its draft Rule determination that in its supplementary submission NEMMCO has outlined that there are approximately 100 to 150 metering installations in Victoria that are type 5 or 6 first tier metering installations for which the Local Retailer has responsibility under current jurisdictional arrangements. All of these contestable metering installations in Victoria where the Local Retailer has responsibility are above 160 MWh. NEMMCO has requested in its supplementary submission that the Local Retailer retain exclusive rights for responsibility of these metering installations.

The Commission noted in its draft Rule determination the concerns raised in submissions regarding the potential lack of clarity and certainty as to the arrangements regarding the responsible person being set out in the Metrology Procedure. In its draft Rule determination the Commission also noted concerns raised in submissions regarding the potential to undermine investment in new technology that may also arise from NEMMCO's original proposal.

In its supplementary submission NEMMCO advised that the South Australian jurisdiction no longer requires the provision outlined in the Rule change proposal and that the Victorian jurisdiction only requires the provision as a transitional arrangement for approximately one hundred to one hundred and fifty metering installations that have the Local Retailer as the responsible person.

In its draft Rule determination the Commission decided to adopt transitional arrangements for Victoria in relation to the type 5 and 6 first tier metering installations that have the Local Retailer as the responsible person. These arrangements would cease when the metering installation is replaced or if the consumers change their retailer. In either of these events the Local Retailer will not have the option to elect to be the responsible person for that metering installation.

Submissions to the draft Rule determination and draft Rule were supportive of this position. The Commission has therefore not deviated from its position in the draft Rule determination.

In its draft Rule determination the Commission noted that no end date had been proposed for the grandfathered provision applying to the Victorian jurisdiction. In its draft Rule determination the Commission sought comment from interested stakeholders as to whether an end date should be included in the Rule and what that end date should be.

The Commission received three submissions[80] in the second round of consultation that stated that no end date for the grandfathered Victorian provisions were

[80] United Energy and Alinta submission, (Second round), pp.6-7; Energy Australia submission, (Second round), p.2; Citipower and Powercor submission, (Second round), p.3.

necessary, particularly in light of the number of metering installations effected. One submission[81] stated an end date of five years should be provided for. The Commission considers that there appears to be no rationale for introducing an end date to the grandfathering provisions.

5.3.4 Differences between the proposed Rule and the Rule to be made

The Commission has adopted the proposed provision contained in NEMMCO's supplementary submission with some drafting modifications. The provision is contained in the savings and transitional arrangements in Chapter 11 which allows the Market Participant for specific first tier loads with a type 5 or 6 metering installation to continue to be the responsible person for that metering installation.

5.4 Rule Change Proposal no. 4 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – recognition of arrangements to provide facilities in addition to those normally provided by the responsible person.

5.4.1 NEMMCO proposal

NEMMCO in its Rule change proposal stated that jurisdictional provisions allow end-use customers access to additional facilities at metering installations at the end use customers expense. NEMMCO stated that the provisions allow parties to install or modify metering installations to include capabilities that are in addition to those normally provided by the responsible person.

NEMMCO stated that the Rule change proposal recognises jurisdictional arrangements that allow retailers to facilitate the provisions of "value added services" to end-use customers and provides a "head of power" for these to be incorporated into the NEM Metrology Procedure. NEMMCO also proposed that the supporting clauses within the NEM Metrology Procedure cover aspects such as payment, technical requirements and timing requirements.

NEMMCO proposed that this change promotes the delivery of end use customer expectations, satisfaction and quality by providing a mechanism that facilitates the interaction between the end-use customer and retailer for alternatives or enhancements to a metering installation at an end-use customer's request.

5.4.2 Views in submissions

Energy Australia stated (first round):

[81] Energex submission, (Second round), p.3.

"There is also a risk that the provision for additional facilities (Rule change number 4) could conceivably result in large scale switch outs of existing metrology assets." [82]

Ergon Energy stated (first round):

"While Ergon Energy supports the inclusion of a head of power to facilitate the provision of value added services by retailers, the ability of the Metrology Procedure to address issues of payment and LNSP cost recovery is questioned in the light of the contrary legal advice on this issue that Ergon Energy understands has been obtained by NEMMCO since the Rule changes were submitted."

"It is suggested that clause 7.3.6 should be expanded to explicitly address the issue of cost recovery in circumstances where the LNSP installs "alternative" metering at a retailers request.

"It is queried whether the reference to "cannot be the responsible person" in clause 7.2.3(j) unduly restricts Market Participants in Victoria and South Australia from requesting an alternative type of metering installation in circumstances where there is a right of election with respect to first tier loads that is not exercised. If this outcome was in fact not intended, it is suggested that this phrase be amended to "is not the Responsible Person".[83]

CitiPower and Powercor stated (first round):

"The wording infers that the Market Participant would undertake the installation of the "different" metering installation." [84]

CitiPower and Powercor submitted (first round) some marked up text that amended the NEMMCO proposal in the following way:

- "Change "withhold its consent" to "refuse"; and
- Add "…for the LNSP…" before "to install". " [85]

SP AusNet stated (first round):

"This clause is only applicable to type 5/6 installations as the Market Participant can be the Responsible Person for a metering installation for type 1 to 4."

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82 Energy Australia submission, (First round), p.1.

83 Ergon Energy submission, (First round), p.4.

84 CitiPower and Powercor submission, (First round), p.5.

85 Ibid

"Whereas the clauses (ca) to (j) define a process for type 5/6 meters which requires a fair and reasonable offer, it is unclear what the financial basis of the arrangement is for the non standard meters the LNSP must install under a request under this clause.

"SP AusNet consider that this should be made clear and that this should be on the basis of the relationship being a commercial one with respect to the increment over and above the base level meter regulated price.

"The current wording could be taken incorrectly to mean that the Market Participant would install the non standard metering installation." [86]

United Energy and Alinta stated (first round):

"for clarity the businesses suggest that the words "for the Local Network Service Provider" be added after the word "request" in line 3." [87]

In its supplementary submission NEMMCO stated (first round);

"The Rules at clause 7.3.1(c) and (g) anticipate that a metering installation may be used for functionality beyond the provision of metering data to NEMMCO, while clause 7.3.6 governs payment for metering."

"The proposed clause 7.2.3(j) permits the Market Participant (Financially Responsible Market Participant) to arrange for the metering installation to be changed to another type – for example from a type 5 to a type 4 – or to provide additional facilities to what the Local Network Service Provider (LNSP) would otherwise provide.

"The purpose of the proposed change is to ensure that in circumstances where the metering installation is provided by the network under regulated charges, the Market Participant (i.e. retailer) is not prevented by the rules from competing with other retailers on the basis of additional functionality at the metering installation.

"Subsequent to the submission of this Rule change proposal to the AEMC, it has been identified that NEMMCO will be unable to harmonise the jurisdictional cost recovery clauses into the Metrology Procedure as intended due to a lack of an adequate head of power. The provisions anticipated to be included in the Metrology Procedure would have required the party requesting the new metering functionality to pay additional costs above those which the LNSP would normally incur.

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86 SP AusNet submission, (First round), pp.6-7.

87 United Energy and Alinta submission, (First round), p.2.

"An alternative approach to dealing with the original proposal would be to incorporate within the Rules the necessary provisions relating to costs. Specifically, Rules clause 7.3.6(g) relates to costs associated with alterations that lead to a change in classification of a metering installation. Utilising the existing framework within the Rules, a possible approach is to extend this provision to support proposed Rules change 7.2.3(j) for type 6 to type 5 metering installation changes and additional functionality."[88]

United Energy and Alinta stated (second round):

"We are supportive of the incorporation of a clause that clarifies cost recovery in line with the current jurisdictional instruments. However the cost recovery under Clause 7.3.6 is limited to alteration under 7.3.4 (i.e. the addition of the capability of remote acquisition) of a type 5 or type 6 installation and where the alteration leads to the LNSP no longer in the role of the responsible person. The drafting of Clause 7.3.6 (g) clearly contemplates some form of an exit fee where the Market Participant elects to take on the responsible role of a meter capable of remote acquisition. The current drafting is limited in nature and does not cover the original intent. We suggest a new sub clause (3) in 7.3.6 (g) to cover the ability to recover costs for any alterations requested under 7.3.1(c)."[89]

Energy Australia stated (second round):

"Energy Australia is concerned that this decision may not be fully realised under the current rules or the changes proposed…"

"As it is currently drafted, and under proposed changes in the Draft Rule, the use of the word "only" in Rule 7.3.4(f) implies a broader restriction on the ability of an LNSP to alter a metering installation to make it capable of remote acquisition than is necessary to ensure that the LNSP will only remain the default responsible person in such circumstances where the modification was reasonably required due to operational difficulties. The existing clause 7.3.4(f) would appear to provide that LNSPs may not undertake the RP role following election by the FRMP where a type 5 meter is modified for remote reading. However, would this be inconsistent with what we understand to be the intent of the AEMC's 2006 decision. We therefore suggest that proposed paragraph (f) should be either deleted or amended to ensure it does not restrict the operation of Rule 7.2.3 or the general ability of an LNSP to modify metering installations. This could be achieved by deleting paragraph (f) and amending paragraph (g) so that it only applies where a metering installation is altered in accordance with paragraph (e).[90]"

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88 NEMMCO supplementary submission, (First round), pp.2-3.

89 United Energy and Alinta submission, (Second round), pp.7-8.

90 EnergyAustralia submission, (Second round), p.2 .

Energex (second round) suggested expanding clause 7.3.4(f) to applying to "operational efficiencies" and stated:

> "the reduction of operational costs through efficiency measures that may result from the remote acquisition of strategic meters is seen as being in line with the NEM objectives."

> "The proposed provision for the compensation to LNSPs for the alteration of metering installations under clause 7.3.6(g) does not cover the situation where the alteration does not cause a change in the classification of the metering installation and therefore where the LNSP remains the responsible person but the alteration request from the FRMP does include facilities in addition to that which the LNSP would otherwise install in accordance with the metrology procedure."[91]

Ergon Energy stated (second round):

> "Ergon Energy does not support the proposed 7.3.6(g) as it has the effect of limiting cost recovery to circumstances where the classification changes and the LNSP is no longer the responsible person for the metering installation. In practice, there are situations where a customer will request additional functionality for a metering installation which will not result in the meter classification changing or the LNSP no longer being the responsible person. Ergon Energy supports the ability for customers to request the additional functionality in these circumstances on the basis that the responsible person is able to negotiate in good faith with the customer to ensure it is reasonably compensated for the alteration."

> "in this context, Ergon Energy notes that is some ambiguity around the application of new sub-clauses 7.3.4(e), (f) and existing sub-clause 7.3.4(g) which specifically provides that an alteration of a metering installation by a LNSP in accordance with (e) & (f) does not alter the classification of that installation to a type 4 metering installation. Ergon Energy notes that where the FRMP requests a change to the metering installation this should result in a change of classification. The only circumstance which would not result in a change in classification is where the LNSP changed the metering installation because of operational difficulties.

> "Ergon Energy notes that the drafting in 7.3.6(g) should be amended to reflect that the FRMP may request an alteration to a metering installation but is not itself able to alter the installation."[92]

NEMMCO stated (second round):

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[91] Energex submission, (Second round), p.4.

[92] Ergon Energy submission, (Second round), p.4.

"NEMMCO agrees that the Commission's changes to Rules 7.3.1(c) and 7.3.4 (e) generally maintain the intent of the provisions in NEMMCO's original submission. However, NEMMCO believes further clarification is required mainly in the area of cost management arrangements."

"The new Rules (7.3.1(c) and 7.3.4 (e)) do not cover the situation where the Financially Responsible Market Participant requests a meter type change from type 6 to type 5, or a different type 5 meter, when the Local Network Service Provider remains the responsible person. The new provisions also do not seem to address which participant pays for a request for additional functionality to that metering installation as 7.3.6(g) only references alteration. NEMMCO believes the cost provisions should be extended to clarify cost obligations under these circumstances to adequately support new provisions.

"It is also noted that clause 7.3.1(c) does reference features in "addition" to those specified in paragraph (b)". However this could be read to mean that it does not cover enhancements/variations that a party may request to components covered under paragraph (b). Further clarity could be achieved by referring to modifications and enhancements or any additional functionality added over and above the functionality specified under clause 7.3.1."[93]

SP AusNet submitted some proposed wording amendments and stated (second round):

"the intent of the industry/NEMMCO proposed wording in 7.2.4(j) has been incorrectly translated into the revised 7.3.1(c)."

"The intent translated from the jurisdictional codes was to give the retailer the ability to have the LNSP install a type 5 or 6 meter other than the "base" level meters used by the LNSP for an installation with the parameters involved. It was not necessarily to get additional "features" above those in 7.3.1(a)."[94]

5.4.3 Commission's considerations and decision

In its draft Rule determination the Commission was supportive of providing the ability for end use customers to be able to alter a metering installation for any specific value added requirements. In its draft Rule determination the Commission considered that providing for the modification of metering installations beyond those modifications and alterations identified by the responsible person provided benefits to end use customers. While the Commission noted that a proposal of this kind may raise the potential for impacts to system security and reliability through the modification of installations, the Commission considered that these risks could be

[93] NEMMCO submission, (Second round), p.3.

[94] SP AusNet submission, (Second round), p.6.

effectively managed. Submissions in the first stage of consultation were broadly supportive of the Rule change proposal whilst raising particular issues.

The first round submissions raised a variety of issues in relation to this Rule change proposal. The first issue raised in submissions was the application of the provision in the NEM, particularly, as arrangements regarding the identification of the responsible person for metering installations may differ in relation to types of metering installation. As well as differences in the type of metering installation, there are also differences between the jurisdictions in identification of the responsible person. In its draft Rule determination the Commission considered that there should be no limit on which parties should be able to request an alteration or enhancement to the metering installation, and so the provision should apply to all jurisdictions and metering installation types. However, the Commission in its draft Rule determination considered that the right to make such a request and the scope of the alteration of the installation should be contained within the Rules. The Commission has not deviated from this position in this final Rule determination.

In its draft Rule determination the Commission considered that the existing framework for alteration of metering installations in clause 7.3.4 can be sufficiently expanded to incorporate NEMMCO's proposal while retaining the ability for the LNSP to alter certain metering installations due to operational difficulties. Similarly, the Commission considered that clause 7.3.1 currently allows for enhancements to the metering installation and that it would be appropriate to expand this clause to accommodate NEMMCO's proposed amendments.

Submissions in the second stage of consultation also commented on clause 7.3.1. NEMMCO noted that the reference in clause 7.3.1(c) to "features in addition to those specified in paragraph (b)" could be read to mean that it does not cover enhancements or variations that a party may request to components covered under clause 7.3.1 (b). NEMMCO requested further clarity by referring to modifications and enhancements or any additional functionality added over and above the functionality specified under clause 7.3.1. The Commission agrees that the scope of the clause 7.3.1(c) provision was intended to be as wide as enhancements, variations, modifications and additional functionality over and above the clause 7.3.1(b) examples. The clause has therefore been amended to this effect.

SP AusNet stated in the second stage of consultation that the draft Rule did not correctly translate the intent of the NEMMCO proposal. SP AusNet stated that the intent was to have the LNSP install a type 5 or 6 metering installation other than the base level metering installation and that it was not necessary to get additional features above those in 7.3.1(a). The Commission notes that the NEMMCO proposal stated that the jurisdictional instruments provide for no limit to the additional facilities and act to accommodate any innovation exercised by the end-use customer and the retailer. The Commission further notes that clause 7.2.3(j) of the NEMMCO proposal permitted the installation of "a metering installation of a type that is different from that already installed, or that provides facilities in addition to that which the LNSP would otherwise install". In light of these statements the Commission considers that the draft Rule does reflect NEMMCO's policy intent and therefore has not deviated from the draft Rule in relation to this issue.

In the first stage of consultation submissions raised the issue of cost recovery. NEMMCO's supplementary submission has concurred with views in submissions that the Metrology Procedure is not able to provide for cost recovery. Currently cost recovery for the alteration of first tier metrology installations is provided for in jurisdictional instruments. In its draft Rule determination the Commission noted that in its supplementary submission NEMMCO proposed that these instruments continue to provide for cost recovery.

In its draft Rule determination the Commission however, considered that matters of cost recovery should be addressed in the Rules. For cost recovery to continue to be provided in jurisdictional instruments is inconsistent with the policy objective of the harmonisation of metrology requirements. This is particularly so, as the metering installations themselves that will be the subject of any request for cost recovery would be regulated within the framework of the Rules. For this reason, in its draft Rule determination, the Commission incorporated the cost recovery for the LNSP of a Market Participant requesting to alter a metering installation into the cost recovery provisions in clause 7.3.6.

Submissions in the second stage of consultation commented that the cost compensation arrangements provided in clause 7.3.6(g) did not fully address the position adopted by the Commission.[95] The parties submitted that the draft Rule did not cover the situation where the alteration does not cause a change in the classification of the metering installation.

The Commission considers that the intent of paragraph (g) was to compensate the LNSP for the stranded cost of type 5 or 6 metering equipment if a FRMP changed the metering equipment to a type 4 metering installation (or similar). The Commission considers that this event is covered by clause 7.3.6(g)(1). The Commission considers that the intent of this paragraph was not to cover the compensation of the LNSP for providing "additional features" if required by clause 7.3.1(c), as this compensation is already covered in paragraph (a) of clause 7.3.6. The Commission therefore considers that the concerns raised in submissions would be better addressed by clarifying the scope of clause 7.3.6(a) which includes enhancements and additions made under clause 7.3.1(c).

Submissions in the second stage of consultation have also commented on clause 7.3.4(f). Two parties[96] were not in favour of the restriction imposed on the LNSP in clause 7.3.4(f). Under the drafting in the draft Rule the word "only" now works to limit the ability of the LNSP to make any change to the metering installation types 5, 6 or 7 unless that change is for the purpose of introducing remote acquisition to the metering installation. An ambiguity has also been identified in subclause 7.3.4(e). The Commission has addressed these issues identified in submissions by amending the clauses to retain the intention of the current clause.

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[95] United Energy and Alinta submission, (Second round), pp.7-8; Energex submission, (Second round), p.4; Ergon Energy submission, (Second round), p.4; NEMMCO submission, (Second round), p.3; SP AusNet submission, (Second round), p.6.

[96] EnergyAustralia submission, (Second round), p2. ; Ergon Energy submission, (Second round), p.4 .

Energex has stated that clause 7.3.4(f) should be expanded to include "operational efficiencies". The Commission considers that this change proposed by Energex is a substantive policy issue and would require further consultation. The Commission further considers that as this issue was not part of the NEMMCO proposal, the suggestion by Energex is out of scope of this Rule change proposal. The Commission has therefore not deviated from its draft Rule determination in relation to this issue.

5.4.4 Differences between the proposed Rule and the Rule to be made

In accommodating NEMMCO's proposal within the existing framework of the Rules, the Commission has made modifications to the existing alteration arrangements in clauses 7.3.1 and 7.3.4. In the Rule to be made the Commission has clarified the original intention (that exists in the current Rules) that the LNSP may alter a metering installation to make it capable of being remotely read and in circumstances where there are operational difficulties, it does not change the classification of the installation. The cost recovery for such alterations will fall within the scope of clause 7.3.6.

The Commission has also clarified clause 7.3.1 to allow for enhancements and additions to the metering installation to be borne by the FRMP consistent with clause 7.3.6(a).

5.5 Rule Change Proposal no. 5 - Consequential change to harmonise jurisdictional metrology requirements - data storage capacity of type 6 metering installations.

5.5.1 NEMMCO proposal

NEMMCO in its Rule change proposal stated that currently data storage capacity requirements for interval metering installations are set out in the Rules and data storage requirements for accumulation metering installations are set out in jurisdictional instruments. NEMMCO stated that to harmonise jurisdictional metrology requirements with the NEM metrology requirements, it is necessary to incorporate additional requirements into the national framework that are not currently addressed by either the Rules or the NEM Metrology Procedure.

NEMMCO stated that the proposed Rule change will incorporate the data storage requirements for accumulation metering, as outlined in jurisdictional instruments. NEMMCO stated that as a result, the relevant clauses of the Rules will specify the data storage requirements for interval metering installations and accumulation metering installations.

NEMMCO stated that the proposed Rule change improves the clarity of obligations and requirements in relation to data storage capacity of type 6 metering installations, increasing efficiencies and reducing the risk of non compliance. NEMMCO stated that the single definition for the storage of energy data within accumulation metering installations is consistent with the harmonising benefit by the JJR Report.

5.5.2 Views in submissions

ActewAGL stated (first round):

> "this statement appears to give the impression that after 12 months, the meter can reset itself and now excludes the previous 12 months consumption."
>
> "It is suggested that the phrase "over a period of at least 12 months" be deleted." [97]

Origin stated (first round):

> "It is unclear as to what this type of clause is trying to achieve. It is understood that type 6 metering does not have the ability to store data."
>
> "It is suggested that the text be removed or qualified." [98]

United Energy and Alinta, NEMMCO, CitiPower and Powercor, and SP AusNet all submitted that that they were in favour of a control to be inserted into the Rule regarding the necessity for type 6 metering installations to be able to record at least five digits. This would prevent the dial from turning back to zero within a year at high volume metering points.[99]

5.5.3 Commission's considerations and decision

In its draft Rule determination the Commission considered that the proposed provision is a technical requirement and its inclusion is therefore supported. The Commission noted in its draft Rule determination that the Rules currently provide for a continuous requirement to record total accumulated energy[100] and that this requirement applies to all types of metering installations. The Commission also noted in its draft Rule determination that the current provision referred to a visible display which is a facility to record the accumulation energy for that metering installation.

The Commission therefore removed the control necessitating type 6 metering installations contain at least five digits. Submissions to the second round of consultation however have clarified this point that the display is required to contain at least five digits to ensure that the metering installation would have the capacity to record the required volume of energy for a year without going back to zero. The Commission has reinserted this control into the final Rule.

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[97] ActewAGL submission, (First round), section 2.2.

[98] Origin submission, (First round), p.2.

[99] United Energy and Alinta submission, (Second round), p.8; NEMMCO submission, (second round), p4; Citipower and Powercor submission, (Second round), p.p.3-4; SP AusNet submission, (second round, p8.

[100] Rule 7.3.1(a)(1).

5.5.4 Differences between the proposed Rule and the Rule to be made

The Commission made some amendments to the clause in the Draft Rule to clarify the operation of the proposed clause. The Commission qualified the word "record" with "continuously" and deleted the reference to "at least 12 months" to take into account the point raised by ActewAGL. In response to Origin Energy's submission the Commission notes that the visible display on type 6 metering installations is the recording device. The Commission therefore considers that adding the phrase "by a visible display" after "record" improves the clarity of the provision.

Following second round submissions and reviewing the intention of NEMMCO's proposal, the Commission reinstated the reference to at least twelve months. The Commission considers the provision is intended to ensure the installation is capable of recording data for a period of at least twelve months.

5.6 Rule Change Proposal no. 6 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – management of losses between connection point and metering point

5.6.1 NEMMCO proposal

In its Rule change proposal NEMMCO stated that it is not always possible to install the metering point at the connection point. NEMMCO stated that the management of energy losses between the connection point and metering point is partly covered in clause 7.3.2 and partly in some jurisdictional instruments and therefore there is a need to harmonise the management of losses and specify a common NEM approach.

NEMMCO stated that the energy loss in some circumstances is more than the uncertainties of measurement in the metering installation. NEMMCO further stated that the difference between "as metered" and "true energy" is material and therefore obligations ensuring satisfactory adjustment to energy values are required.

NEMMCO proposed a change that incorporates aspects of the jurisdictional requirements by providing clarity to the party responsible for the management and adjustment of the losses. NEMMCO stated that the proposed changes are consistent with current industry practice and would ensure that the necessary adjustments are made for energy losses between the connection point and metering point, where these are considered material.

NEMMCO stated that the proposed Rule change adds clarity and simplifies the current approach by bringing together the management of losses between the connection point and metering point into a single location within the Rules. NEMMCO stated that this will ensure that obligations are in place to deliver the required outcomes. NEMMCO stated that a harmonised consistent approach to this requirement facilitates the achievement of the benefits of harmonisation envisaged by the JJR.

5.6.2 Views in submissions

ActewAGL stated (first round):

> "What is and who determines "material losses"?
>
> What does "material" mean in this context?
>
> What happens if the parties disagree with the calculations?
>
> Are the losses going to cost companies more than $100k?
>
> Will it not cost more to review a particular site's losses than the gains achieved?
>
> Who wins here?
>
> Is "material" the best word to use here? Why not "significant?"." [101]

Ergon Energy stated (first round):

> "Ergon Energy raises serious concerns regarding the practical application of the proposed changes for the management of losses."
>
> "Many typical installations would fail to comply with sub-clause 7.3.2(bc) as it is currently drafted (eg. high rise buildings where meters are installed in submains). It is considered that a loss greater than that envisaged in sub-clause 7.3.2(bc) would be expected in the majority of cases due to the voltage drop alone in the consumers main between the point of connection and the meter. In this context, it is understood that a 5% voltage drop at maximum load is permitted in the consumer's mains under the SAA wiring rules." [102]
>
> Ergon Energy therefore stated that (first round):
>
> - "The materiality threshold in sub-clause 7.3.2(bc) should be urgently re-assessed; and
>
> - As the requirement to assess "materiality" is site specific in nature, the costs to the responsible person in undertaking the assessment should be clearly weighed against the benefits that are considered to be derived in

[101] ACTEWAGL submission, (First round), section 2.2.

[102] Ergon Energy submission, First round), p.4.

assessing whether the amendment contributes to the achievement of the NEM objective." [103]

CitiPower and Powercor stated (first round):

"CitiPower and Powercor are concerned that the materiality threshold is too low and the provisions may unintentionally encompass a large number of small customers where the assessment is not practical and where the losses are currently included in the distribution loss factors."

"The clause should be deleted leaving the determination of "material" up to the discretion of the responsible person or a different materiality threshold be defined that takes into account the size of the load and the magnitude of the losses to avoid a costly and impractical outcome." [104]

SP AusNet stated (first round):

"For the majority of metering installations the metering point and the connection point do not correspond exactly and hence there will always be losses between the metering point and the connection point. Therefore this clause in the existing Rules requires a tripartite agreement regarding the adjusting of the metering data for almost all installations. This is obviously an unworkable requirement."

"NEMMCO and the industry agreed that this correction for losses, and hence this agreement, was only required where the losses were material i.e. they were outside the range of normal installations for which the broad network DLF's apply. To make the definition of "material" any more stringent than that implied by the DLF figures would seem to disregard the basis of the approved DLF's and in the extreme distort the DLF calculation by double accounting for these higher loss sites.

"There is no basis given in the changes support document for the choice of 50% of the energy attributed to the maximum permissible error of the metering installation. For a type 5 installation this would limit the error due to losses to 0.75%.

"SP AusNet has not carried out a detailed analysis of the losses attributed to customers installations between the connection point and the meter, however from our preliminary analysis it is likely that the level of losses specified in the draft could easily be exceeded in a reasonably significant minority of customer's installations.

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[103] Ergon Energy submission, (First round), p.4.

[104] CitiPower and Powercor submission, (First round), pp.6-7.

"This would impose a new obligation with relatively significant costs onto the LNSP to identify these installations, carry out assessments of the losses in these circumstances, and set the envisaged correction factors. Ultimately these costs will be passed to customers. Further a whole new process for establishing and communicating and agreeing on these correction factors would be involved if this clause stands as is.

"The limitation on the level of losses currently experienced by customers is currently largely driven by the regulatory restrictions on voltage drops at maximum demand in the two components of the customers' supply. The Distributors have obligations to maintain voltage levels at the point of connection through the Code, and the voltage drop in the consumers mains is subject of requirements in the AS 3000 wiring rules.

"To date these requirements appear to have been deemed by industry and NEMMCO to generally be sufficient to ensure that the average losses are not "material". Despite a reasonable number of installation audits over the years of the market, we know of no circumstances where NEMMCO has found that a metering installation was deficient because no correction method had been agreed.

"SP AusNet consider that the thrust of these clauses needs to revert to defining a process which recognises that the normal controls over losses is sufficient except in extreme circumstances, and hence for the Responsible Person to action not based on specific measure of losses but rather based on assessed circumstances.

"If this is deemed insufficient then an industry/NEMMCO study is required of typical installations to arrive at a criteria which does not add significantly to the process complexities and costs. The addition of these complexities and costs was not the intent of the changes to this Rule clause.

"Whatever the process ultimately included in the Rules for dealing with non coincident connection and metering points, all the clauses (b) to (bc) need reconsideration.

"The current clause (b) is not consistent in intent with the new clauses. This clause should be replaced by a clause (bd) which better integrates with the others. If the Responsible Person determines the losses are material (however defined) then they must ensure they are accounted for. Presumably the method for doing this (a correction factor) would need to be subject to some type of review if requested. This would be the subject of the new clause. Clause (b) would then be inconsistent and superfluous." [105]

United Energy and Alinta stated (first round):

[105] SP AusNet submission, (First round), pp.9-11.

"The application of these provisions should be limited to larger customers where the distance between the connection point and the metering point is substantial and where losses may be an issue. The businesses are concerned that a strict interpretation of the current change proposal could lead to requests for a wider application of the requirements, even in residential installations where the distance between the connection point and the metering point may be substantial…"

"…Rather than specifying a level of materiality, the businesses believe the current approach of absorbing losses into the average distribution loss factors, except for larger customers, is a more cost efficient approach for participants and customers. We suggest that sub-clause 7.3.2(bc) be deleted and the references to material within the balance of 7.3.2 be deleted (3 instances).

"Further any requests by a Market Participant under clause (ba) will involve a site visit and measurements to enable the technical calculations to be undertaken to determine the losses. The responsible person should be able to recover the costs incurred in fulfilling the Market Participants request under clause (ba), this would also provide an appropriate cost-benefit discipline on the activity in a similar manner to that proposed in Clause 7.11.2(ae)." [106]

In its supplementary submission NEMMCO stated (first round):

"Industry deliberations on this proposed Rules change made no distinction between a large volume connection point and a small volume connection point. Current industry practice is to address measurement errors due to mis-location of the metering point differently for large volume connection points and small volume connection points. At large volume connection points an adjustment is made for identified measurement errors, while for small volume connection points the adjustment is left to be dealt with in the Distribution Loss Factors (DLF's)."

"In relation to the determination of materiality, the principle that formed the basis of the original Rules change proposal was that the responsible person should make the initial determination, which may then be challenged by other parties affected by the volume of energy traded at that connection point." [107]

United Energy Distribution and Alinta, Energex and CitiPower and Powercor (second round) stated that they agreed with the Commission's position to not adopt the Rule proposal.[108]

NEMMCO stated (second round):

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[106] United Energy and Alinta submission, (First round), p.3.

[107] NEMMCO supplementary submission, (First round), p.3.

[108] United Energy and Alinta submission, (Second round), p8; Energex submission, (Second round), p6; CitiPower and Powercor submission, (Second round), p.4.

"… the intention of the original proposal was to clarify the application of clause 7.3.2(b) and its practical use within industry as well as to incorporate various jurisdictional aspects. This was subsequently followed up by a supporting letter from NEMMCO."

"While there appears general support for retaining proposed provisions (b), (ba) and (bb) (as per NEMMCO's original submission) there has been difficulty in determining what constitutes "materiality" as detailed in clause (bc). The purpose of clause (bc) as part of this set of provisions was to attempt to establish a threshold that ensured frivolous requests were not placed on the responsible person to undertake a review of every decision made thereby potentially turning this into a costly process.

"A Metrology reference group (MRG) meeting was held in November 2007, at which the matter of materiality was raised. Unfortunately the MRG was not able to reach a firm conclusion on this issue. However, if an alternate method could be found to address this issue and retain clauses (b), (ba) and (bb), this would provide greater clarity around the process for managing losses and retain the harmonisation achieved between the first tier and second tier requirements. While not the preferred option, the original 7.3.2(b) provision could be retained unchanged with further analysis to be undertaken at a later date.[109]"

SP AusNet stated (second round):

"For the majority of metering installations the metering point and the connection point do not correspond exactly and hence there will always be losses between the metering point and the connection point. Therefore this clause in the existing Rules requires a tripartite agreement re the adjusting of metering data for almost all installations. This is obviously an unworkable requirement if taken by "regulators" as a literal requirement. The elimination of this uncertainty was the aim of the NEMMCO/industry drafted words."

"Sp AusNet suggests that the Commission refer to item #13 of SP AusNet's original submission for a potential approach.

"…however if AEMC agrees that the words are OK, and NEMMCO (and the AER agree that the current wording will not be literally interpreted, then SP AusNet will accept the Commission's view that the Clause remains as is.[110]"

5.6.3 Commission's considerations and decision

In its draft Rule determination the Commission stated that the views in first round submissions could be summarised as follows:

[109] NEMMCO submission, (Second round), p.4.

[110] SP AusNet submission, (Second round), p.7.

- ActewAGL, Ergon Energy, CitiPower and Powercor, SP AusNet, and United Energy and Alinta disputed that the operation of proposed clause 7.3.2 (bc) is consistent with current industry practice. This raises the question of the validity of the NEMMCO statement about current industry practice;

- Ergon Energy, CitiPower and Powercor, and United Energy and Alinta submitted that the clause be re-assessed or deleted entirely;

- CitiPower and Powercor and United Energy and Alinta stated that they believe the provisions have some merit for large consumers;

- SP AusNet would like recognition that normal controls over losses are sufficient except in extreme circumstances; and

- United Energy and Alinta, and CitiPower and Powercor, supported the remaining clauses besides proposed clause 7.3.2 (bc).

In its draft Rule determination the Commission considered that the provision that is currently contained in the Rules in clause 7.3.2(b) applies to all types of metering installations. At the commencement of the NEM, the current provision applied to types 1,-4 metering installations only. When full retail competition (FRC) was introduced in 2002 in NSW and Victoria, this provision was not changed and consequently was automatically extended to apply to types 5 and 6 metering installations, in addition to the types 1,2,3,4 metering installations. Whilst the FRC extension only applied to second tier loads, there is no actual difference in this provision between second tier and first tier loads, since a load can change from one category to another at any one connection point without disturbing the physical relationship between the connection point and the metering installation. For this reason, there should normally be no provision for the introduction of first tier loads into the Rules.

NEMMCO stated in its proposal that the proposed changes are consistent with current industry practice. The Commission considered in its draft Rule determination that on that basis, the variation appeared to be a realignment of the current provision with current practice. Clause (b) appeared to recognise that it is not practical to account for the absolute amount of physical loss and in practice only those losses that are found to be "material" are accounted for. It appeared that this discretion had arisen from the difficulty in interpreting the current provision. On this basis, the Commission considered in its draft Rule determination that it is reasonable to assume that there will always be a practical threshold below which the amount of physical (actual) loss would not be accounted for.

The Commission noted in its draft Rule determination that first round submissions have queried whether NEMMCO's proposed methodology to ascertain losses between the metering point and connection point is the current industry practice.[111]

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111 ActewAGL submission, (First round), section 2.2; Ergon Eneergy submission, (First round), p4; Citipower and Powercor submission, (First round), pp6-7; SP AusNet submission, (First round), pp9-11; United Energy and Alinta submission, (First round), p3.

In its supplementary submission, NEMMCO stated that for low volume loads, these losses are part of distribution loss factors.

The Commission noted in its draft Rule determination that the issues raised in submissions in relation to whether the determination of material losses in the Rules can be appropriately applied to both high volumes and low volumes. However, the Commission came to the view in its draft Rule determination that the proposed provision does not appear to be reasonable for low volume loads, as the location of a low voltage direct connect metering installation may be reasonably distant to the connection point due to network infrastructure, customer installation requirements and design limitations. The "connection point" is not well defined in the determination of distribution loss factors. Distribution loss factors in general attempt to pick up all actual losses between the consumer's metering installation and the transmission connection point related to that load. Accordingly it would be impossible (or impractical) to determine the physical point in the circuit that should be used when applying the test for "material". To rigidly apply the proposed provision would imply that a test of each metering installation must be performed in order to determine whether the "material" threshold had been breached. The Commission considered in its draft Rule determination that these tests appear to have no practical value whilst imposing a significant cost on the responsible person.

The Commission therefore decided not to adopt this Rule change proposal as part of its draft Rule due to the potential for significant and unnecessary costs being imposed onto Market Participants in relation to low volume metering installations. The Commission was of the view in its draft Rule determination that further consideration of the impacts and alternative methods to ascertaining losses is required, including the provision of deemed amount of losses or distribution loss factors.

The Commission considers that this Rule change as proposed would be unlikely to promote the NEO as it has the potential to impose substantial costs on certain Market Participants without providing benefits in excess of those costs. The Commission therefore has not adopted this Rule change proposal into its Rule to be made.

The Commission was of the view in its draft Rule determination that the issue of losses between the connection point and metering point may be addressed in one of the future NEMMCO metrology Rule change packages. The Commission however invited stakeholders who were of the view that this issue should be addressed in the context of this current Rule change proposal to make a detailed case in the second stage of consultation as to its proposed methodology including the consideration of alternative methods to ascertain losses and providing quantitative analysis of the impact of those methods.

Three submissions at the second stage of consultation have supported the Commission's position to not adopt this part of the Rule proposal. NEMMCO has submitted in the second round of consultation that the Commission adopt its proposed approach until a better solution can be found. SP AusNet referred the Commission to the approach it proposed in the first round of consultation as a possible approach. This involved normal controls except for in extreme circumstances based on assessed circumstances.

The Commission notes the views of submissions and notes the fact that the MRG was not able to reach a firm conclusion on this matter. The Commission has therefore decided not to deviate from its position in the draft Rule determination to not adopt this part of the Rule proposal into the Rule to be made.

5.6.4 Differences between the proposed Rule and the Rule to be made

The Commission has no amendments to the Rule to be made as a result of the proposed Rule given the Commission's decision not to accept the proposal.

5.7 Rule Change Proposal no. 7 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – metering standards for non-market generation

5.7.1 NEMMCO proposal

NEMMCO stated that jurisdictional instruments have established metering standards for non-market generation that differ from the NEM metering standards and are different between jurisdictions.

NEMMCO stated that this proposed Rule change introduces metrology obligations for non-market generation into the NEM metrology framework. NEMMCO stated that the different standards for non-market generation need to be addressed in the Rules. NEMMCO stated that the adoption of the current NEM requirements for market generators at the time of promulgation of these Rule changes would:

- Represent a significant cost to industry;
- Require the installation of interval metering; and
- Potentially reduce the accuracy of energy measurement.

NEMMCO stated that jurisdictional metrology standards for non-market generators use a demand value rather than an energy volume to determine applicable accuracy standards. NEMMCO stated that the proposed Rule reflects the jurisdictional instruments in that a generating unit with an output capacity greater than 1 MW is required to meet existing NEM standards, whilst a generating unit with output capacity less than 1 MW is permitted to meet a lesser standard.

NEMMCO stated that the jurisdictional standards are based on output capacity rather than annual energy volumes sent out. NEMMCO stated that this reflects the low utilisation factors commonly associated with these types of small non-market generating units and the need for higher accuracy standards than might be achieved by using the existing NEM type 1 to 4 energy based standards.

NEMMCO stated that the proposed Rule harmonises the approach to metering requirements for non-market generators across the NEM. NEMMCO proposed a metering solution that is lower cost than the existing NEM standards for generators below 1 MW capacity, without compromising the measurement accuracies appropriate for the energy volumes supplied.

NEMMCO stated that it does however note that the Rule change proposal does not address the metering standards to be applied to generating units operated by parties exempted from registering with NEMMCO. NEMMCO stated that this issue is the subject of a separate NEMMCO review.

5.7.2 Views in submissions

Ergon Energy stated (first round):

> "Ergon Energy believes that the proposed amendment in clause 7.3.4A(a)(2) to link the tariff applying to the generating unit with the type of metering installation that should be installed for the generating unit, is inappropriately located in Chapter 7. The content of Chapter 7 and the metrology procedure should be restricted to matters of a technical nature and not address the terms upon which energy may be purchased." [112]

United Energy and Alinta stated (second round):

> "…We suggest that further clarity on "r" and agreement across the industry is required before proceeding with this new approach."
>
> "…the following sub clauses are confusing and we consider that they are not required and should be deleted.
>
> "Sub clause (3) and (4) in relation to transformers require a type 3 metering installation or an appropriate metering installation for the connection point. The drafting is confusing and the reason why the transformer may be part of the metering installation could be as a result of the customers load and not by the generation itself. As drafted, does this allow a type 5 metering installation to be used? Any metering installation needs to comply with the requirements of Schedule 7.2, this specific requirement does not need re-stating as a special non market generator requirement.
>
> "Sub clause (5) in relation to metering also needs to meet the requirements of schedule 7.2. Again we suggest that this could be deleted.
>
> "Why is clause (i) limited to paragraphs (a)-(g)? Why isn't clause (h) included for completeness?"[113]

Energex stated (second round):

> "With regards to proposed clause 7.3.1(i)(3),(4) and (5) there appears to be unnecessary repetition in the accuracy requirements for metering installation

[112] Ergon Energy submission, First round), p.5.

[113] United Energy and Alinta submission, (Second round), p.9.

components. Energex suggests that these 3 clauses be combined [marked up text provided]."

"It would also appear that the original intention was to have a minimum requirement of type 3 metering to reflect the low utilisation factors commonly associated with these types of non-market generators. Therefore clause 7.3.1(i)(3)(i) should read "a minimum of a type 3 metering installation.

"With regards to clause 7.3.1(i)(9) it is not clear why the term nameplate rating has been used while the term "an output" has been used in subclauses (6),(7) and (8)."[114]

NEMMCO stated (second round):

"NEMMCO is generally supportive of the draft Rules proposed by the Commission in its draft determination."

"In relation to the proposed provisions for non-market generating units, NEMMCO suggest the inclusion of an additional clause or note at S7.2.3 to indicate that in the case of metering installations for non-market generators, the provisions of S7.2.3 are modified by clause 7.3.8(i). Without such a clause, users of the Rules may anticipate that clause S7.2.3 is the sole determinant of metering installation requirements.

"These provisions at 7.3.1(i) harmonise the current jurisdictional approaches, with slightly more relaxed requirements when generating units are operated at low capacity factors, such as occurs with standby equipment. The metering data from these installations is only required in the market for profile purposes and is not directly used for settlement. In any case the participants involved with each metering installation are able to obtain higher standards of metering by mutual agreement with the other participants associated with the connection point.

"In relation to proposed clause 7.3.1(i)(8), NEMMCO suggests that improved clarity in relation to the meaning of "sent out" may be obtained by substituting for the words "…projected sent out generation; and". This alternative wording incorporates the defined term "sent out generation" and hence strengthens the meaning of "sent out" in this provision.

"…NEMMCO notes that the jurisdictions have not expressed policy differences that would justify the introduction of an "r" volume limit. NEMMCO suggests that a single NEM value would be satisfactory. If the Commission wishes to further explore an explicit upper energy limit for

[114] Energex submission, (Second round), pp.5-6.

accumulation meters, NEMMCO would suggest 750 MWh/year. This is equivalent to an 8.2% capacity factor for a unit of 1MW nameplate.

Jurisdictional requirements

"Please see NEMMCO's earlier comments for Rule Change Proposal No. 2 in regards to clause 11.X.2(c) and incorporating the superseded jurisdictional requirements into the Metrology Procedure."[115]

CitiPower and Powercor stated (second round):

"It is not obvious why the current requirements of S7.2.3 are not satisfactory and therefore there is no obvious benefit in establishing an additional "r" value to be set by jurisdictions in the Metrology Procedure."

"The new section in clause 7.3.1 dealing with requirements for metering installations for non-market generation units includes in sections (i)(3)(i), (i)(4)(i) and (i)(5)(i) the words "a type 3 metering installation; or"which seem to be redundant given that the next provision (ii) in each case provides "the type of metering installation appropriate to that connection point;". Consider deleting 7.3.1(i)(3)(i), 7.3.1(i)(4)(i) and 7.3.1(i)(5)(i)."[116]

SP AusNet proposed some technical amendments to clauses 7.3.1(i)(3)-(9), and also stated:

"The only significant content change proposed by the Commission would appear to be with respect to the accuracy of metering for generators greater than 1MW. The NEMMCO industry words based on the jurisdictional Codes was to require standards consistent with market generating units (as stated in 7.3.4A(3)), whereas the Commission have determined to refer rather to the metering accuracy specified in schedule 7.2 SP AusNet have not formulated a view on this different approach."

"However whereas the words as drafted by NEMMCO/industry were relatively clear re the metering requirements, the Commission's wording is unclear in a number of subclauses as detailed below."[117]

5.7.3 Commission's considerations and decision

In its draft Rule determination the Commission considered that there are four types of generator registration. The proposed Rule change related to non-market generators, where the generator's output is purchased in its entirety by the Local Retailer of a market customer located at the same connection point. Between the

[115] NEMMCO submission, (Second round), p.5.

[116] CitiPower and Powercor, (Second round), p.4.

[117] SP AusNet submission, (Second round), pp. 7-9.

commencement of the NEM and current time, Chapter 7 of the Rules only related to the second tier metering installations of distribution networks. The first tier metering installations, whether for a load or a generator, were not covered by the Rules. Accordingly, in its draft Rule determination the Commission considered that it was appropriate for the NEMMCO proposal to specify standards of metering for generator related first tier connection points.

In relation to Ergon Energy's comments in the first stage of consultation, no other submission considered that this location was inappropriate; and it also reinforced the view that the higher level issue is whether a non-market generating unit should be permitted to install accumulation metering installations, rather than interval metering installations. In its draft Rule determination the Commission was of the view that this Rule change proposal deals with metering provisions and that it is appropriately located in Chapter 7 of the Rules.

In analysing this Rule change proposal, the Commission noted in its draft Rule determination that the proposed Rule provides for the installation of an interval metering installation when time of use rates apply to a generating unit. This condition would only be relevant for a generator that had a type 6 metering installation. A first tier generator has no jurisdictional requirement to upgrade its metering installation with an interval metering installation.

The proposed Rule also provided for accuracy standards for "new accumulation metering equipment" for non-market generating units with an output of less than 1 MW. The Commission considered in its draft Rule determination that the proposed provision raised the question of whether a new metering installation for a non-market generator should be permitted to contain an accumulation metering installation. A further issue was that the proposed Rule used a capacity limit of 1MW or less to determine when a non market generator may have an accumulation metering installation installed as the minimum requirement. The 1 MW capacity limit proposed by NEMMCO relates to a volume limit of approximately 8700 MWh at a 100% capacity factor. This limit appears to greatly exceed the volume limit set by jurisdictional instruments of 160 MWh (Queensland has an upper limit of 100 MWh).

Interval metering have only become generally available in the last fifteen years and generators commissioned prior to this time would have accumulation metering installations. It raised the policy issue of whether any future non-market generating unit should be installed with accumulation metering installations, rather than interval metering installations. The Commission was also aware that the MCE's policy direction appears to favour the progressive rollout of interval metering installations rather than accumulation metering installations.

In its draft Rule determination the Commission sought comment from stakeholders as to whether the upper limit for accumulation metering installations should be brought in line with the volume limits set by the jurisdictions. The Commission noted in its draft Rule determination that the Queensland jurisdiction had chosen to reduce its volume limit to further limit the prevalence of accumulation metering installations. The Commission also sought comment from stakeholders in its draft Rule determination as to whether an "r" volume limit to be set by jurisdictions, be provided for in the Rules. The Commission envisaged that "r" could be set in the

Metrology Procedure where further reductions in volume limits as a policy position by the jurisdictions may be taken into account.

Submissions to the draft Rule determination (during the second round of consultation) have not been in favour of adopting an "r" volume limit, particularly without further consultation and industry involvement.[118] The Commission accepts the views of industry in relation to this matter and has elected to retain the provisions of the draft Rule in the Rule to be made.

The proposed Rule also provided for the measurement of reactive energy for generators with an output of 1 MW or less. In its draft Rule determination the Commission supported the policy intent of this clause. The Commission considered however that the discretion provided to distribution network service providers (DNSPs) to manage whether generators with a nameplate rating of 1 MW or less have their active or reactive energy tested should be applied in a reasonable manner. The DNSP is also required to provide reasons for the request. Where the non market generator is of the view that the DNSP's request is unreasonable and refuses the test, the DNSP may invoke the dispute resolution procedures provided for in the Rules. In its draft Rule determination the Commission sought comment from interested stakeholders as to their views on this amendment.

The proposed Rule requires voltage transformers, current transformers and reactive energy metering installations to meet the technical requirements in Schedule 7.2 for a type 3 metering installation. In its draft Rule determination the Commission considered that the proposed provisions appeared too ambiguous. For example, the reference to the type 3 metering installation as the technical requirement to meet is appropriate for a generator with a capacity of less than 1 MW, but it is not satisfactory for a generator with a capacity of 20 MW. A 20 MW generator would have a maximum output in excess of 100 GWh per annum, which would require a type 2 metering installation. In this case, a type 3 accuracy would not be acceptable. In its draft Rule determination the Commission varied the proposed provisions in the Draft Rule so that the relevant transformer and the measurement element in relation to a reactive meter must meet the technical requirements for the appropriate type of metering installation.

Submissions[119] received in the second stage of consultation have suggested a rewording of the clauses that deal with voltage transformers, current transformers and reactive energy meters (clauses 7.3.1(i)(3)(i), 7.3.1(i)(3)(ii), 7.3.1(i)(4)(i), 7.3.1(i)(4)(ii), 7.3.1(i)(5)(i), and 7.3.1(i)(5)(ii)) to prevent duplication and to add clarification. The Commission has accepted the views of submissions in relation to this matter and has made amendments to the draft Rule accordingly.

Submissions[120] received in the second stage of consultation have also called for consistency in the use of technical terms in the draft Rule. The Commission has

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[118] United Energy and Alinta submission, (Second round), p.5; NEMMCO submission, (Second round), p.5; Citipower and Powercor submission, (Second round), p.4.

[119] Citipower and Powercor submission, (Second round), p.4; Energex submission, (Second round), pp.5-6.

[120] Energex submission, (Second round), pp.5-6; SP AusNet submission, (Second round), pp.7-9.

made the appropriate amendments to ensure that the term "output" refers to the electricity in megawatt hours flowing out of the generator. When a reference is made to megawatts the term capacity or nameplate rating is used in accordance with electricity industry practice. This amendment has been made to clauses 7.3.1(i)(6), 7.3.1(i)(7) and 7.3.1(i)(8).

United Energy and Alinta submission in the second stage of consultation have also called for the inclusion of clause 7.3.1(h) to be included in the provisions for non-market generators. In examining the Rules the Commission considers that clause 7.3.1(h) is a technical provision that is to apply to both market and non-market generators and so no change has been made to the draft Rule to this effect.

NEMMCO's submission in the second stage of consultation called for a cross reference to clause 7.3.1(i) to be added to clause S7.2.3 to highlight that additional metering installation requirements apply to non market generators. In examining the Rules the Commission considers that no such cross reference is required.

NEMMCO's submission in the second stage of consultation called for the use of the term "projected sent out generation" in place of the term "projected sent out annual energy volumes". The Commission considers that this change technically strengthens the provision and has made the amendments to the draft Rule accordingly.

5.7.4 Differences between the proposed Rule and the Rule to be made

The clause has been relocated from the proposed position of clause 7.3.4A to 7.3.1 as it contains similar subject matter to that clause.

As noted in the analysis above, the Commission has modified the requirements in relation to voltage transformers, current transformers and the measurement element for a reactive energy meter so that the requirements for accuracy are appropriate for the relevant type of metering installation. The Rule to be made also removes duplication in the drafting of these subparagraphs.

The term "nameplate rating" has replaced the term "output" in various subparagraphs so that the term is consistently applied.

The Commission has also made some other minor drafting amendments that are reflected in the Draft Rule to improve the understanding of the clauses.

The Commission has placed the proposed provisions that preserve the arrangements for non-market generating units in the savings and transitional section of the Rule to be made. In the draft Rule, the relevant jurisdictional requirements were required to be identified in the Metrology Procedure. This position has been amended in the Rule to be made, with the requirements to be listed in a separate document published by NEMMCO.

5.8 Rule Change Proposal no. 8 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – process for the conduct of a participant requested meter test

5.8.1 NEMMCO proposal

NEMMCO stated that the current Rules for requested meter tests for second tier metering installations places obligations on NEMMCO to facilitate testing of a metering installation. NEMMCO stated that this differs from the current jurisdictional requirements for first tier metering installations which places the obligation for a requested meter test on the LNSP.

NEMMCO stated that for second tier installations, the industry believes it would be generally more efficient for testing to be arranged between the retailer and network operator to meet the requirements of individual end-use consumers rather than being facilitated by NEMMCO. NEMMCO stated that in the majority of circumstances it is not necessary to have NEMMCO involvement.

NEMMCO stated that industry formed the view that it was not possible to eliminate NEMMCO's role from the obligations in the Rules. NEMMCO stated that NEMMCO may still be required to facilitate a test for those situations where the need for the installation test arose from a wholesale market energy data matter, or if the responsible person was tardy in meeting their obligations.

NEMMCO stated that industry proposes to harmonise the different requirements to a NEM wide standard whereby a participant may request the responsible person or NEMMCO to undertake a metering installation test, with an obligation that the party receiving the request must act. NEMMCO stated that the proposed changes will improve industry efficiencies.

NEMMCO stated that the proposed Rule change aligns with current industry practice for testing, where the responsible person meets the testing cost if the installation is non compliant, otherwise the requesting party meets the testing cost.

NEMMCO stated that the current jurisdictional requirements allowed the end-use customer to attend a test and to make a direct request for testing of first tier metering installations. NEMMCO stated however that the model proposed assumes that the end-use customer will make such requests through their retailer. NEMMCO stated that jurisdictional instruments contain additional provisions to support the consumer/retailer relationship.

NEMMCO stated that this proposal offers an economically efficient model that facilitates jurisdictional requirements for end use consumer requested metering installation testing. NEMMCO stated that the proposal achieves this without the involvement of all market parties, and still permits the more formal metering installation testing arrangements of the Rules where wholesale market issues are associated with the need for a metering installation test.

NEMMCO also stated that the proposed amendments bring together in one area requirements that are currently split between clause 7.6.1 and Schedule 7.3 (at

S7.3.1(d) and S7.3.1(f)) and improve market efficiency by having related provisions together.

5.8.2 Views in submissions

ActewAGL stated (first round):

> "Agree with most changes. In point (d), this statement does not give sufficient notice to comply with jurisdictional customer notification periods to access land." [121]

Energy Australia stated (first round):

> "the AEMC may wish to consider providing a definition for the term "affected parties." [122]

Ergon Energy stated (first round):

> "While Ergon Energy supports the proposed model as more efficient, readability would be assisted by a clearer delineation between the NEMMCO and Responsible Person processes, including clarification that a request to NEMMCO will only be on an "exceptions" basis. This would be consistent with both industry practice and the rationale for NEMMCO's involvement as outlined in the statement of issue (ie where the Responsible Person has failed to undertake the test or the need arises from a wholesale market energy matter)."
>
> "Ergon Energy believes that the requirement for the Responsible Person to provide notice of when and where a test will be conducted under clause 7.6.1(bb) should be amended to reflect industry practice whereby:
>
> - The request for the test is made by the retailer, on behalf of the customer (usually via B2B service order request); and
> - Advice regarding when and where the test will be conducted would be communicated from the responsible person to the retailer and, as appropriate from the retailer to the customer.
>
> "As a consequence, the Responsible Person will not usually be in possession of the contact details necessary to provide all "affected parties" (ie if interpreted as including the customer) with the required notice. It is therefore suggested that the reference to "…the Responsible Person must give those affected parties 5 business days notice" should be amended to read:

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[121] ActewAGL submission, (First round), section 2.2.

[122] Energy Australia submission, (First round), p.2.

> …the Responsible Person must give the party making the request 5 business days notice…
>
> "Clarification is sought as to the information that is required to be communicated by the Responsible Person regarding the "method of testing to be adopted", under clause 7.6.1(bb). How is it envisaged that testing other than "on-site" will be managed under this clause?
>
> "It is unclear why there is a need for both sub clauses 7.6.1(e) and (f). Ergon Energy suggests that the subject matter of sub-clause (f) is adequately covered by the broader obligations of sub-clause (e) and accordingly, sub clause (f) should be removed." [123]

SP AusNet provided marked up text in its submission (first round):

> "Regarding clause 7.6.1(e):
>
> It would appear that the parties to whom test results are provided in these two clauses should be the same but the wording is different."
>
> "Regarding clause 7.6.1(g):
>
> Our expectation would be that all test results whether they show the installation to be compliant or non-compliant must be stored. However the requirement for storing records of tests is covered by 7.6A and this clause should be deleted (or made reference to 7.6A only)." [124]

United Energy and Alinta, Ergon Energy and CitiPower and Powercor (second round) have commented on the operation of paragraph 7.6.1(e)[125] and recommended changes to clarify the operation of this clause and outline the roles and responsibilities of the responsible person and NEMMCO. The parties have also recommended changes to prevent the duplication and redundancy of certain provisions of the draft Rule.

AGL, United Energy and Alinta, Energex, Ergon Energy and NEMMCO (second round)[126] have stated that the information dissemination requirements following a meter test in the draft Rule does not differentiate between routine and participant requested meter tests. The submissions argue that this is contrary to the intent of the original proposal and that an unintended consequence therefore is that the information dissemination requirements for routine testing is too onerous.

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[123] Ergon Energy submission, (First round), pp.5-6.

[124] SP AusNet submission, (First round), p.13.

[125] United Energy and Alinta submission, (Second round), pp.9-11; Ergon Energy submission, (Second round), p.5; CitiPower and Powercor submission, (Second round), p.5.

[126] AGL submission, (Second round), p.1; United Energy and Alinta submission, (Second round), pp.9-11; Energex submission, (Second round), pp. 6-7; Ergon Energy submission, (Second round), p.5; NEMMCO submission, (Second round), p.6.

United Energy and Alinta, and CitiPower and Powercor (second round)[127] have submitted that clause 7.6.1(i) should be deleted as NEMMCO already has obligations for the accreditation and registration of metering providers under the Rules.

United Energy and Alinta, and NEMMCO (second round)[128] have also suggested various terminology changes to clause 7.6.1.

Further comments from submissions in the second round of consultation are as follows.

CitiPower and Powercor stated (second round):

> "In the Commissions analysis it has stated "In a practical sense however the Commission considers that smaller end use consumers would liaise with their retailer who would then contact NEMMCO or the responsible person for a meter test." Whilst this assessment may often be correct, it may not be valid in some circumstances, for example where the customer is in dispute with the retailer."[129]

SP AusNet provided marked up provisions and outlined some drafting concerns and also made comment as follows (second round):

> "The intent of the industry/NEMMCO proposed wording in 7.6.1 has been incorrectly translated into the revised 7.6.1."

> "The industry/NEMMCO wording was attempting to keep a level of end use customer protection similar to that in the Jurisdictional Codes. The retention of NEMMCO carrying out the test was to provide a backstop default if the responsible person refused to carry out the test because they did not view it as a reasonable request. The Commission drafting seems to put NEMMCO in the role of "policeman" forcing the Responsible Person to test. This was not the intent.

> "Paragraph (h): If the tests are requested by a Retailer (or a customer through a Retailer) then the result should be delivered to the retailer even if the results are good. The financial arrangement in such a circumstance is that the customer must pay the cost of the test and hence the outcome either way is important. SP AusNet note that the financial arrangements of testing were included in the Jurisdictional Codes and the industry proposed to move these details to the Metrology Procedure containing cost information/obligations has seen these financial arrangements remain in the Jurisdictional Codes despite there being national consistency in approach. Given the Commission's

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127 United Energy and Alinta submission, (Second round), pp.9-11; CitiPower and Powercor submission (Second round), p.5.

128 United Energy and Alinta submission, (Second round), pp.9-11, NEMMCO submission (Second round), p.6.

129 CitiPower and Powercor submission, (Second round), p.5.

view that the costs of meter upgrades should be included in the Rules should this cost matter also be considered for Rules inclusion ?

"Paragraph (i): the audits carried out by NEMMCO are a sample only and hence can only provide a basis for NEMMCO to satisfy itself that there is a reasonable probability that metering installations in general comply, but cannot provide evidence of each installation's compliance."[130]

5.8.3 Commission's considerations and decision

At the first stage of consultation the Commission received submissions suggesting that the number of business days notice that NEMMCO provide to the responsible person of their intention to conduct a participant requested metering installation test be extended from two to seven. The Commission noted that the current provision (prior to the Rule change proposal) provides for two days. In addition the Commission noted that the period of two days was introduced at the commencement of the NEM and was not changed at the introduction of FRC. The Commission considered that use of the expression "no later than" allows parties (NEMMCO and the relevant responsible person) to reach an agreed period which could vary for each class of end use customer. The provision therefore did not require different periods to be specified for the different types of metering installations and appears consistent with light handed regulation. On review however the Commission is of the view that seven days notification is a more appropriate timeframe for NEMMCO to advise the responsible person and organise for the testing of the meter.

The Commission stated in its draft Rule determination that submissions have also called for a definition of affected parties in the Rule. The Commission amended the clause in the draft Rule and replaced the term "affected parties" with the term "Registered Participant". The Commission considered that the term "affected parties" was used to refer to end use customers and retailers as well as parties such as NEMMCO. In a practical sense however the Commission considered that smaller end use consumers would liaise with their retailer who would then contact NEMMCO or the responsible person for a metering installation test.

In its first round submission Ergon Energy suggested that the proposed Rule be amended to clarify that a request to NEMMCO will only be made on an "exception" basis. In its draft Rule determination the Commission was of the view that providing for a request to be made to NEMMCO on an exception basis would remove the ability for participants to conduct "forum shopping". The Commission also considered that it would prevent participants from requesting two tests of the same metering installation where they were simply unhappy with the results of the metering installation test. The Commission therefore adopted this suggestion into its draft Rule.

In its first round submission Ergon Energy suggested that the proposed Rule be amended to specify that a response to the notice of the test be restricted to the party requesting the test. The Commission noted that this variation appeared to reflect

[130] SP AusNet submission, (Second round), p.10.

industry practice at the jurisdictional level. In its draft Rule determination the Commission analysed the practical approach that consumers would normally be expected to liaise with their retailer to partially adopt Ergon Energy's request. The Commission provided that NEMMCO or the responsible person must advise the "party making the request" and "where the Local Network Service Provider is the responsible person, the financially responsible Market Participant" of the metering installation test.

In its draft Rule determination the Commission considered that the right of consumers to witness the test does not need specific protection in Chapter 7 at this stage of market maturity. The Commission considered that it is enough to allow Registered Participants to apply good industry practice to ensure that the consumer is engaged. In particular there would be a service obligation on the retailer to advise the consumer of the test arrangement if the consumer requested the test through that retailer. The Commission considered that there is nothing preventing a relevant consumer from requesting a test from the responsible person, thereby ensuring that the consumer was kept informed of the test by the responsible person. The Commission considered that this arrangement reflects light handed regulation, and should only be prescriptive if events indicate that good industry practice is not being followed. If the consumer was not adequately represented by the retailer or the responsible person, the consumer has a choice to move to another retailer who would provide better service.

In relation to Ergon Energy's suggestion in the first round of consultation that the proposed provision regarding the "method of testing" be clarified, the Commission noted that the phrase "method for testing" is sufficiently descriptive at this stage of market maturity. The Commission considered in its draft Rule determination that the phrase was sufficient to require the responsible person to provide information to a reasonable extent on the method to be employed in undertaking the test. If the information was not reasonable, the matter could be resolved through the Rules dispute resolution mechanism. Accordingly, the Commission was of the view that there was no additional clarification needed on this matter to improve the clarification of the proposed provision at this time.

Ergon Energy suggested in its first round submission that the provisions in proposed clause 7.6.1(f) are covered by the broader provisions of proposed clause 7.6.1 (e) and hence proposed clause 7.6.1 (f) can be deleted. In light of the Commission's amendments to the use of the term "affected parties" the Commission accepted Ergon Energy's suggestion in its draft Rule determination, and has amended the proposed Rule accordingly.

The Commission notes that submissions[131] in the second round of consultation stated that the Commission had not met the intent of the Rule proposal in its draft Rule with respect to the dissemination of metering installation testing information for routine testing. Submissions made the point that metering providers were of the view that it was reasonable to provide testing information where the test was requested by the participant but not in the case where the testing was not requested.

[131] United Energy and Alinta submission, (Second round), pp.9-11, Ergon Energy submission, (Second round), p.5; NEMMCO submission, (Second round), p6.

The Commission has accepted the views of submissions and amended the drafting accordingly to reflect this comment. Metering installation testing information in relation to routine tests need only be provided to Registered Participants on request.

The Commission notes that submissions in the second round of consultation sought to amend clause 7.6.1(e) of the draft Rule and ascertain its intent. The Commission considers that the intent of clause 7.6.1 in the current Rules is to recognise NEMMCO's role in the testing of metering installations where a doubt to the installations accuracy has been raised. The Commission considers that the intent of paragraph 7.6.1(e) was to control the request to witness the test, which is the subject of paragraph (b) and (c). The Commission has clarified the drafting of the clause accordingly in its Rule to be made.

Submissions[132] in the second round of consultation have also raised the issue that clause 7.6.1(i) should be deleted. The Commission considers that this clause provides NEMMCO with a verification role which underpins quality and ongoing integrity of metering installations in addition to its accreditation framework. The Commission has therefore not deviated from its final Rule determination from its position in the draft Rule determination.

5.8.4 Differences between the proposed Rule and the Rule to be made

The Commission has largely adopted the policy intent of NEMMCO's proposed amendments. As noted above, the Commission had included a provision in the Draft Rule to require the responsible person to notify the party who requested the test and the Market Participant (where necessary) of the location, time and method of testing. The Commission had also adopted Ergon Energy's suggestion to clarify that a participant request can only be made to NEMMCO on an exception basis (ie. where the responsible person has failed to undertake the test or the need arises from a wholesale market energy matter).

In response to submissions[133], the Commission has also clarified the circumstances when test results are made available. In circumstances where the test results indicate deviations from the technical requirements should be made available to the persons required to have the data under clause 7.7 (excluding the AER and Jurisdictional Regulators). In circumstances where the testing has been requested, it should be made available to the person who requested the test and those entitled to the data. In all other circumstances, it should be available on request.

The Commission has also made a variety of drafting changes to improve the readability and understanding of the clause. The Commission has also renumbered the clause in light of the new clauses proposed by NEMMCO. The Commission considers the renumbering is minimal in nature and improves the readability of the clause. On review of the draft Rule, the Commission identified an inconsistency in

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[132] United Energy and Alinta submission, (Second round), pp9-11, Citipower and Powercor submission, (Second round), p.5.

[133] United Energy and Alinta submission, (Second round), pp.9-11, Ergon Energy submission, (Second round), p5; Citipower and Powercor submission, (Second round), p5.

the timing requirement in relation to when NEMMCO must advise the responsible person in relation to the testing of the installation and when the responsible person must advise the person who requested the test. This has been rectified in the Rule to be made where NEMMCO is required to advise the responsible person seven days prior to the testing and the responsible person must advise the person who requested the test five days before the test.

5.9 Rule Change Proposal no. 9 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – record keeping

5.9.1 NEMMCO proposal

NEMMCO in its Rule change proposal stated that clause 1.9 of the Rules contains a general requirement for keeping relevant records for 7 years. NEMMCO stated that a retention period of 7 years past the record creation date is insufficient when the record relates to the compliance of equipment that may remain in service for a further 20 years beyond the date when the test record was created. NEMMCO therefore stated that it is necessary to establish alternative record keeping requirements appropriate to metrology related records

NEMMCO stated that each of the jurisdictional metrology instruments specifies the type of records that must be maintained and in some circumstances varies the timeframes required for record retention as a result of factors such as asset management plans and equipment maintenance cycles.

NEMMCO stated that the proposed Rule change identifies specific metrology records which must be retained, defined retention periods in terms of related maintenance activities rather than record creation date, and specifies the party responsible for maintaining the relevant records.

NEMMCO stated that the proposed Rule change harmonises existing jurisdictional and NEM requirements and identifies specific records essential to establishing the compliance of a metering installation and maintaining the veracity of energy data used for NEM settlement.

NEMMCO stated that these records are essential for supporting the resolution of NEM disputes and maintaining a confidence in energy data used in the NEM. NEMMCO stated that the proposed Rule, clarifies the responsibility for retention of a record which may exist in duplicate from amongst a group of participants. NEMMCO stated that clarity in relation to an understanding of the Rules requirements, aids compliance and market confidence resulting in more efficient market processes, thereby contributing to the NEM objective[134].

[134] Prior to January 1 2008 and at the time that this Rule change proposal was submitted the NEO was known as the NEM objective.

5.9.2 Views in submissions

Ergon Energy stated (first round):

> "It is unclear exactly what is expected of a responsible person in order to satisfy the requirement under clause 7.6A(e) of storing metering data "in the form in which it was collected". For example, would the collection of information electronically, via field force automation and the subsequent uploading of the information into a database satisfy this requirement?" [135]

SP AusNet stated (first round):

> "Our understanding is that metering data does not need to be stored in the form it is collected after 13 months. However the specific requirements for metering data storage is covered by 7.9.1(f) and (g) and this clause should be deleted (or made a reference to 7.9.1(f) and (g) only)." [136]

TransGrid stated (first round):

> "The draft new clause 7.6A parts (e) and (f) will introduce a new requirement for responsible persons for types 1-4 metering installations to ensure that metering data, in the form it was collected and any adjustments or substitutions, are stored separately for a period of 7 years."
>
> "Responsible persons for types 1-4 metering installations are not currently required to store metering data under the Rules.
>
> "With reference to the existing Rule 7.9.2(a), NEMMCO is responsible for the remote acquisition of the metering data and for the storing of this data as settlements ready data in the metering database…
>
> "….Metering Data Agents for type 1-4 metering installations are engaged by the Financially Responsible Market Participant and are also deeded as agents for NEMMCO. Consequently, there is no commercial relationship between the Responsible Person and the Metering Data Agent. Therefore there is no natural mechanism for the Responsible Person to ensure that the Metering Data Agent's metering data storage systems will satisfy the responsible person's obligations under the draft new clause.
>
> "Hence, the responsible person will need to either enter into an additional and new commercial arrangement with the Metering Data Agent to ensure its liabilities are legally and commercially covered, or alternatively, invest in duplicate systems and processes to fulfil its obligations under this proposed Rule change. Either option results in increased costs and no net market

[135] Ergon Energy submission, (First round), p.6.

[136] SP AusNet submission, (First round), p.13.

benefit, as the Metering Data Agent already is obligated to perform the storage of metering data.

"This Rule change proposal in its current form potentially duplicates existing market processes and would therefore result in increased type 1-4 metering installations (wholesale market) responsible person ultimately consumer costs and therefore does not meet the NEM objective's efficiency and consumer cost benefit requirements.

"It is recommended that the scope of the draft clause 7.6A parts (e) and (f) be limited to types 5 to 7 metering installations to be redrafted to assign the responsibility for data storage to those parties who are actually responsible for acquiring the data directly from the metering installations for NEM settlement processes." [137]

AGL stated (second round):

"AGL requests that the references to "compliance of equipment" and "metrology related records" be clarified in terms of what information is being referred to and for which of the obligations these relate to."

"The requirement of record keeping for 20 years seems onerous and unnecessary considering that generally there is a statutory limitation on actions of 6 years."[138]

United Energy and Alinta stated (second round):

"The intent of the Rule changes in clause 7.9.1(f) – (i) is to provide clear requirements on the responsible person for keeping records for metering installation types 5-7 in the metering installation database and on NEMMCO for metering installation types 1-4 to record metering data in the metering database. These requirements are promulgated in meter provider diagrams and obligations in the Rules and Metrology Procedure and are best left as is at this stage."[139]

Energex stated (second round):

"The proposed wording in clause 7.6.4(b) states that the responsible person must retain records and documentation. However, current market practice is that a responsible person engages a metering provider to provide install and maintain metering installations. The metering provider then retains test records and relevant documentation on behalf of the responsible person."

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[137] TransGrid submission, (First round), p.1.

[138] AGL submission, (Second round), p.2.

[139] United Energy and Alinta submission (Second round), p.2.

"Energex suggests that the wording originally proposed by NEMMCO would better reflect current market practice. Energex also believes that changes to clause 7.6.4(b) would reflect the obligations in clause 7.9.1(f) and (g)."[140]

Ergon Energy supplied some drafting suggestions and stated (second round):

"Ergon Energy supports the policy that the MDA be assigned responsibility for metering data for type 1-4."

"The wording in the Rules needs to clearly delineate responsibilities between the responsible person and NEMMCO…

"Ergon Energy further notes that the responsible person should only be obligated to retain results for tests that they have conducted."[141]

CitiPower and Powercor supplied some drafting suggestions and stated (second round):

"Clause 7.9.1 does not clearly allocate responsibilities between NEMMCO and the responsible person."

"In relation to metering types 1-4 NEMMCO should be responsible for the metering data, and for types 5-6 the responsibility for metering data should fall to the responsible person. This affects clauses 7.9.1(f) and (g) which should be re-drafted to include NEMMCO."[142]

SP AusNet suggested some drafting amendments for clarification and stated (second round)

"NEMMCO (or their agent) is charged with the collection of data from the metering installation (whether from the data logger in a type 4 or the metering installation database in a type 5/6, whereas the clause as drafted implies others could have this role[143]."

NEMMCO stated (second round):

"NEMMCO agrees that the proposals for this Rule change have largely been accepted. However in view of comments received on this matter and amendments made by the Commission, NEMMCO believes further changes could be made to help clarify the obligations and responsibilities in relation to provisions 7.9.1(f), (g), (h) and (i). This essentially stems from the difference in provisions for type 1-4 metering installations and type 5-7 metering

[140] Energex submission, (Second round), p.7.

[141] Ergon Energy submission, (Second round), p.5.

[142] CitiPower and Powercor submission, (Second round), pp.5-6.

[143] SP AusNet submission, (Second round), p.12.

installations in the market. The Responsible Person performs the obligations in relation to type 5-7 metering installations. NEMMCO performs the obligations through the use of agents (MDAs) for type 1-4 metering installations."[144]

5.9.3 Commission's considerations and decision

In its draft Rule determination the Commission agreed with NEMMCO that a thorough regime of record keeping is essential for supporting the resolution of NEM disputes, and maintaining confidence in energy data. The Commission also accepted that the proposed Rule clarifies the responsibility for record retention, thus contributing to efficiencies in terms of compliance, and Market Participant confidence which result in more efficient market processes.

In its draft Rule determination the Commission considered the requirements for the retention of various test records and metering data records to be appropriate.

In relation to TransGrid's comments in the first stage of consultation, the comments relating to paragraphs (e) and (f) of clause 7.6A are similar to SP AusNet's first round comments. In its draft Rule determination the Commission considered that the collection of metering data from the type 1 to 4 metering installations is performed by the Metering Data Agents (MDAs) who are engaged by NEMMCO. The Commission considered it appropriate that the MDA be required to perform the role nominated in the proposed provision, rather than the "responsible person" as specified by NEMMCO in its proposal. The Commission noted that the MDA has full control of the "metering database" in accordance with NEMMCO's contractual arrangements.

The collection of metering data from the type 5 to 7 metering installations is performed by the Metering Data Provider, who is engaged by the responsible person. The Commission considered it appropriate that the responsible person be required to perform the role nominated in the proposed provision. The Commission considered the Metering Data Provider, on behalf of the responsible person, is required to submit the metering data to the NEMMCO system (MSATS).

In its draft Rule determination the Commission accepted that the role of collecting metering data will not always be the same person for all metering installations. The Commission included a new provision in clause 7.9.1(i) of the Draft Rule as an attempt to address this matter. Instead of referring to the responsible person, the clause refers to the person required under Chapter 7 of the Rules to collect metering data for settlements. In its draft Rule determination the Commission sought feedback from stakeholders as to whether the Commission's proposed solution is appropriate.

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[144] NEMMCO submission, (Second round), pp.6-7.

Six parties commented on the provisions in draft Rule clause 7.9.1(f) to (i).[145] Submissions indicate the differences between the metering data collection requirements for types 1-4 and types 5-7 metering installations have not been recognised in the draft Rule. Some of the parties have provided alternate drafting suggestions to clarify this clause. The Commission accepts that the clause requires clarification and has amended the clause accordingly to clarify the responsibility for data collection rests with the person who has that responsibility under Chapter 7.

AGL in the second round of consultation commented on the length of time that metrology related records are to be kept. The Commission considers the timeframes of the NEMMCO proposal (which have been developed with the assistance of industry) to be appropriate for specific technical records relating to serviceable equipment.

In relation to clause 7.6.4 Energex stated that the metering provider is engaged by the responsible person to provide, install, maintain, and retain test records and relevant information in regards to metering installations for the responsible person.

5.9.4 Differences between the proposed Rule and the Rule to be made

The Commission has located the relevant draft Rule within clause 7.6.4 as the content of the clause is related to the other matters that are also addressed in Rule 7.6. The Commission has also moved the requirements relating to the retention of metering data records to clause 7.9.1 as the requirements are relevant to the matters addressed in that clause. The Commission has amended clause 7.9.1 to accommodate the relocation of these provisions.

The Commission has made some drafting amendments to the draft Rule for clarity while retaining the policy intent of the proposed clause.

5.10 Rule Change Proposal no. 10 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – rights of access to metering data

5.10.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that the existing Rules requirements for metering data access specify the parties with either direct or remote access to metering installations, the metering database or the metering register. NEMMCO stated that industry participants identified that the current requirements leave some ambiguity as to the entitlements of persons to have direct access to the stored data versus an entitlement to receive data through a service provider or NEMMCO.

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[145] United Energy and Alinta submission, (Second round), pp.11-12; Ergon Energy submission, (Second round), p.5, NEMMCO submission, (Second round), pp.6-7, SP AusNet submission, (Second round), p12; TransGrid submission, (Second round), p.2; Citipower and Powercor submission, (Second round), pp.5-6.

NEMMCO stated that jurisdictional instruments make provision for end-use customer access to metering data, and provision for this requirement needs to be taken into account in the harmonisation activity. NEMMCO further stated that harmonising the differing requirements is in accordance with the JJR report recommendations.

The Rule change proposal, therefore, according to NEMMCO specifies entitlements to data, with further access management being supported by procedures such as MSATS and B2B Procedures and NEMMCO's meter churn guidelines. NEMMCO proposes that an end use customer requiring data will make a request through their FRMP. NEMMCO stated that in situations where electronic access to the metering installation is required by the end-use customer, the involvement of the responsible person would be considered essential (clause 7.8.2(ca)).

NEMMCO stated that the current provisions also duplicate the right of access for the "Customer", which is already covered under the category of Registered Participant. Moreover NEMMCO stated that the rights of the Registered Participant are detailed in two provisions, proposed clauses 7.7(a)(1) and (6). NEMMCO stated that the proposed changes simplify this by referring to the Registered Participant only once at clause 7.7(a)(1).

NEMMCO stated that the proposed Rule clarifies data entitlements without mandating a right to direct access to records stored within metering installations or databases. NEMMCO stated that industry participants have identified that improved clarity in relation to clause 7.7(a) will simplify compliance obligations and result in reduced compliance costs in relation to this requirement.

In addition, NEMMCO stated that current security practices strictly limit direct access to data held within the metering installation to NEMMCO, the Metering Provider and the party providing data collection services. NEMMCO stated that the current wording of clause 7.7(a) has been interpreted as an entitlement to direct access to the metering installation. NEMMCO stated that such direct access has the potential to erode market confidence in the quality of the data held within the metering installation, and consequently erode confidence in the NEM.

NEMMCO stated that the proposed amendments are necessary to support a strong security policy in relation to metering data, and hence maintain confidence in market data.

5.10.2 Views in submissions

ActewAGL stated (first round):

> "Agree with most changes. Point (a)(7) the sentence is worded incorrectly."[146]

Ergon Energy stated (first round):

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[146] ACTEW AGL submission, (First round), section 2.2.

"The information that comprises "NMI Standing Data" is broader than metering data or data associated with the metering installation. As a consequence, section 7.7(a) significantly expands the nature of the information to which the listed parties are entitled. Ergon Energy believes that the reference to "NMI Standing Data" should be removed."

"It is unclear upon what basis the Jurisdictional Regulators have been included within the list of parties entitled to receive metering data under sub-clause 7.7(a)(6). Ergon Energy believes that this sub-clause should be removed.

"A customers right to metering data should be addressed through jurisdictional instruments, rather than through sub-clause 7.7(a)(8) as inclusion in the NER creates practical and legal uncertainty regarding the manner in which a customer would be able to exercise its "right" to access.

"Ergon Energy is also concerned that, as drafted, sub clause 7.7(a)(8) implies that a customer may request its FRMP to provide data related to a metering installation of which the FRMP has a "financial interest" but for which the customer currently has no association. That is, there is a financial connection between the FRMP and the metering installation for the purposes of sub-clause 7.7(a)(8), but not the customer and the metering installation." [147]

Metering Dynamics did not support the Rule change proposal and stated (first round):

"if end-use customers want direct access to the meter, the FRMP and RP will in most cases agree, and MPB and MDP will be obliged to provide and manage a password and work around the customer's times of direct access."[148]

Metering Dynamics stated (first round) that the impact of the Rule change would be:

"End use customers requiring data request it from their FRMP, if electronic access to the meter is required RP authorisation is required."

"…changing wording from "Rights of Access" to "Entitlement" [in the title of the clause] does not change the meaning or the application of this Rule." [149]

A second issue that Metering Dynamics commented on (first round) was:

[147] Ergon Energy submission, (First round), pp.6-7.

[148] Metering Dynamics submission, (First round), p.3.

[149] Ibid.

> "If the customer, their consultants or their systems, directly access the meter and do not disconnect correctly, this will lock the MDP out preventing them from meeting their market obligations." [150]

A third issue raised by Metering Dynamics in the first round of submissions (to which they also supplied some marked up text) was:

> "Proposed wording 7.8.2 implies that the customer has a mandated right to access the metering installation. Suggested wording below provides more control to the Market Participants responsible for reading and processing the data." [151]

Metering Dynamics provide some marked up text in its submission. Metering Dynamics then stated (first round):

> "Providing a "read only" password to a new end-use customer would enable them to access the previous end-use customer's data directly from the meter, unless it was cleared at the time of transfer. Wording in the Rules should make it clear that the RP/MDP can only provide customer access to metering data for the period when the customer was legally responsible for electricity consumed at the site, or if the new customer has the consent of the previous customer." [152]

Metering Dynamics submitted in their first round submission that in their view the impact of this change would be:

> "Data synchronisation issues between customer collected data and market data, due to substitution and revisions, leading to possible data/billing disputes and wasted time. This needs to be managed by FRMP/RP not the MDP." [153]

Origin Energy stated (first round) in relation to Clause 7.7(a)(8):

> "Clarification is required as to the period for which the FRMP's customer can request data and therefore the length of time the FRMP with the financial interest in the metering installation must hold the data."
>
> "It is suggested that the same timeframes apply as detailed in clauses 7.9.1 (f) and (g)." [154]

Origin Energy stated (first round) on Clause 7.8.2(ca):

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[150] Metering Dynamics submission, (First round), p.3.

[151] Metering Dynamics submission(First round), p.3.

[152] Ibid.

[153] Ibid.

[154] Origin submission, (First round), p.2.

"What constitutes a "read only password"? "Read only Password" should be a defined term. Also where "read only" passwords are not available, direct access to the meter shall be denied to non Market Participants i.e. the FRMP's customer."

"As a general comment, Origin notes there is significant evidence that where a financial incentive exists to illegally modify (Hack) an electronic machine, such activities often occur. Origin recommends that the AER is structured to only allow direct access to electronic meters by the minimum number of parties required, and that the AER specifically excludes any form of electronic access to any parties apart from NEMMCO, their agents, and Meter Providers." [155]

Origin Energy's first round submission contained a suggested amendment and definition for "read only password".

CitiPower and Powercor stated (first round):

"In clause 7.7(a)(7) the word "is" should be replaced with "in"." [156]

TransGrid stated (first round):

"The draft new clause 7.8.2(ca) proposes to allow the Financially Responsible Market Participant to provide a 'read only' password to its customer, subject to authorisation by the Responsible Person."

"Read only" passwords for accessing metering data held in metering installations must be allocated by the Metering Provider (refer NER 7.8.2(c)) and access to this metering data is to be scheduled by the Responsible Person to ensure that congestion doesn't occur (refer to NER 7.7(c)).

"There needs to be an additional requirement for the FRMP to obtain the password for its customer from the Metering Provider, and to schedule its customer's access to the metering data in the metering installation through the responsible person, to ensure visibility of all parties directly accessing metering data from metering installations." [157]

United Energy and Alinta stated (second round):

"The Rule proposal is intended to allow listed persons to have access to metering data, NMI standing data or data from the metering register for a metering installation. In the original proposal, sub clause (1) provided access to the data as provided for in MSATS, B2B procedures and the meter churn

[155] Origin submission, (First round), pp.2-3.

[156] CitiPower and Powercor submission, First round),p.8.;

[157] TransGrid submission, First round), pp.2-3.

guidelines. This clarification of the data being provided in accordance to these procedures has been removed by the AEMC. We suggest that this drafting be re-instated as it clarifies that a Registered Participant may access the data where they are the listed financially responsible market participant (FRMP) in accordance with MSATS. In addition the B2B procedures provide some guidance on data that is able to be accessed by non FRMPs."

"The jurisdictional regulators are no longer the Metrology Coordinators and once these Rule changes are in place the first tier metering arrangements will be managed under the Rules and the national Metrology Procedure. Shortly after this Rule change takes effect the jurisdictional metrology procedures and the majority of the 1st tier metering arrangements should fall away. For Victoria, the AER is intended to be the economic regulator for the next price review and is already the enforcer of the Rules. We are unclear why the jurisdictional regulator would continue to have a need for such information. Consumer protection will continue to be managed nationally, however customer complaints regarding meter data are managed by the Ombudsman scheme and not by the jurisdictional regulator."[158]

Energex stated (second round):

- "Customer access to metering data from a metering installation raises a number of practical issues and increases the risk and liability of all parties including the customer. These issues include: Confidentially of passwords and information collected.
- Conflict arising from the difference between data directly from the metering installation versus settlements ready data. Recovery of costs where third party access has caused data corruption or access lockout requiring site visits to investigate and rectify.
- Liability issues and consequential losses where third party access has corrupted data provided to the market whether deliberately through 'hacking' or unintentionally."

"Metering Providers will be required to introduce additional operational processes with associated increased operational costs to:

[158] United Energy and Alinta submission, (Second round), p.12.

- Control password access during churn to ensure that customers do not continue to have access to metering installations that are now registering another customer's load.

- Monitor more closely the integrity of metering installations to ensure that third party access is not deliberately or unintentionally changing meter "constants" or date.

- Monitor the impact of the third party access on the ability of metering providers to satisfy NEMMCO's SLA delivery requirements.

Have these issues been considered? The Rules have no mechanism for placing responsibilities or obligations on customers covering the control of customer access to metering installation data."[159]

Ergon Energy stated (second round):

> "Ergon Energy does not support a right of access to metering data by Jurisdictional Regulators on the basis that these Regulators will no longer have responsibility for metrology and as such have no relevant interest in the data. Providing an entitlement to access to parties with no relevant interest has the potential to increase the costs of administering the data with no clear benefit to the market."[160]

NEMMCO submitted drafting amendments to clauses 7.7(a)(2), 7.7(a)(3), 7.7(a)(8), and 7.8.2(g) and also stated (second round):

> "Clause 7.7(a)(1): By removing reference to the MSATS procedures, B2B procedures and meter churn guidelines, uncertainty could be created in certain situations such as NMI Discovery, where a Registered Participant does not have a financial interest in the metering installation or in the energy measured at that particular point in time and the participant is still entitled to access some NMI standing data. Retaining reference to these procedures provides greater clarity and certainty to the access arrangements in situations as described that do not fit the general rule."

> "… On the matter of NMI standing data, NEMMCO would like to state that it agrees with the Commissions proposal to retain NMI Standing Data as part of the provision. This removes ambiguity in this area and helps ensure relevant parties will have access to the necessary information to fulfil their obligations and roles. Further details governing access to this data are outlined in the MSATS (CATS) procedures.

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[159] Energex submission, (Second round), pp.7-8.

[160] Ergon Energy submission, (Second round), p.5.

"… NEMMCO believes this to be a matter for comment by the jurisdictions."[161]

CitiPower and Powercor stated (second round):

"It is not obvious why the economic regulator would need access to this data. Any disputes arising in relation to metering data would be handled by the Ombudsman. Consider deleting 7.7(a)(6)."[162]

SP AusNet submitted suggested drafting amendments to relevant provisions.[163]

5.10.3 Commission's considerations and decision

In its draft Rule determination the Commission considered that the substance of NEMMCO's proposal in relation to the rights of access to metering data and security controls are appropriate.

Rule 7.7 – Rights of access to metering data

Ergon Energy in its first round comments proposed to remove the phrase "NMI standing data" in the clause relating to the rights of access to metering data on the basis that it broadens the scope of the information to which listed parties are entitled. NEMMCO was silent in its proposal on the need to include this additional information requirement. In its draft Rule determination the Commission noted that the proposed Rule contained provisions with respect to MSATS procedures. This provision permits subordinate documents to be prepared and published by NEMMCO. These documents contain statements relating to NMI standing data. The Rule proposal does not provide industry with a head of power to have access to NMI standing data, whereas such a head of power would clarify this right. The general attempt to clarify industry rights was explained by NEMMCO in its proposal. The Commission therefore did not adopt Ergon Energy's suggestion. The Commission has not deviated from this position in its final Rule determination.

In its draft Rule determination the Commission addressed Ergon Energy's question as to the basis for including the Jurisdictional Regulators within the list of parties entitled to receive metering data. Ergon Energy has submitted that they wish for this provision to be deleted. The Commission noted that Ergon Energy has not provided any reasons in its submission as to why it objects to Jurisdictional Regulators having access to this range of data. The Commission however also noted that NEMMCO's proposal is also silent on the need to include the Jurisdictional Regulators as a party who receives this information. The Commission also noted that section 7.5(b)[164] of the JJR Report gives NEMMCO specific instructions to consider the requirements for access to metering data. However, the JJR Report contains no specific instruction to provide data access to Jurisdictional Regulators. The Commission noted that no

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[161] NEMMCO submission, (Second round), pp.7-8.

[162] CitiPower and Powercor submission, (Second round), pp.6-7.

[163] SP AusNet submission, (Second round), p.14.

[164] Joint Jurisdictional review of the Metrology Procedures Final Report, October 2004, section 7.5(b).

other interested party made a submission on this point. The Commission therefore sought the views of interested stakeholders as to whether Jurisdictional Regulators should be provided with metering data. The Commission also sought reasons as to how interested stakeholders have arrived at their answer to the previous question.

The Commission received a number of responses to these questions in the second round of consultation. Ergon Energy reiterated that it did not support a right of access to metering data by Jurisdictional Regulators because these regulators no longer have responsibility for metrology. Ergon Energy further stated in its second round submission that Jurisdictional Regulators have no relevant interest in the data, and their entitlement has the potential to increase the costs of administering the data with no clear benefit to the market. NEMMCO stated that the inclusion of Jurisdictional Regulators is a matter for comment by the jurisdictions. CitiPower and Powercor stated that data disputes are handled by the Ombudsman and could not identify an obvious reason as to why the reference to Jurisdictional Regulators should remain. United Energy and Alinta stated that the majority of first tier metering arrangements will fall away and it is unclear why the Jurisdictional Regulator would continue to have such information.

The Commission notes the views expressed in submissions however the Commission notes that Jurisdictional Regulators are still involved in retail regulation. The Commission considers therefore that Jurisdictional Regulators may need access to metering information. Furthermore the Commission considers that Jurisdictional Regulators provide a check for unforeseen events that may occur to the power system such as major outages where they may require access to information to be able to intervene where necessary. The Commission therefore has decided not to deviate from its position in the draft Rule determination to allow Jurisdictional Regulators continued access to metering information.

Ergon Energy also submitted in the first round of consultation that they would like a customer's right to metering data addressed through jurisdictional instruments, rather than through the Rules. Ergon Energy was concerned that the inclusion of a right in the Rules would create a practical and legal uncertainty regarding the manner in which a customer would be able to exercise that right to access. The Commission noted in its draft Rule determination that the JJR Report gave NEMMCO instructions to consider access rights to data, but gave no detailed instruction in regards to consumer rights. However NEMMCO in its proposal specifically stated that "jurisdictional instruments make provision for end use customer access to metering data, and provision for this requirement needs to be taken into account in the harmonised activity". NEMMCO specifically allows for data to be available from its retailer, or remotely from the metering installation via remote electronic acquisition.

The Commission therefore considered in its draft Rule determination that to the extent this right is provided to a consumer in the Rules, there appears to be no limitation for the Rules to provide this right. In particular, it is noted that Clause 34(d) of the NEL specifically enables the Rules to impose a right on any person (other than the AER and AEMC).

Furthermore Ergon Energy in the first round of consultation was concerned that as drafted the proposed provision permitted a customer of a FRMP to obtain access to

the information from a connection point metering installation to which it had no association. The Commission acknowledged in its draft Rule determination that this is a possible interpretation and accordingly an amendment was included in the draft Rule.

Metering Dynamics in the first round of consultation did not support the ability for the end-use customer to receive the specified information by only making a request to the FRMP. Metering Dynamics stated that electronic access to its metering installation should require responsible person authorisation. Metering Dynamics further stated that end-use customers should rely on an agreement between the FRMP and the responsible person who will, in most cases, agree. Metering Dynamics stated that if the direct access does not disconnect correctly, the metering data provider (MDP) will be locked out of further access, preventing the MDP from meeting their market obligations. There was no comment on how this problem is rectified by the MDP. The Commission noted in its draft Rule determination that in essence Metering Dynamics agreed that a customer can have electronic access to a metering installation but only if it is approved by the responsible person and the MDP and they have sole discretion on whether access is provided.

The Commission noted in its draft Rule determination that the term MDP is a term that is not used elsewhere in Chapter 7. This is because the term MDP is a term used by NEMMCO to describe a category D Metering Provider, who is engaged under contract by the responsible person to perform certain duties in relation to the metering installation. Further the MDP action is only relevant to types 5, 6, and 7 metering installations. As the responsible person engages the MDP, this person is the correct person to provide permission. It is up to the responsible person to seek approval of their MDP if they so choose. The Commission noted in its draft Rule determination that the Rule change proposal expressly requires the responsible person to manage the access to ensure that congestion does not occur. The Commission envisaged that this would entail some form of dialogue with the metering provider, and hence the MDP where applicable. The Commission considered that there appears to be no regulatory benefit in co-jointly including this person in a Chapter 7 provision. The Commission has not deviated from this view in its final Rule determination.

Metering Dynamics suggested in its first round submission that the mandatory requirement on the FRMP be changed to a discretionary requirement in relation to a customer's access to the metering installation. The Commission noted in its draft Rule determination that the discretion would be in favour of the FRMP, to be able to allow customer access not the responsible person. The Commission considered that there appeared to be no rationale for giving the FRMP the discretion to withhold a password if it was authorised by the responsible person. Furthermore the Commission considered in its draft Rule determination that there appeared to be no regulatory benefit in giving the FRMP the discretion to withhold the password from a customer when the customer has specifically requested electronic access to the metering data. Accordingly the Commission did not adopt this suggestion in its draft Rule determination. The Commission has not deviated from this position in its final Rule determination.

Clause 7.8.2 – Security Controls

In clause 7.8.2, NEMMCO proposed a new paragraph (ca). The proposed provision removes any doubt that an end use customer can have access to the electronic data in a metering installation. The provision of a "read-only" password to a customer is standard industry policy for first tier customers in NSW, at least, and the Commission considered in its draft Rule determination it is entirely appropriate to include this as a harmonised provision in the Rules.

The Commission considered that the request for the end-use customer to make a request to its retailer (FRMP) to obtain a "read-only" password was appropriate. The Commission however considered that the "subject to authorisation" restriction available to the responsible person needed to be clarified. The Commission, in its draft Rule determination considered it appropriate that the person responsible for the metering installation be aware of any person who is provided with a password to the metering installation. The Commission considered that the term "authorisation" used in this regard would be appropriate. However, the Commission considered it inappropriate if the term "authorisation" permitted the responsible person to unduly or unreasonably withhold that authorisation, either for an extended period or to simply reject the request by the Market Participant. The Commission considered a reasonableness restriction should be placed on the responsible person in relation to the authorisation it is required to provide. The Commission has not deviated form this position in this final Rule determination.

Having considered that a qualifier was required, the Commission considered it apparent in its draft Rule determination that thought needed to be given as to whether a period in which the authorisation must be given was necessary to remove any opportunity to frustrate the operation of the customer's right. The Commission considered that such a period is necessary and a period of one week would appear to be reasonable for the responsible person to receive a request from the FRMP and respond to that request. The Commission considered that a period of two weeks (or 10 business days) would appear to be reasonable for the FRMP to receive a request from its customer and respond to that request. The Commission considered in its draft Rule determination that a provision to ensure that a customer's right can be exercised under normal operating conditions was good regulatory practice. The Commission has not deviated from this position in this final Rule determination.

Metering Dynamics suggested in its first round submission that the requirement of a customer to "request" the read only password be deleted. In its draft Rule determination the Commission considered that there appears to be no clear rationale for this deletion. By deleting this requirement, the trigger for supplying the password to the customer was removed, and hence is silent. In regard to customer rights and obligations, the Commission considered that it would not be good regulatory practice to leave this aspect silent and accordingly this suggestion was not adopted into the draft Rule. The Commission has not deviated from this position in this final Rule determination.

Origin Energy commented in its first round submission that the term "read only password" be a defined term. The Commission noted in its draft Rule determination that the terms "read only" and "write only" are used in their common language forms in Chapter 7. The Commission also noted that Chapter 7 had relied on these common language definitions since the start of the NEM. NEMMCO had not

proposed that these definitions be changed in their proposal. The Ergon Energy's suggestion therefore was not supported.

Origin Energy suggested in its first round submission that where "read only passwords" were not available, that direct access to a metering installation should be denied. In this regard, Origin Energy suggested that the phrase "except where read only passwords are not available, direct access to a metering installation should be denied", be added to the provision. The Commission noted in its draft Rule determination that the proposed Rule expressly provides for the situation where "read only" passwords are unavailable. In this regard, Origin Energy appeared to have raised the issue that the proposed provision should not override the current provision, which is entirely appropriate. In its draft Rule determination the Commission considered that an amendment to clarify that if there is no "read only" password for a metering installation, then no additional action is required to change the technology to enable a "read only" password to be provided.

Origin Energy suggested in its first round submission that any form of electronic access to a metering installation be excluded for all parties except NEMMCO, its agents and meter providers. The rationale for this exclusion is the inevitable evolution of the "hacker" who would seek to illegally modify meter programs to reduce measured consumption. The Commission noted in its draft Rule determination that this comment was not supported by jurisdictional practice. The Commission also noted that NEMMCO explicitly stated in its proposal that jurisdictional instruments make provision for end-use customer access to metering data. The Commission considered in its draft Rule determination that it was not good regulatory practice to remove a right from a customer for data access purely on the grounds of possible future problems with technology design over which the customer has no control and accordingly this suggestion was not supported. The Commission has not deviated from this position in this final Rule determination.

TransGrid commented in its first round submission that the provision should prescribe how the FRMP is to obtain the "read only password" in order to pass on to the customer. This suggestion is supported as it removes the risk that a FRMP or a Metering Provider, or both parties, will frustrate the intent of the provision. The Commission considered in its draft Rule determination that this would be in line with good regulatory practice and has accordingly adopted TransGrid's suggestion. The Commission has not deviated from this position in this final Rule determination.

5.10.4 Differences between the proposed Rule and the Rule to be made

The Commission has made some minor drafting amendments to the clause relating to the rights of access to metering data to clarify the provisions.

In relation to the clause relating to security controls, the Commission has made amendments to the proposed Rule ensure the arrangements in relation to access to a "read-only" password are clear. This includes ensuring the reasonable person does not unreasonably withhold authorisation to a request by a FRMP for a password for its customer. It also requires the responsible person to act within 10 days of receiving the request. The clause has also been clarified in relation to the circumstances when no password is required.

5.11 Rule Change Proposal no. 11 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – on site meter testing

5.11.1 NEMMCO proposal

In its Rule change proposal NEMMCO stated that the jurisdictional instruments provide, in relation to on-site meter testing, that the end-use customer is not required to pay for material energy flows recorded by the meter that occur as a result of a meter test, and specify when an alteration to stored energy data within a meter should occur. These requirements, according to NEMMCO, need to be harmonised and incorporated into the Rules.

NEMMCO stated that the proposed Rule change will harmonise the existing jurisdictional requirements and merge them into Rules. NEMMCO stated that the proposed wording reflects key aspects of industry best practice. NEMMCO stated where the energy data stored in a meter is not altered, and if that data is identified as misrepresenting the billable energy, a change is made to the metering database in accordance with agreed industry procedures.

NEMMCO stated that this Rule change proposal provides industry certainty and allows all Metering Providers to establish standard internal processes which will be compliant across first and second tier metering installations, and across jurisdictional boundaries. NEMMCO stated that this Rule change will also provide certainty for retailers and network providers who will know that all data substitutions will take place within the premises of MDAs and metering data providers (MDPs) and in accordance with an agreed industry procedure.

NEMMCO stated that each of the above points contributes to market certainty, and builds confidence in market processes. NEMMCO stated that standard processes based on industry best practice result in improved market efficiency. NEMMCO stated that market confidence in energy data reduces the likelihood of market disputes, and encourages all parties to resolve anomalies when they are identified. Market confidence further contributes to market efficiency and meeting NEM objectives.

5.11.2 Views in submissions

No submissions in the first round of consultation raised significant issues. SP AusNet raised an issue in relation to metering data.

United Energy and Alinta stated (second round);

> "For meter types 1-4, the responsible person is unable to ensure that the MDA or NEMMCO's metering database is updated in accordance with the requirement in 7.8.4 (b)(2) as the responsible person may have no contractual arrangement with the MDA and does not police/enforce these matters on NEMMCO or the MDA. To ensure that obligations are clear and placed on the

correct parties, we suggest drafting amendments [marked up provision is provided]."[165]

NEMMCO stated (second round);

"NEMMCO notes the point raised by SP AusNet in relation to clause 7.8.4(b) and the use of the term "metering installation database" and "metering database".

"Depending on the metering installation type, the party responsible for undertaking the substitution and maintaining the database in which metering data is adjusted will differ. If an alteration to a type 5-7 metering installation is required, this alteration would be performed by the Responsible Person in the "metering installation database", and for a type 1-4 metering installation the alteration would be performed by NEMMCO in the "metering database". NEMMCO suggests that it may be appropriate and consistent with current practice to separate clause 7.8.4(b)(2) into the different provisions to identify the parties responsible and database types based on the type of metering installation.

"Further to this, as the party responsible for engaging the Metering Provider to perform the test the Responsible Person should remain responsible for ensuring the relevant party is aware of the adjustment required."[166].

5.11.3 Commission's considerations and decision

In its draft Rule determination the Commission supported NEMMCO's policy position with respect to this Rule change proposal as it harmonises the current practice contained within jurisdictional instruments. The Commission considered that the new clauses proposed by NEMMCO provided clarity to a matter that the Rules were silent about. The Commission considered in its draft Rule determination that proposed paragraph (b) reflected accepted industry practice and is consistent with the need to align the actual electricity consumed (which may be different to the reading shown by the metering installation) to the database records. The Commission has not deviated from this position in this final Rule determination.

In relation to SP AusNet's comments in its first round submission that the term "metering installation" be replaced by a new term "metering installation database", the Commission noted that the term "metering installation database" was not defined in the Rules. Furthermore, the Commission noted that the term "metering installation database" is used by some parties to describe a particular database arrangement used by a Metering Provider (for types 5 to 7 metering installations). This term is therefore not relevant to this provision (which accommodates types 1 to 7) metering installations. The Commission therefore did not support SP AusNet's suggestion.

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[165] United Energy and Alinta submission, (Second round), pp.12-13.

[166] NEMMCO submission, (Second round), p.8.

Submissions at the second stage of consultation from United Energy and NEMMCO have provided further detail and have suggested that clause 7.8.4(b) be amended in the Rule to be made for clarification. NEMMCO have submitted in its second round submission that the responsible person is responsible for undertaking substitution and maintaining the metering installation database for type 5-7 metering installations. NEMMCO further submitted in its second round submission that the responsible party for data validation and maintaining the metering database for type 1-4 metering installations is NEMMCO. United Energy and Alinta make a similar point in its second round submission.

The Commission accepts that clause 7.8.4(b) requires amendments and has separated the responsibilities for type 1-4 and type 5-7 metering installations accordingly.

In regards to SP AusNet's comments that the word "load" be inserted to describe "energy volumes" the Commission noted in its draft Rule determination that this clause applied to the full range of metering installations and can be used for generator connection points, load connection points and interconnector connection points. The Commission considered that the introduction of this word would therefore substantially change the intent of the proposed provision, and accordingly has not incorporated SP AusNet's suggestion into its draft Rule. The Commission has not deviated from this position in this final Rule determination.

Other minor editorial amendments proposed by SP AusNet in their first round submission were supported in the draft Rule determination and were incorporated into the draft Rule. The Commission has also incorporated these into its Rule to be made.

5.11.4 Differences between the proposed Rule and the Rule to be made

The Commission has adopted the Rule change proposal subject to some minor drafting changes which in the Commission's view have not altered the intent of the proposal.

5.12 Rule Change Proposal no. 12 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – metering databases

5.12.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that the current provision in the Rules (clause 7.9.1(f)) specifies requirements for the storage of historical metering data within the metering database for types 1-4 metering installations.

NEMMCO stated that the historical metering data for Second tier types 1-4 metering installations is stored within the metering database and is specified within the Rules. NEMMCO stated though, that for second tier type 5-7 metering installations, historical metering data is stored within the metering installation database and is specified in the Metrology Procedure. NEMMCO stated that data storage

requirements for first tier type 5-7 metering installations however exist within jurisdictional instruments.

NEMMCO stated that the location of requirements for metering databases in different instruments, or at different locations within the same instrument creates opportunities for misreading of compliance requirements and a risk of participant error.

NEMMCO stated that in developing a solution to this issue, a further matter identified was the inconsistent industry usage of the terms "metering data" and "energy data". NEMMCO stated that industry discussion indicated ambiguity as to the understanding of "historical data" as used in the current provision clause 7.9.1(f). NEMMCO stated that it has addressed this ambiguity within this proposal.

NEMMCO stated that this Rule change proposal harmonises first and second tier requirements and brings the requirements together in the same area of the Rules for all metering installation types. NEMMCO stated that differences between data storage requirements are more apparent, and industry users of the Rules have all the relevant obligations at a single location. NEMMCO proposed to add a new subclause that parallels the requirements of the current clause 7.9.1 (f) for metering installations type 1-4, but reflects the differences in database names.

NEMMCO proposed to resolve the terminology matter and clarify the data to be stored within the respective databases, by:

- Replacing the reference to "historical data" in clause 7.9.1 by the defined term "metering data";
- Extending the definition of "metering data" to include "estimated energy data";
- Removing the reference to estimated energy data from the glossary term "energy data"; and
- Creating a new glossary term "substituted energy data".

NEMMCO stated that the current provision (Rules clause 7.9.1(f)) establishes requirements for storing historical data within the metering database for type 1-4 metering installations. NEMMCO stated that the proposed Rule change establishes a similar requirement for the data from type 5-7 metering installations, which promotes efficiency within service providers who deal with metering installations both types 1-4 and types 5-7 metering installations.

NEMMCO stated that the standardisation of practices contributes to the efficiency of service providers and through competitive processes, improves service and costs and it is of the view that these benefits are expected to flow to consumers through the competition between retailers.

NEMMCO stated that bringing similar requirements for types 1-4 and types 5-7 metering installations into the same clause assists industry participants to understand the differences and similarities between the requirements for different metering installation types. NEMMCO stated that this assists those industry participants in the management of compliance matters.

NEMMCO stated that amending the definition of certain terms assists in the standardisation of processes across type 1-4 and types 5-7 metering installations. NEMMCO stated that this confirms the current industry practice of using the definition of "energy data" to refer to data within a metering installation and "metering data" to refer to the data external to the metering installation. NEMMCO listed examples of "metering data" as data obtained from a metering installation, the processed data, estimated energy data or substituted energy data). NEMMCO stated that using the amended definitions clarifies the boundaries used to describe data usage within the industry, including the historical data required for storage.

NEMMCO believed that the proposed definitions for substituted energy data and estimated energy data are simplified as far as the Rules glossary are concerned, and rely on the procedures defined in the Metrology Procedure. NEMMCO stated this greatly simplifies the understanding required when using the Rules in NEMMCO's view, and leaves the detailed procedure to a separate document.

5.12.2 Views in submissions

Two submissions (first round) provided comment on the Rule change proposal. Both Ergon Energy and CitiPower and Powercor commented that the term "metering installation database" was italicised in the proposed Rule was not a defined term. Ergon Energy suggested a definition be added to the Rules for the term "metering installation database" while CitiPower and Powercor suggested that the italics be removed.[167]

In its supplementary submission NEMMCO stated (first round):

> "The "metering database" is contained within the NEMMCO systems (MSATS) and the systems of NEMMCO's service providers (MDA's) and is applied in reference to type 1-4 metering installations."
>
> "The "metering installation database" is the database contained within the metering installation for types 5-7 and is the responsibility of the responsible person. Refer NER clause 7.3.1(b)(5) and Figure 2.3 (page 18) of the AEMC Rules determination of November 2006. Although the metering installation database is defined within the Metrology Procedure NEMMCO is not proposing to replicate this definition in the Rules.
>
> "The presentation of metering installation database in this proposal (and proposed provision 7.12(ba)) should be consistent with the manner applied in the NER clause 7.3.1(b)(5)." [168]

United Energy and Alinta stated (second round):

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[167] Ergon Energy submission, (Second round), p.7; Citipower and Powercor submission, (Second round), p.7.

[168] NEMMCO supplementary submission, (First round), p.3.

"The businesses are supportive of similar requirements (where appropriate) for metering installation types 1-4 and metering installation types 5-7 being closely located with the appropriate obligations placed on the parties in accordance with roles in the NEM and reflected in the Rules, Metrology Procedure and MSATS. The businesses are not supportive of merging clauses where the obligations on the parties are made less clear, are inconsistent with industry practice and contractual arrangements or where the long standing definitions are re-interpreted. In accordance with our response above to Rule change number 9, we suggest that the term metering database not be substituted for the term metering installation database as these databases are managed by different roles in the NEM. Any moves to merge such terminology is likely to lead to confusion as it leads to the roles and obligations being mismatched."

"… The AEMC note that there are one or more unique databases which can be classified as a metering database. Yet the metering installation database and the metering database have different definitions and are managed by different NEM roles. The treatment of these two databases under the one terminology is not consistent with the Rules definition for metering database - a database of metering and settlement ready data maintained and administered by NEMMCO in accordance with Clause 7.9.

"NEMMCO states that energy data refers to data within a metering installation and metering data refers to data external to the metering installation. The AEMC appear to have supported NEMMCO's view on the metering and energy data definitions. However, amending the metering data definition to include versions of energy data seems to confuse the matter and to be inconsistent with NEMMCO's statement."[169]

United Energy and Alinta proposed amendments (second round) to the Rules definitions of "substituted energy metering data", "estimated energy metering data", "energy data", and "metering data".[170]

United Energy and Alinta further stated (second round):

"We recommend that the energy data services definition in the Rules be amended to a metering data service definition that involves the collation of energy data from the metering installation, the processing of metering data, the storage of metering data in the metering installation database and the provision of access to this data. Adopting this recommendation will also require a change from energy data services to metering data services in Rules clause 7.14.3 (a) (1) (iii)."

[169] United Energy and Alinta submission, (Second round), pp.13-15.

[170] Ibid

"Given the substantive nature of this change and the impact on underlying instruments, a more appropriate time for such a significant change could be the structural review of Chapter 7 or the introduction of other changes to facilitate a smart meter roll out. It is very important that changes such as this are done appropriately in a way that facilitates a clear understanding of chapter 7 and takes account of the developments coming, the current proposal may not have been sufficiently considered to ensure that it provides the best long term outcome."[171]

NEMMCO stated (second round):

"NEMMCO notes in the draft determination, the Commission consolidated the phrase "metering installation database" and "metering database" for the purposes of continued harmonisation."

"NEMMCO believes this difference in terminology should be maintained at this stage because of the current structure and arrangements that are in place in the NEM that are based on this understanding. Developments in the NEM over time have resulted in differing provisions for type 1-4 metering installations and type 5-7 metering installations, and these differences underpin many of the processes. This includes different obligations on relevant parties as well as the different storage location requirements of the metering data depending upon the metering type. The "metering database" is managed by NEMMCO for type 1-4 metering installations, and in the "metering installation database" is managed by the Responsible Person for type 5-7 metering installations.

"NEMMCO believes the amendments proposed to clauses 7.9.1(h) and (i) require further analysis to fully understand and appreciate the impact of this change given its importance in the market. NEMMCO therefore proposes similar provisions to the original proposal should be incorporated, differentiating between the metering base and metering installation database according to metering installation types.

"Taking into account Ergon Energy's suggestion to include a definition of metering installation database in the Rules which may help clarify the difference between metering database and metering installation database, NEMMCO suggests a definition similar to the following may be beneficial.

"Metering Installation Database: A database of metering data collected from type 5, 6 and 7 metering installations as established by the responsible person under the Metrology Procedure.

"Should the Commission choose to include a definition for "metering installation database" in the Rules, the use of the term in the following

[171] United Energy and Alinta submission, (Second round), pp.13-15.

provisions would also require italicising. Clauses 7.3.1(a)(12) and (13), 7.3.1(b)(5), 7.9.3(b) and the definition for data logger.

"NEMMCO would like to note, although it believes clause 7.9.1(i) should be deleted that the phrase "The person who is required under this Chapter 7 to collect the metering data" of the draft determination could be difficult to interpret as the person responsible for undertaking collection is the Metering Data Provider as opposed to the Responsible Person who is responsible for ensuring the data collection services are in place.

Energy Data and Metering Data

"In the original submission NEMMCO proposed to establish consistent usage of the terms "metering data" and "energy data" across the industry. NEMMCO would like to include some further clarification following additional feedback from the MRG.

"The new definition of "energy data" referred to data within the meter and "metering data" to data that has been extracted from the meter, processed data, estimated data or substituted data. Based on this understanding the subsequent use of the word "energy" in the definition of metering data (for the terms "estimated energy data" and "substituted energy data") could be misunderstood to mean that substitution or estimation of data takes place within the meter. As a result, NEMMCO would like to propose the word "energy" should be removed from the definition of "metering data" when referring to substituted data and estimated data and that the term "metering installation" be replaced with "meter".

"It has also been pointed out that to ensure the terminology is consistently applied, the definition of "energy data services" in the Rules should be updated to "metering data services", with the references to "energy data" in this definition replaced with "metering data".

"NEMMCO also notes following these changes similar changes will be required to the Metrology Procedure to align the documents.

"NEMMCO proposed amendments to the Rules definitions of "metering data", "substituted energy data", "estimated energy data" and "energy metering data services"."[172]

CitiPower and Powercor stated (second round):

"The proposed definition of "metering data" does not clearly include the measured electrical units read from registers in the meter, otherwise defined as "energy data". However, it could be inferred that "energy data" is a subset

[172] NEMMCO submission, (Second round), pp.9-11.

of "metering data" because it emanates from the meter which is part of the "metering installation". It should be made clear whether "energy data" is included within the definition of "metering data" or not. If it is not to be included then revision should be considered for clause 7.9.1 to ensure that energy data is collected and stored for the prescribed period, currently these provisions only apply to "metering data".

"The proposed definition of substituted energy data refers to metering data substituted in accordance with the Metrology Procedure. This is counter intuitive and it would be more appropriate for the definition to be for "substituted metering data" since it refers to metering data.

"Similarly the proposed definition for "estimated energy data" would be more intuitive if it referred to estimated metering data."[173]

Sp AusNet stated (second round):

"SP AusNet's view is that terminology to:

- provide differentiation with respect to data as it moves thru the end to end data process, or
- differentiate the databases through which it moves,

is a tool to aid drafting and understanding. The differentiation can be provided at any point in the end to end process, however the key requirements with respect to terminology is, that once the point of differentiation is decided it must be used consistently."

"At the MRG industry and NEMMCO debated the point of differentiation between energy data, metering data, and settlement ready data. It was agreed that:

energy data – is data in the meter

metering data – is data ex the meter up to the point that NEMMCO validates it suitable for settlements, when it becomes settlement ready data.

"The Metrology Procedure has now been re-drafted on this basis.

"There was less finality with respect to debate re the terminology applied to databases. SP AusNet's view is that the concept of a metering installation database as distinct from the metering database is a useful one which should be continued. Note that the term currently uses the common, broad sense of database which is part of the metering installation rather than a specific Rules definition.

[173] CitiPower and Powercor submission, (Second round), p.7.

"However the counter view which the Commission have argued, that all databases with metering data should be defined as metering databases is also possibly viable with some changes to the Rules.

"SP AusNet consider that it is not the case unless the definition of metering database is changed because currently it is restricted to a database "maintained and administered by NEMMCO" and containing "settlements ready data"… The metering installation database established and maintained by the RP using an MDP and containing only metering data does not meet this definition.

"To use the term metering database in a broader sense, as well as the metering database definition being revised, a number of clauses in section 7.9.1 would require to be revised as they make reference to only NEMMCO having a metering database, including (b) which is about "the" metering database; and (c) which requires electronic access which is not available into the database maintained by the Responsible Person.

"Conversely however, some aspects of 7.9.1 do not support the alternate approach of the using the term metering installation database including (d): as NEMMCO metering database will NOT include "original energy readings" as for types 5 and 6 meters this will be in the metering installation database.

"Note: the term "original energy readings" is not consistent with the data terminology adopted and the equivalent new term would be "metering data as extracted from the meter but before any changes due to scaling, validation or substitution.

"SP AusNet have not attempted to draft the specific clause changes but having opened the issue of the database definition and terminologies, it is appropriate for the Commission to attempt to rationalise the terminology in all clauses.

"SP AusNet make the comments below against the clauses revised or added by the Commission in the current Determination [marked-up provision provided].

"In regard to clause 7.9.1(h): Based on the above SP AusNet view of the retention of the concept of a *metering installation* database, we consider that the two clauses as drafted by NEMMCO/industry should be reinstated as 7.9.1 (h) and (i) with minor correction of terminology in (i)."[174]

5.12.3 Commission's considerations and decision

In its draft Rule determination the Commission supported NEMMCO's policy position in relation to this Rule change proposal.

In regards to Ergon Energy's and CitiPower and Powercor's comments in the first round of consultation in relation to the phrase "metering installation database", the

[174] SP AusNet submission (Second round), pp.14-18.

Commission noted that this was not a defined term. The Commission also noted in its draft Rule determination that use of the term "database" as a common term does not provide NEMMCO or interested persons with adequate certainty over the quality of the storage and data access arrangements. The Commission noted however that the phrase "metering database" can be used for all types of metering installations. The Commission noted in its draft Rule determination that the Rules provide NEMMCO and industry with the scope to identify one or more unique databases which can be classified as a "metering database" and hence be bound by the quality and access arrangements already contained in Chapter 7 of the Rules.

The Commission noted in its draft Rule determination that if the defined term "metering database" is substituted for the phrase "metering installation database" proposed clause 7.9.1(f) and (g) may be consolidated. The Commission accordingly incorporated this amendment into its draft Rule and has upheld this view in its Rule to be made. The Commission considered such an amendment to promote the continued harmonisation of NEM metrology requirements thereby improving the overall efficiency of metering.

In its draft Rule determination the Commission supported NEMMCO's policy intent in relation to the amendments to the terms for "energy data", "metering data", "estimated energy data" and "substituted energy data" as they bring the definitions in the Rules in accordance with the definitions on the Metrology Procedure. The Commission considers that this standardises and simplifies these definitions.

The Commission notes that this drafting has led to extensive comment in the second round of consultation. The Commission consolidated the databases in the draft Rule determination and draft Rule as metrology is currently structured around a single "metering database" with NEMMCO as the sole party responsible for the integrity of the data in that database for the purpose of settlements.

The Commission notes that for types 1-4 metering installations, NEMMCO has adopted a distributed metering database architecture and a contractual framework whereby the database of the MDAs is nominated as forming an integral part of NEMMCO's "metering database".

The Commission notes that for types 5-7 metering installations NEMMCO has adopted a slightly different database structure, where the NEMMCO database is known as "MSATS" and the "metering installation database" is required to perform to certain standards established under contractual agreement between the parties.

The Commission considers that the metering installation database is a device that is part of the metering installation. For types 5 and 6 metering installations, their function is to store the energy data once it has been collected, to enable integrity processing, and to interface the metering installation with NEMMCO's data Collection System at the "telecommunications boundary".

For type 7 metering installations, its function is to contain the asset records and algorithms needed to form energy data for all non-metered connection points, and to interface the energy data calculations with NEMMCO's Data Collection System at the telecommunications boundary".

Submissions from NEMMCO, United Energy and Alinta, and SP AusNet have proposed complex amendments (which in some cases have been acknowledged in the respective submissions). The Commission considers that at this stage of the Rule change process without sufficient consultation that these submissions are sufficiently complex and have implications throughout the Rules to be regarded as out of scope. The Commission however considers that such an approach may be submitted in a subsequent package of metrology reforms to be considered with due industry consultation.

The Commission notes that the submission provided by TransGrid to section 5.9 of the draft Rule determination proposed a change that was in accordance with the harmonisation principle of this Rule proposal. In this suggestion the consolidation of the databases has been preserved and the need to specifically reference the differences in types of metering installations has been eliminated. The suggestion also has the effect of clarifying the responsibilities of the responsible person and NEMMCO and retaining a consolidated provision.

The Commission notes that CitiPower and Powercor made comment on the nature of the definition of "energy data" and "metering data". CitiPower and Powercor identified that "energy data" is a subset of "metering data". This relationship was introduced into the Code in 2002 at the commencement of FRC, and has generally been understood and applied by industry since that time. The Commission notes that CitiPower and Powercor also commented on the proposed definition of "substituted energy data" and suggested that this be varied to "substituted metering data" on the basis that "metering data" is a more intuitive term. A similar suggestion is made for "estimated metering data".

The Commission notes that the CitiPower and Powercor comments fit within the broader set of comments and definitional changes suggested by other parties. The Commission also notes that the CitiPower and Powercor suggestions appear to have identified an ambiguous interpretation of energy data and metering data. Can energy data be defined in terms of metering data when energy data is a subset of metering data?

The Commission considers that given that CitiPower and Powercor have pointed out the ambiguous nature of the proposed definition and that NEMMCO and others have suggested further fundamental changes to those definitions, the Commission considers it prudent for these definitions to not be adopted. The Commission has made the requisite amendments to the Rule to be made to give effect to these positions as stated in this final Rule determination.

5.12.4 Difference between the proposed Rule and the Rule to be made

In addition to the amendments to the proposed Rule that have been adopted for the draft Rule mentioned above, the following changes have been made:

- The Commission has decided to pursue the amendments that have been made to the definitions to substituted energy data, estimated energy data, energy data and metering data.

- In response to submissions about the different persons responsible for data collection, the Commission has amended clause 7.9.1 to ensure the relevant person responsible for collecting the metering data, must ensure the relevant data is stored separately and retained for seven years.

5.13 Rule Change Proposal no. 13 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – metering installation malfunctions

5.13.1 NEMMCO proposal

NEMMCO stated that the proposed Rule and the NEM Metrology Procedure currently require a 2 day timeframe for the responsible person to arrange for the rectification of a metering installation malfunction. NEMMCO stated however that the timeframes stated within jurisdictional instruments may vary up to 10 days for the repair of a first tier metering installation.

NEMMCO proposed that this Rule change proposal establish a harmonised approach to metering installation malfunctions across the NEM as follows:

- Rectification or notification to NEMMCO within 2 days is required for a connection point with a metering installation type 1,2 or 3; and

- Rectification or notification to NEMMCO within 10 days is required for a connection point with a metering installation type other than type 1, 2 or 3.

NEMMCO stated that the proposed Rule change will provide a consistent approach across the NEM for metering installation malfunctions and clarifies the response time obligations. NEMMCO stated that other advantages of the Rule change proposal are that it aids compliance and market confidence, and results in more efficient market processes.

NEMMCO stated that the proposed approach takes into account the energy volume at the connection point and establishes shorter response times for larger energy volumes.

NEMMCO stated that the harmonisation of diverse jurisdictional requirements will lead to more efficient and consistent business processes across the NEM that will ultimately flow through to achievable end-use customer benefits. NEMMCO stated that a proposed amendment to the clause heading better reflects the content of the clause.

5.13.2 Views in submissions

United Energy and Alinta, ETSA Utilities, and CitiPower and Powercor all stated (second round)[175] that the phrase "ought reasonably to have been detected" be deleted from clauses 7.11.2(a) and (b). The reasons cited by the parties is that the phrase in the context of metering installation malfunctions is confusing, and introduces subjectivity.

NEMMCO stated (second round) that it supports the Commission's draft Rule determination for this part of the Rule change proposal.[176]

SP AusNet proposed (second round) drafting amendments to clause 7.11.2. [177]

5.13.3 Commission's considerations and decision

In its draft Rule determination the Commission considered the changes outlined in this Rule change proposal to be valid. The Commission noted that these changes were foreshadowed in the 2006 changes to Chapter 7 and appear to be consistent with the views expressed at that time. The Commission also considered the changes to be reasonable and consistent with industry practice. The Commission upholds this position in this final Rule determination.

Submissions in the second round of consultation have raised the issue that parties[178] do not accept that a responsibility can be placed on a party prior to the time that the party becomes aware of the problem. In this situation the parties refer to the phrase "ought reasonably to have been detected." They state that remedial action cannot begin until a malfunction has actually been detected. The parties[179] therefore stated that the phrase "ought reasonably to have been detected" be deleted.

The Commission considers that the provision protects against the risk that a party becomes aware of a malfunction but that no action is taken on that malfunction for an unreasonable period of time. The Commission considers that the phrase acts to prompt each party who has accepted responsibility for the metering installation to record how they would reasonably argue that they have asset management strategies in place and that any malfunction they were not aware of could be classed as unreasonable.

The Commission therefore considers that the phrase is good regulatory policy in that it prompts parties who are assigned responsibility to introduce conscious and robust compliance arrangements. The Commission has therefore not supported the deletion of the phrase in the Rule to be made.

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[175] United Energy and Alinta submission, (Second round), p.15; ETSA Utilities submission (Second round), p.2; CitiPower and Powercor submission, (Second round), p.7.

[176] NEMMCO submission, (Second round), p.11.

[177] SP AusNet submission, (Second round), p.13.

[178] United Energy and Alinta, (Second round), p.15; ETSA Utilities, (Second round), p.2; Citipower and Powercor, (Second round), p.7.

[179] Ibid

5.13.4 Differences between the proposed Rule and the Rule to be made

The Rule to be made contains some drafting differences from the proposed Rule to improve the clarity of the relevant provisions. The policy intent of the proposed Rule has, however, been preserved in the Rule to be made.

5.14 Rule Change Proposal no. 14 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – security seals

5.14.1 NEMMCO proposal

NEMMCO, in its Rule change proposal, stated that jurisdictional instruments currently contain diverse approaches to the sealing of metering equipment and situations where a security seal has been broken.

NEMMCO stated that the current NEM approach to this matter is relatively light handed with current jurisdictional requirements used to address the deficiency. NEMMCO proposed stronger, harmonised NEM obligations to replace the diverse jurisdictional requirements.

NEMMCO stated that this Rule change proposal proposes the adoption of an industry "best practice" approach for the sealing of metering equipment in the NEM, which has been developed through the harmonisation of current jurisdictional requirements.

NEMMCO stated that the proposed arrangements provide a comprehensive framework for the application of security seals to metering installations, replacement of damaged seals, and cost recovery for the replacement of security seals. NEMMCO stated that the arrangements also provide clarity in relation to participant obligations for security seals across the NEM.

NEMMCO stated that a consistent NEM-wide approach to the application and replacement of security seals assists participants to meet their compliance obligations irrespective of the jurisdictions in which the metering installation exists.

NEMMCO stated that the certainty created allows participants to establish common work practices across first and second tier metering installations, and facilitates transfer of consumer loads between first tier and second tier without the need for metering installation changes. NEMMCO stated that this contributes to NEM efficiency and the NEM objective[180].

5.14.2 Views in submissions

Ergon Energy stated (first round):

[180] At the time of this Rule change proposal was submitted the NEO was known as the NEM objective.

"It is suggested that "discovers" in clause 7.11.2(ad) may lead to ambiguity and that this should be replaced with "becomes aware".

"As currently drafted, clause 7.11.2(ad) would require the meter reader to replace a broken seal when visiting a premises for the purposes of a meter reading – i.e. "first occasion the metering equipment is visited to take a reading…". This is inappropriate as, for example, the MPB may be required to investigate and remove the cover. It is suggested that the timeframe for replacing the broken seal be simply left as "within 100 days of receiving notification that a seal has been broken.

"The intent of clause 7.11.2(af) should be clarified. Ergon Energy has assumed that this is intended to provide that a meter test is required prior to the reinstatement of the seals or the replacement of the metering installation equipment, in circumstances where the seal is broken (i.e. main cover seals that control the metering accuracy calibration) and it is suspected that the meter may no longer comply with accuracy requirements.

"The reference to "relevant minimum standard" should be amended to "relevant standard"." [181]

Origin Energy stated (first round):

"[In relation to clause 7.11.2(ac)] it is unlikely that the FRMP will discover that a seal has been broken or interfered with." [182]

CitiPower and Powercor stated (first round):

"[In relation to clause 7.11.2 (ac)] the term "business day"' is defined and should be italicised."

"[In relation to clause 7.11.2 (ae)] the reference to relevant Registered Participant in subclause 1 is ambiguous because the term Registered Participant covers both the Market Participant and the DNSP. The reference to "Registered Participant" in subclause (1) should be changed to "Market Participant".[183]

SP AusNet stated (first round):

"[In relation to clause 7.11.2 (ac)] the most likely party to detect a broken seal is a Metering Provider during a routine or special read, and the industry practice would be for the Metering Provider to record that detail, assess for signs of tampering, and repair the seal. This existing practice provides an

[181] Ergon Energy submission, (First round), p.7.

[182] Origin submission, (First round), p.3.

[183] CitiPower and Powercor submission, (First round), p.10.

effective and efficient arrangement whilst maintaining a high level of control and scrutiny of possible metering installation tamper situations. The need to report this to the Responsible Person where tamper is not suspected would appear to add complication and costs without improving the security of installations. The proposed wording does not reflect this practical process."

"[In relation to paragraph (ad)] the obligation on the Responsible Person should be to ensure actions generally not to carry out the actions." [184]

TransGrid stated (first round):

"The draft new clause 7.11.2(ae) allocates the responsibility for meeting the costs for replacing broken seals to the Registered Participant or the responsible person only. There are situations where the Metering Provider may have broken seals for maintenance or other purposes and failed to replace the seals following completion of the work. In some cases, the Metering Provider may have been engaged by the Financially Responsible Market Participant and may not therefore have a commercial relationship with the Responsible Person. Hence, clause 7.11.2(ae) should include another option inserted before part (3) as follows:

(2a) by the Metering Provider if the seal was broken by the Metering Provider. " [185]

United Energy and Alinta stated (first round):

"Clause 7.11.2 (ae) refers to the cost of replacing a seal to be borne by the Registered Participant if the seal was broken by its customer. The reference to Registered Participant covers both a Market Participant and a DNSP. We suggest that the clause be amended to refer to a Market Participant who has the relationship with the end use customer." [186]

Ergon Energy stated (second round):

"Ergon Energy considers that new clause 7.8.1(f) should be clarified to explicitly provide that a meter test is required prior to the reinstatement of the seals if it is suspected that the metering installation may no longer comply with accuracy requirements. The current drafting leaves open an interpretation that the metering installation should be resealed immediately even in the event that a meter test will be required."[187]

NEMMCO stated (second round):

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[184] SP AusNet submission, (First round), pp.14-15.

[185] Transgrid submission, (First round), p.2.

[186] United Energy and Alinta submission, (First round), p.3.

[187] Ergon Energy submission, (Second round), p.6.

"In response to the Commission's request for further clarification in relation to clause 7.8.1(f), NEMMCO believes the current proposed provision provides enough guidance for the Responsible Person without being overly prescriptive, to ensure the metering installation is maintained to meet the relevant requirements. It should be the case in general that if it appears the metering installation no longer meets the relevant metering requirements as a result of any broken seals or some other form of unauthorised access, that the meter should be tested to ensure compliance."

"On the matter of whether the phrase in provision 7.8.1(f) should be "relevant minimum standard" or "relevant standard", NEMMCO has no objection to the use of the phrase "relevant standard". NEMMCO had no specific reason for choosing one term over the other."[188]

CitiPower and Powercor stated (second round):

"Clause 7.8.1(f) seems to be sufficiently clear."[189]

SP AusNet stated (second round):

"SP AusNet have accepted the draft Rule, but have also requested that the wording of their first round submission be reconsidered to reflect the process adopted in practice."[190]

5.14.3 Commission's consideration and decision

In its draft Rule determination the Commission supported NEMMCO's policy objectives in relation to this Rule change proposal. These provisions cover the security of the metering installation and are appropriate. The Commission, however, considered the proposed provisions would be better located in clause 7.8.1 which provides for the security of metering equipment. The Commission remains of this view in this final Rule determination.

In relation to Ergon Energy's comments in its first round submission relating to the resealing of metering installations, the Commission considered that at the time this provision is triggered, the responsible person has an opportunity to instruct its Metering Provider to investigate the circumstance surrounding the broken seal. The status of the metering installation seal does not prevent the attendance of the Metering Provider (MPB) at the metering installation site, or investigation of the metering installation's condition. The Commission considered in its draft Rule determination that the early sealing of the metering installation should not be prevented by a requirement to investigate the status of the metering installation. The Commission considered that it is up to the responsible person to manage the meter reading and meter investigation resources such that the metering installation should

[188] NEMMCO submission, (Second round), pp.11-12.

[189] CitiPower and Powercor submission, (Second round), p.8.

[190] SP AusNet submission, (Second round), p.19.

be resealed as soon as possible with the action recorded and reported for later analysis. Accordingly, the meter reader action to reseal the metering installation and the Metering Provider action to investigate the situation can be independent events. Alternatively they could be the same event if the Metering Provider was the first person to "discover" the broken seal.

In its draft Rule determination the Commission considered that NEMMCO's proposed provisions act to reduce the risk of any interference with the meter and to re-establish control of this device at the earliest possible time, which is considered best practice. Accordingly, the Commission has not adopted Ergon Energy's suggestion. The Commission remains of this view in this final Rule determination.

In relation to Ergon Energy's comments regarding clarification of the intent of proposed clause 7.11.2(af) made in the first round of consultation, Ergon Energy stated that:

> "it is assumed that this provision is intended to require a metering installation test prior to the re-instatement of the seals or the replacement of the meter equipment, in circumstances where the seal is broken (ie. Main cover seals that control the metering installation accuracy calibration) and it is suspected that the metering installation may no longer comply with accuracy requirements."

In the draft Rule determination Commission sought comments from interested stakeholders as to whether it is necessary to clarify this clause and sought suggestions on how such a clarification would be of assistance in its draft Rule determination.

Ergon Energy reiterated its first round comment in its submission in the second round of consultation stating it would like to have an explicit requirement specified in the Rules to conduct a metering installation test if the seals are broken.

The Commission notes that the clause provision provides for two opportunities to reseal the metering installation in this situation. Firstly, the person who finds the broken seal has the opportunity to reseal the metering installation. The Commission considers that this opportunity should be seen as a first action. The person who finds the broken seal must record the event and inform the appropriate authorised person that the event has occurred and the observations surrounding the broken seal.

The second opportunity is to program a test of the metering installation and reseal the metering installation after that test. In both opportunities, the action of sealing the meter imposes a non material cost on the party. The main determining factors in sealing the metering installation is that the party who finds the broken seal is accredited to seal metering installations and has the meter sealing equipment readily available.

The Commission notes that the responsible person must decide and act on resealing the metering installation within 100 days of the notification. Clause 7.8.1(f) acts to make the responsible person conduct a test of the metering equipment if there is a doubt that the equipment no longer meets the relevant minimum standard.

The Commission notes that NEMMCO support this view by commenting that clause 7.8.1(f) of the draft Rule "provides enough guidance for the responsible person without being overly prescriptive." The Commission has therefore not adopted the Ergon Energy suggestion in the Rule to be made.

In relation to Ergon Energy's comments that "relevant minimum standard" be replaced by "relevant standard", neither Ergon Energy nor NEMMCO have provided detail as to why they have chosen their respective terms.

In its second round submission NEMMCO stated that it is indifferent to the phrase "relevant minimum standard" and "relevant standard". The Commission has not amended the draft Rule in relation to this matter.

CitiPower and Powercor, SP AusNet and United Energy and Alinta in their first round submissions commented that in relation to proposed clause 7.11.2(ae) the term "Registered Participant" be changed to read "Market Participant". Registered Participant refers to both a Market Participant and a Network Service Provider. Whilst a Network Service Provider can be a Transmission Network Service Provider or a Distribution Network Service Provider, the clause appears to be written so as to establish a relationship between the customer and the FRMP. Accordingly to remove any ambiguity the term "Registered Participant" could be replaced by the term "Financially Responsible Market Participant". The Commission made this amendment to its draft Rule and has retained the amendment in its Rule to be made.

In relation to clause 7.11.2(ac), SP AusNet's suggestion in the first round of consultation was for the Metering Provider to be given a specific obligation to replace the seal in situations where the "discovery" occurs without the knowledge of the responsible person. SP AusNet explained that the most likely person to "discover" a broken seal is a Metering Provider during a routine or special read. This reference to Metering Provider is similar to the reference to meter reader used by Ergon Energy. In both instances, the meter reading is done under the control of the responsible person. The question arises as to whether good industry practice should be allowed to prevail in the restoration of the meter seal, or whether this practice should be regulated.

The Commission considered in its draft Rule determination that given that the Metering Provider is accredited by NEMMCO and under the direct contractual control of the responsible person, it appeared that circumstances existed where adequate quality control of these actions is available without the need for further regulation. This view was reinforced by the fact that the proposed provision is stated to represent best practice and as such does not recommend that additional obligations be placed on the Metering Provider within the Rules. No other submission sought to treat the Metering Provider in this way. Accordingly the suggestion was not supported in the draft Rule determination. The Commission has not deviated from this position in its final Rule determination.

SP AusNet also suggested a further change to clause 7.11.2 (ac) in the first stage of consultation. The provision as it stood mandated that the responsible person must replace a broken seal on the first occasion the metering equipment is visited for a meter reading. However, in light of the SP AusNet suggestion, this requirement appeared to be too narrow. The Commission considered that it would be better if the

provision accommodated the situation where a meter seal had been replaced by an appropriate person, and this proposed provision acts as a last resort, which the Commission considered was the intent of the SP AusNet suggestion. The Commission therefore incorporated the intent of the SP AusNet provision into its draft Rule. The Commission upholds this position in this final Rule determination.

In the first stage of consultation SP AusNet suggested that the last part of clause 7.11.2(af) be varied to provide the responsible person with reasonable flexibility in who performs the metering installation test. In its draft Rule determination the Commission considered that in practice it must be the Metering Provider who conducts the test, not the responsible person. However the Commission considered that the responsible person has the obligation to ensure that the test is undertaken. In making this change, the responsible person moves from being the party to conduct the test to the party who controls the requirement that the test must be conducted. The Commission considered in its draft Rule determination that this suggestion better reflected the intention of the provision and the responsibilities placed on the Metering Provider by clause 7.4.1 and hence current practice. This suggestion is supported in this final Rule determination.

TransGrid commented in the first stage of consultation that in relation to clause 7.11.2 (ae) that an additional situation could arise where a Metering Provider may be the cause of the broken seal but the responsible person has no commercial relationship with this party. In this case TransGrid stated that subparagraph (3) is not adequate. The Commission agreed in its draft Rule determination that this additional situation could arise and amendments should be made to ensure that it is provided for within the clause. The Commission therefore included the Metering Provider in the category of persons required to bear the costs of replacing the seal in its draft Rule determination. The Commission upholds this position in this final Rule determination.

United Energy and Alinta commented, in the first stage of consultation that in relation to Clause 7.11.2 (ae), that subparagraph (1) be changed from "Registered Participant". The Commission considered this to be an appropriate amendment in its draft Rule determination. The Commission upholds this position in this final Rule determination.

5.14.4 Differences between the proposed Rule and the Rule to be made

The Commission has largely adopted NEMMCO's proposed amendments subject to the modifications discussed above. The Commission has amended the clause relating to the requirement to replace a broken seal so that the responsible person is only required to replace the seal if the person who notified the responsible person has not replaced the seal.

The Commission has also included a requirement that if the Metering Provider broke the seal, the costs of replacing the seal are to be borne by the Metering Provider.

5.15 Rule Change Proposal no. 15 - Consequential change to harmonise jurisdictional metrology requirements with existing NEM requirements – type 7 metering installations

5.15.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that the Rules require that a type 7 metering installation only be allowed for a "market load". NEMMCO stated that the Rules and jurisdictional instruments do not currently clarify the criteria to be used when determining whether an un-metered supply may be categorised as a type 7 metering installation, but rather use examples.

NEMMCO proposed in this Rule change proposal:

- That the first reference to "market loads" in item 5 of Schedule S7.2.3 be made a reference to "loads at connection points" in order to permit type 7 metering installations to be applied to first tier unmetered supplies; and

- That the coverage and the listed examples be replaced with principles to be applied when determining if a load qualifies as a type 7 metering installation.

NEMMCO proposed to incorporate in the Rules the principles applied in the Metrology Procedure and jurisdictional metering instrument (for the first tier) so that the Rule provides a framework for determining connection points that may be unmetered.

NEMMCO was of the view that the Rule change proposal clarifies NEMMCO's role in determining which connection points qualify as type 7 metering installations in the NEM and address the criteria under which a connection point can be type 7.

NEMMCO stated that if this Rule change proposal is adopted, the result would be that the determination of type 7 metering installations will be consistent for first and second tier loads. NEMMCO stated that this would provide greater clarity to the industry and metering service providers, and contribute to market efficiency. NEMMCO stated that the Rule change proposal would not affect existing jurisdictional arrangements.

5.15.2 Views in submissions

Ergon Energy stated (first round):

> "The removal of the reference to "market load" in Item 5 of Schedule 7.2.3 appears to expand its application to all first tier connection points, rather than those that have been declared by the jurisdiction as falling within the market arrangements."
>
> "This expanded application would appear to be inconsistent with the legal advice that Ergon Energy understands has been obtained by NEMMCO regarding the application of Chapter 7 to non-market (i.e. franchise)

connection points. This is of particular relevance in Queensland where the Electricity Act 1994 provides for the progressive application of market arrangements to unmetered loads.

"Ergon Energy therefore requests confirmation that the proposed drafting does not impact existing jurisdictional arrangements for franchise loads." [191]

Origin Energy stated (first round):

"As the Local Retailer (LR) carries the financial risk associated with the inaccuracy of unmetered supplies, it is suggested that the LR ratify any NEMMCO decision that determines a particular supply does not require metering."

"As a general comment, advances in metering technologies can now allow devices to be metered where they were once considered unable to be metered." [192]

SP AusNet has provided marked up text with each of its comments, and specifically stated (first round):

"We understand and support that the role of NEMMCO is to determine where a "category" of metering installation in general meets the conditions to be considered an unmetered load and so classify that category as type 7."

"However we understand that NEMMCO will not ascertain whether every installation within the category meets the conditions. Hence although because of typical magnitude and/or connection arrangements NEMMCO might classify a category of installation as type 7, the Responsible Person (ie the LNSP) may determine that a specific installation in that category does not meet the conditions. Eg the load may be larger than typical and/or it may be located such that providing a metering installation is lower than average cost.

"The conditions for classification by NEMMCO should not necessarily be both the magnitude of the load; and the connection arrangements. An installation's connection arrangements might be such that the installation of a metering installation is easy, however the load is such that annual consumption is so small that the metering installation and reading costs still cannot be justified.

"There are a number of aspects of this "process" for UMS which NEMMCO and the industry agree are less than satisfactorily detailed and defined. There is likely to be a NEMMCO/industry effort to clarify and formalise this process. This may also lead to a need for further Rules changes in this area. Two examples of aspects which might require Rules documentation are:

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[191] Ergon Energy submission, (First round), p.8.

[192] Origin submission, (First round), p.4.

- The need for the decision of NEMMCO with respect to classifying an installation as type 7 (or not classify an installation as type 7) or to remove an existing classification under S7.3.2.1 Item 5 (d) [new numbering] to be subject to obligatory consultation

- The relationship of this NEMMCO process to that currently required in the Metrology Procedure for the Minister to declare an unmetered supply as contestable (ie a market load)." [193]

United Energy and Alinta stated (first round):

> "What is unclear from the wording as proposed is whether NEMMCO will be required to vet and approve individual new/variations of type 7 installations or are they going to set the principals as set out in (a) and (b) of Item 5 of Schedule 7.2.3 and leave it to the market to manage the installations within those principles."
>
> "The businesses understand that NEMMCO is currently in the process of making a submission to the MRG on these matters." [194]

NEMMCO stated in its supplementary submission (first round):

> "The purpose of the proposed Rules changes in relation to type 7 metering is to clarify NEMMCO's role in determining type 7 metering installations and which connection points qualify as type 7."
>
> "Sub clauses (a) and (b) of the proposal set out the principles for those connection points which may be classified as type 7.
>
> "In particular clause (b) outlines connection points in which it would not be cost effective to meter due to the nature of the installation. This situation arises when the volume of energy flowing through the connection point is small (for example, snow gauges or traffic counters) compared to the overall cost associated with installing and maintaining a metering installation.
>
> "Difficult connection arrangements can exist due to actual physical or geographical difficulties in connecting a meter for reasons such as safety, prevention of vandalism or impracticalities such as installing and reading a meter at every street light." [195]

United Energy and Alinta proposed (second round) some drafting amendments.[196]

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[193] SP AusNet submission, (First round), pp.17-19.

[194] United Energy and Alinta submission, (First round), p.3.

[195] NEMMCO Supplementary Submission, First round), pp.3-4.

[196] United Energy and Alinta submission, (Second round), p.16.

Energex stated (second round):

> "The proposed Rule change assumes that unmetered type 7 metering installations are market loads. This is not the case for the majority of unmetered loads. NEMMCO was proposing that where they happen to be market loads, the Metrology Procedure must include appropriate arrangements. Energex supports the original NEMMCO proposal."[197]

Ergon Energy stated (second round):

> "Ergon Energy supports the changes made by the AEMC to clarify that the provision applies only to market loads."[198]

NEMMCO, in addition to proposing a drafting amendment, stated (second round):

> "The main purpose of this proposal was to extend the scope of the unmetered loads provisions to recognise first tier loads and provide a framework for determining an unmetered load. The key to this proposal was the removal of the term market load, as it is a defined term and relates to "a load at a connection point the electricity relating to which is purchased other than from the Local Retailer…", therefore allowing loads purchased from the Local Retailer (ie first tier loads) to be incorporated."
>
> "According to NEMMCO's understanding, the removal of the term "market load" does not introduce loads that have not been declared by the jurisdiction (franchise loads) in accordance with clause 2.3.1of the Rules.
>
> "Therefore NEMMCO recommends the removal of the reference to "market load" in the draft determination and subsequent deletion of clause S7.2.3, item 5: (b)(4)."[199]

Sp AusNet proposed further arguments in relation to their comments made in the first stage of consultation as follows:

> "The Commission rejected our use of the term "category". The concept of a category being declared a type 7 is defined in the Metrology Procedure which in Clause 14.2.2 of Part B states "the agreed market load that is published by NEMMCO will be generic in nature (eg "street lighting") ie will be a category. In our original submission what we were wanting to include was that when such a decision was made to create a "generic" type 7 load category that the right of an LNSP to exclude a particular installation from the category was protected."

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[197] Energex submission, (Second round), p.10.

[198] Ergon Energy submission, (Second round), p.6.

[199] NEMMCO submission, (Second round), p.12.

and:

"The Commission in its analysis of this proposed change, suggested that the measure for whether a load could be considered as a type 7 was "the cost of the meter and reading is more than the revenue generated from the load" and implied that, provided that this was the case, the provision should "not offer any restriction to the determination under this provision". Under our reading of the intent of Item 5, as defined by the Commission's words in the determination, sub points (i), (ii) and (iii) under (b)(3) are not required and can be removed. The fundamental decision is cost of the meter services ($ value) compared with the size ($ value) of the load. If any detail of the basis of the costs comparison is included (and SP AusNet suggest that it is probably not required), it should probably be to set out the factors as defined by the Commission."[200]

5.15.3 Commission's considerations and decision

In the draft Rule determination the Commission supported the policy intent of the Rule change proposal. In its draft Rule determination the Commission stated there was one matter of detail arising from analysis of the Rule change proposal that the Commission believed required further consideration.

The Rule proposal provided a statement of the principles to be used in determining whether a load can be classified as type 7. The Commission also considered that the proposed change also replaced the examples from which the principle was previously implied. The Commission considered that the proposed change was evidence of an evolutionary step taken towards good regulatory practice on metering in that examples lead to principles that then provided light handed regulation.

The Commission considered that the changes raised a policy issue. The type 7 metering installation is justified on two characteristics, firstly, the difficulty in installing meters into existing infrastructure, such as certain types of lighting, public facilities and telephone services; and secondly, the limited revenue from the load because it is miniscule. Clause S7.2.3 (a) of the proposed provision adequately deals with the first characteristic above. Clause S7.2.3 (b) of the proposed provision is potentially different, in that it allows the test to be based on the cost effectiveness created by the load rather than on the "miniscule" characteristic of the load.

A miniscule load is likely to trigger a cost effective decision in favour of a type 7 metering installation. However a more substantive load could also trigger a decision in favour of a type 7 metering installation. As it is stated, the magnitude of the load must be taken into account, but that magnitude is not limited in any way. It would be possible to justify a cost effective outcome based on loads that are larger than miniscule. In its draft Rule determination the Commission has clarified this issue in the draft Rule to refer to "small" loads.

[200] SP AusNet submission, (Second round), pp.19-20.

Accordingly the proposed provision opened the door for increased volumes of loads to be classified for type 7 metering installations. The Commission considered that the policy intent of the provision was likely to be to eventually eliminate all type 7 metering installations as technology progresses to the point where all loads can be metered. The Commission retains this position in its final Rule determination.

Ergon Energy in its first round submission was concerned about a broader cover of the proposed provision to loads that have not yet been granted contestable status by a jurisdiction. The current method of separating contestable loads from non-contestable loads is to refer to all contestable loads (which are those that are captured by the Chapter 7 provisions) as "market loads", which is a defined term. By inference all other loads (being "non-market loads") are covered by jurisdictional arrangements, such as those that exist in Queensland for a transitionary period (the next year or so). In its draft Rule determination the Commission considered that it appeared applicable to incorporate Ergon Energy's concern into the proposed provision.

The Commission received three submissions in relation to "market loads" in the second stage of consultation[201]. NEMMCO stated in its second round submission that if a jurisdiction declares an unmetered load to be contestable (as has happened in Victoria, New South Wales, South Australia and the Australian Capital Territory) the draft Rule would not allow those loads supplied by the local retailer to be classified as type 7 metering installations. These loads would therefore not be covered by Chapter 7 of the Rules and the Metrology Procedure. NEMMCO therefore suggested that the reference to Market loads be deleted.

The Commission considers that the integrity of the unmetered load should be assured at all times so that it can readily swap from first tier to second tier status and back again as desired by market forces. On this basis the Commission considers that the coverage of unmetered loads should be expanded to first and second tier loads.

The ability for an unmetered load to swap from first tier status to second tier status is determined by jurisdictional policy. At current time, Queensland is the only jurisdiction whose policy on unmetered loads prevents their contestability. Based on this analysis the Commission considers that the draft Rule should be amended to align with the intent of the original NEMMCO proposal.

In its second round submission Energex stated that with the introduction of first tier loads into the Rules, Energex suggested that the term "market load" is too restricting because a load cannot be classified as a market load unless it is supplied by a second tier retailer. Hence Energex stated that a local retailer cannot classify any of its loads as a "market load" by definition. Energex therefore supported the NEMMCO suggestion.

Ergon Energy supported the Commission's draft Rule determination view that unmetered loads should be restricted to market loads as these loads are not contestable in Queensland (the jurisdiction that Ergon Energy operates in).

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[201] Energex submission, (Second round), p10. ; Ergon Energy submission, (Second round), p.6 ; NEMMCO submission, (Second round), p.12 .

The Commission however considered that removal of the term "market loads" would provide coverage to loads that are market loads as well as loads that are not market loads. In this way first and second tier unmetered loads in both the contestable and non contestable jurisdictions would be classified as type 7 loads and covered by Chapter 7 of the Rules and the Metrology Procedure. The Commission therefore has varied its position from the draft Rule determination in relation to this issue.

Origin Energy's suggestion in the first stage of consultation was to have NEMMCO's determination of a type 7 metering installation condition ratified by the local retailer. The suggestion allows the Local Retailer to minimise the use of the type 7 metering installations. That is, the Local Retailer would be able to manage its settlement risk associated with the calculation of an unmetered load by either overriding NEMMCO's decision to not install a metering installation or agreeing with NEMMCO if NEMMCO's decision is to install a metering installation. The Commission considers that the proposed change would act to limit the number of type 7 metering installations, and in this way is consistent with the last paragraph. The current provision contained in the Rules does not have to deal with this problem since it is not an issue for second tier loads. Whilst the suggestion appeared to be reasonable, and in a regulatory sense acts to minimise the number of type 7 metering installations, the Commission considered that it raised the question as to whether other interested parties consider that the change has merit. The Commission received no further comment on this issue at the second stage of consultation and has therefore not deviated from its position in its draft Rule determination.

SP AusNet's suggestion in the first stage of consultation to describe metering installations as "categories" does not appear to have obvious merit nor improve the reading of the provision. In particular the suggestion is based on improving the determination required to be made by NEMMCO.

SP AusNet has reiterated this suggestion in its second round submission. SP AusNet sought to provide a right for the LNSP to exclude a particular installation where a generic type 7 category is declared under the Metrology Procedure. The Commission reiterates its position in the draft Rule determination and further stated that this suggestion has partly been addressed through providing that NEMMCO must consult with the LNSP to determine a type 7 metering installation.

United Energy and Alinta in their first round submission suggested that the term "it has been determined by NEMMCO" be deleted.

In relation to United Energy and Alinta's comments, the Commission noted in its draft Rule determination that the current provision permits a Market Participant to determine if a metering installation was a type 7 by reference to the examples. NEMMCO is only required to determine if a condition is consistent with the list of examples should a doubt arise. The current provision had been accepted by the market and has had no operational problems. The proposed provision removes the examples and replaces them with principles. United Energy and Alinta's concerns were raised in regard to the application of these principles. In particular, why would NEMMCO's role in determining the conditions be retained if the principles are adequate?

The issue of the movement away from examples to principles and their application was reiterated by SP AusNet in its second round submission. The Commission considers that NEMMCO should consider establishing a transparent process to permit industry to understand how the principles would be applied and the method by which they could have a connection point assessed to permit the use of a type 7 metering installation. The Commission however does not consider it necessary to formalise this process in the Rules. The Commission has therefore not deviated from its position in its draft Rule determination in this final Rule determination.

The final issue raised by SP AusNet in its first round submission is in relation to clause S7.2.3 (b). The suggestion is to permit a choice between the conditions by joining them with an "or". The example given is the situation where a metering installation is easy to install but the load is so small that the cost of the metering installation and its regular reading cannot be justified. To assist this example, it is assumed that the load has a regular pattern and can be calculated with reasonable accuracy. When tested by the proposed provision, this example would meet the principle of clause S7.2.3 (a); and meet the principle of clause S7.2.3(b) in that the cost of the metering installation and the reading is more than the revenue generated from the load. In this regard S7.2.3(b)(3)(i) and S7.2.3(b)(3)(ii) can both be taken into account when considering the "cost effectiveness" of installing a metering installation. That is, the proposed provision does not offer any restriction to the determination available under this provision. Accordingly this suggestion was not supported in the draft Rule determination.

The issue of the movement away from examples to principle and their application was reiterated by SP AusNet in its second round submission. The Commission considers that NEMMCO should consider establishing a transparent process to permit industry to understand how the principles would be applied and the method by which they could have a connection point assessed to permit the use of a type 7 metering installation. The Commission however does not consider it necessary to formalise the transparent process in the Rules. The Commission has therefore not deviated from its position in its draft Rule determination in this final Rule determination.

5.15.4 Differences between the proposed Rule and the Rule to be made

The Commission has largely accepted NEMMCO's proposed amendments on this matter which are contained in clause S7.2.3. The Commission has made some modifications as noted above. The Commission has enhanced the criteria that must be taken into account in determining the cost effectiveness of metering the connection point. The Commission's enhancements include clarifying that the "small" magnitude of the load should be taken into account as well as the geographical and physical location of the connection point.

As noted above, in the draft Rule the Commission has also clarified that the load must be a market load. On further review, the Commission decided that the provision should not be limited to market loads and has removed its qualifier.

5.16 Rule Change Proposal no. 16 – remove duplicate requirements – data validation, substitution and estimation

5.16.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that for type 1-4 metering installations, responsibility for data validation, substitution and estimation falls to NEMMCO. NEMMCO stated that data validation, substitution and estimation is carried out by the Metering Data Agent in accordance with a metering data validation and substitution procedure established by NEMMCO under current provisions in the Rules (clause 7.9.4.).

NEMMCO stated for type 5-7 metering installations, responsibility for this activity falls to the responsible person, and is carried out by the MDP in accordance with the NEM Metrology Procedure. NEMMCO stated that although the processes are identical for type 4 and type 5 metering installations, the obligations are located in different documents.

NEMMCO stated that the split places an obligation on NEMMCO to maintain the identical data validation, substitution and estimation procedures in two places, these being:

- The procedures defined under current provisions in the Rules (Rule clause 7.9.4); and
- The NEM Metrology Procedure.

NEMMCO stated that there are risks to the market associated with not keeping these documents aligned.

NEMMCO stated that clause 7.9.4(a) of the Rules and Schedule S7.5.2(d) refer to "data validation, substitution and estimation". It stated that in addressing the substantive issue there is an opportunity to establish a consistent nomenclature and a NEM wide requirement.

NEMMCO proposed to bring the obligations for data validation, substitution and estimation together in adjacent sub-clauses within Rules clause 7.9.4. NEMMCO stated that under this Rule change proposal the obligations on NEMMCO (for type 1-4 metering installations and the responsible person (for type 5-7 metering installations) would remain unchanged.

NEMMCO stated that the procedures for data validation, substitution and estimation may be readily combined into a single document, and this is the most efficient process for ready access by service providers and Market Participants. NEMMCO proposed to bring all the data validation, substitution and estimation processes and algorithms together within a common area of the NEM Metrology Procedure.

NEMMCO stated that to facilitate this change, it proposes the amendment of clause 7.9.4 to reference the NEM Metrology Procedure rather than "…procedures developed by NEMMCO…" which would allow the existing separate NEMMCO procedure under clause 7.9.4 to be withdrawn.

NEMMCO proposed to amend the heading for clause 7.9.4 to "Data validation, substitution and estimation" along with the text within the Rule, and the reference at Schedule S7.5.2(d). NEMMCO stated that these changes are to aid clarity by adopting a consistent harmonised approach and nomenclature.

NEMMCO stated that discussions with industry groups and NEMMCO operational personnel indicated that a single reference document for service providers (whether MDAs or MDPs) is the most efficient arrangement. NEMMCO stated that this would be advantageous to both the parties providing the service and the parties with responsibility for the service. NEMMCO stated that this reflects the commonality of processes for data validation, substitution and estimation across the different metering installation types.

NEMMCO stated that for the period that two documents exist, NEMMCO must ensure the common elements remain aligned, and therefore consultation on amendments to the two procedures must be conducted in parallel, with a common final determination and effective date. In addition NEMMCO pointed out that nationally, participants are required to duplicate submissions to consultations, and NEMMCO is required to provide duplicate responses to the submissions.

NEMMCO was of the view that the proposed Rule change will provide a single efficient process for the management of data validation, substitution and estimation processes. NEMMCO stated that these more efficient processes will provide benefits to service providers, responsible persons, and retailers and reduce NEMMCO's costs. NEMMCO stated that these costs savings are all capable of translation into benefits to consumers.

NEMMCO stated that the rationalisation of these two procedures into one is in conformity with recommendation 3.2(e) of the JJR Report, to reduce duplications in procedures and obligations.

5.16.2 Views in submissions

AGL stated (first round):

> "We note …that the use of "estimation" with respect to type 1-4 metering in proposed Rule 7.9.4 can be misleading and suggest that it be removed." [202]

Ergon Energy stated (first round):

> "Ergon Energy queries whether the reference to "Metrology Procedure" in clause 7.9.4(ab) should be amended to "Metrology Procedures" – i.e. as defined in Chapter 10." [203]

Origin stated (first round):

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[202] AGL submission, First round), p.1.

[203] Ergon Energy submission, (First round), p.8.

"[With reference to clause 7.9.4(a)] it is understood that it is the accredited agents of NEMMCO that are responsible for validation and substitution of metering data."

"[With reference to clause 7.9.4(ab)] it is understood that it is the MDP as accredited by NEMMCO, who is responsible for the validation, substitution and estimation of metering data. Note also that Metrology Procedures need to be italicised in this clause." [204]

CitiPower and Powercor stated (first round):

"[In reference to clause 7.9.4(ab)] the words "Metrology Procedure" refers to a defined term and should be italicised, without capital letters."

"The reference to clause 7.11 in clause 7.14.1(c)(7) should be 7.11.1. As drafted the reference would pick up 7.11.2 which is not relevant." [205]

SP AusNet stated (first round):

"In reference to clause 7.9.4(ab), italics and caps not correctly used."

"In reference to clause 7.14.1(7), incorrect reference." [206]

United Energy and Alinta stated (first round):

"Clause 7.14.1(c)(7)(ii) requires the Metrology Procedure to include data estimation for the purposes of Rule 7.11. We suggest that the clause be redrafted to refer to Clause 7.11.1 the metering data section of Clause 7.11." [207]

United Energy and Alinta stated (second round):

"The intent of the Rule change is to allow the validation, substitution and estimation procedures to be incorporated into a single document - the national Metrology Procedure. [United Energy and Alinta] supports the rule changes proposed in clause 7.9.4."

"However, this support is limited to supporting the procedures and their use for type 4 metering for a small number of large consumers.

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[204] Origin submission, (First round), p.3.

[205] CitiPower and Powercor submission, (First round), pp.9-10.

[206] SP AusNet submission, (First round), pp.14,16.

[207] United Energy and Alinta submission, (First round), p.4.

"[United Energy and Alinta are] not supportive of the manual elements of the type 4 processes if applied to AMI for mass market customers."[208]

NEMMCO and SP AusNet both supported the Commission's draft Rule.[209]

5.16.3 Commission's considerations and decision

In its draft Rule determination the Commission supported the policy intent of the Rule change subject to minor drafting amendments. The Commission considered that in relation to proposed clause 7.9.4(ab), the assignment of responsibility to the responsible person and away from NEMMCO is consistent with current practice. Currently the responsible person undertakes all necessary validation, substitution, and estimation for types 5, 6 and 7 metering installations due to their "manual nature".

ActewAGL's comment in the first round of consultation related to the change in the heading of clause 7.9.4 where "estimation" has been added. The comment also had a bearing on paragraph (a) where an estimation action is not appropriate. If the heading was left unaltered then an opposite comment could be raised because 7.9.4(ab) requires "estimation" to be performed and this was not recognised in the heading. Accordingly the Commission did not support the suggestion in its draft Rule determination. This position has been upheld in the final Rule determination.

Origin suggested in its first round submission that in relation to clause 7.9.4(a) that the accredited agents of NEMMCO are responsible for validation and substitution of metering data. The Commission considered that Clause 7.3.5(c) permitted NEMMCO to use agents, but the responsibility was always with NEMMCO, as correctly stated in the current provision of clause 7.9.4(a). Accordingly the suggestion was not supported. The Commission has not deviated from this position in this final Rule determination.

Origin suggested in its first round submission that in relation to proposed clause 7.9.4 (ab) that the MDP is responsible for validation, substitution and estimation of metering data. In its draft Rule determination the Commission considered that the responsible person is responsible for validation, substitution and estimation of metering data, since it is this person who must engage the Metering Provider in accordance with clauses 7.2.5(a) and (b). Accordingly the suggestion was not supported in the draft Rule determination. The Commission has not deviated from this position in its final Rule determination.

CitiPower and Powercor, United Energy and Alinta and SP AusNet, in relation to clause 7.14.1(c)(7)(ii), suggested that the cross-reference to clause 7.11 is too broad and should be pointed to clause 7.11.1. The Commission agreed in its draft Rule determination that clause 7.11.2 is not a relevant reference for clause 7.14.1(c)(7), as the subject of this latter clause is settlement ready data (a progression from metering data), whereas clause 7.11.2 refers to malfunctions of metering installations. The

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[208] United Energy and Alinta submission, (Second round), p.16.

[209] NEMMCO submission, (Second round), p12; and SP AusNet submission, (Second round), p. 21.

Commission considered that there was merit in narrowing the cross reference to clause 7.11.1 as it improves the reading of the provision. Accordingly this suggestion was supported in the draft Rule determination and has been maintained in the final Rule determination.

Two submissions in the second stage of consultation supported the Commission's draft Rule. United Energy and Alinta provided conditional support to the Commission's draft Rule. The support was limited to type 4 metering for a small number of large consumers. United Energy and Alinta did not provide any explanation as to why the support was limited.

The Commission has therefore not deviated from its draft Rule determination.

5.16.4 Differences between the proposed Rule and the Rule to be made

The Commission has adopted NEMMCO's proposed changes with very little drafting changes.

5.17 Rule Change Proposal no. 17 – Address NEM efficiencies – incorporate Queensland's minimalist transition approach to FRC in the Rules

5.17.1 NEMMCO proposal

NEMMCO stated that the proposed harmonisation of first tier metrology requirements into the Rules will result in the blanket application of NEM obligations to all metering installations in Queensland. NEMMCO stated that some of these obligations are inconsistent with Queensland Government policy as outlined in the Queensland Electricity Industry Code.[210]

NEMMCO stated that the introduction to FRC by Queensland in July 2007 is predicated on transitional arrangements outlined in the Queensland Electricity Industry Code.[211] NEMMCO stated that this Rule change is to incorporate the Queensland Minimalist Transitioning Approach within the transitional provisions of Chapter 11 of the Rules.

For the introduction of FRC in Queensland in July 2007, the government has developed a number of transitional National Metering Identifier (NMI) information requirements. This is known as the Minimalist Transitioning Approach and is outlined in the Queensland Electricity Industry Code. NEMMCO stated that this Rule change addresses these transitional arrangements as applicable to Chapter 7.

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[210] The Queensland Electricity Industry Code is made under the Queensland Electricity Act (1994). The third edition of the Queensland Electricity Industry Code came into effect on 1 July 2007 to include the introduction of full retail contestability.

[211] ibid

This particular NEMMCO proposal aimed to facilitate the introduction of FRC in Queensland and the inclusion of Queensland's first tier metrology requirements into the Rules and NEM Metrology Procedure.

NEMMCO stated that the proposal allows the Minimalist Transition Approach being adopted by Queensland for FRC (as outlined in the Queensland Electricity Industry Code[212]) to remain in place and introduce NEM wide first tier metering installation requirements.

5.17.2 Views in submissions

Ergon Energy stated (first round):

> "It is queried however whether a conflict exists between the transitional provisions in chapter 11 and the requirement for the registration of metering installations under clause 7.1.4(a)(1), which may necessitate clause 7.1.4(a)(1) being included in the list of clauses that do not apply under the Minimalist Transitioning Approach." [213]

Ergon Energy stated (second round):

> "The AEMC in its draft determination notes that the Minimalist Transitioning Approach exemption is aimed at enabling a person (with a NMI classification of SMALL) to consume a load at a connection point without operating in the market. Ergon Energy notes the AEMC's advice that on this basis (and by virtue of exempting clause 7.3.3(f)) it considers that the current provisions of clause 7.1.4(a)(1) would not apply. "
>
> "Ergon Energy agrees with the stated intent that clause 7.1.4(a)(1) does not apply under the Minimalist Transitioning Approach exemption.
>
> "That said, Ergon Energy's strong view is the readability and interpretation of the Rules would be assisted if this was made explicit in the Rules by including clause 7.1.4(a)(1) in the list of exempted clauses in the proposed new clause 11.X.5."[214]

NEMMCO and SP AusNet (second round) both agreed with the Commissions draft Rule.[215]

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[212] The Queensland Electricity Industry Code is made under the Queensland Electricity Act (1994). The third edition of the Queensland Electricity Industry Code came into effect on 1 July 2007 to include the introduction of full retail contestability.

[213] Ergon Energy submission, (First round), p.8.

[214] Ergon Energy submission, (Second round), p.6.

[215] NEMMCO submission, (Second round), p.12; and SP AusNet submission, (Second round), p.21.

5.17.3 Commission's considerations and decision

In its draft Rule determination the Commission supported the policy position adopted by NEMMCO subject to some minor drafting amendments.

Ergon Energy commented in the first stage of consultation in relation to clause 7.1.4(a)(1) that this clause may need to be included as an exempted clause. This clause is prefaced by the intention to participate in the market. The defined term market means: "Any of the market or exchanges described in the Rules for so long as the market or exchange is conducted by NEMMCO". It would appear that the exemption is aimed at enabling a person (with a NMI classification of SMALL) to consume a load at a connection point without operating in the market. On this basis, the current provision of clause 7.1.4(a) would not apply. Accordingly there is no requirement to include this clause in the exemption.

The proposed provision gives exemptions to the following clauses:

1. Clause 7.2.3.(h)(2);

2. Clause 7.2.5(b)(2);

3. Clause 7.2.5(d)(6); and

4. Clause 7.3.1(f);

where the connection point has a NMI classification of SMALL and LNSP has not received a valid request from a Market Customer for the NMI to be registered with NEMMCO.

Clause 7.2.3(h)(2) requires the LNSP to provide NEMMCO with a NMI for the metering installation within 10 business days.

Clause 7.2.5(b)(2) requires the responsible person to provide NEMMCO with the relevant details of the metering installation as specified in Schedule 7.5 within 10 business days.

Clause 7.2.5(d)(6) requires the responsible person to provide NEMMCO (when requested) with the information specified in Schedule 7.5 for a new or modified metering installation.

Clause 7.3.1(f) requires the responsible person to register the NMI with NEMMCO in accordance with procedures from time to time specified by NEMMCO.

In its second round submission Ergon Energy suggested that clause 7.4.1(a)(1) be included in the list of exemptions available to Market Participants in the Queensland jurisdiction. The Commission notes that clause 7.1.4(a)(1) has been renumbered in the draft Rule to clause 7.1.2(a)(1). In regard to clause 7.1.2(a)(1) it is noted that the provision requires the Market Participant to provide certain information to NEMMCO when participating in the market at a connection point.

The Commission considers that whilst it is true that the clauses included in the exemption provided by clause 11.20.5 all rely on clause 7.1.2(a)(1) being active, it is

not true that the Queensland Minimalist Transitional Approach provides an exemption for a Market Participant to operate in the market without a metering installation (except for type 7 loads).[216]

The Commission therefore does not support Ergon Energy's suggestion in this final Rule determination.

5.17.4 Differences between the proposed Rule and the Rule to be made

The Commission has incorporated NEMMCO's proposed amendments for this Rule change proposal into the draft Rule with no substantive change. The clauses referred to in the proposed amendment, namely clauses 7.2.3(i)(2), 7.2.5(b)(2), 7.2.5(d)(6) and 7.3.1(f), are not affected by this Rule to be made. The Commission has made some minor drafting amendments to the provision in Chapter 11 to improve the clarity of the provision.

5.18 Rule Change Proposal no. 18 – Address NEM Efficiencies – Use of standard terms and conditions

5.18.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that to facilitate timely retail transfers, the LNSP generally publishes a set of terms and conditions under which the LNSP is willing to act as responsible person for type 5, 6 or 7 metering installations.

NEMMCO stated that in the current provisions of the Rules, Chapter 7, provides that a Market Participant must request an offer from the LNSP to act as the responsible person where a type 5, 6 or 7 metering installation is, or is to be installed.

NEMMCO stated that industry recognises that the timely transfer of retailer connection points at lower energy volumes is dependent upon an efficient and relatively automated process. NEMMCO stated that the recognition of standard terms and conditions in the Rules as an alternative to the formal requirement for the retailer to request an offer from the LNSP has the potential to facilitate further efficiencies in the retail transfer process.

NEMMCO stated that the proposed Rule change is to recognise in Chapter 7 the use of LNSP terms and conditions in responsible person arrangements for type 5-7 metering installations, to provide greater clarity to the industry and to contribute to market efficiency.

NEMMCO stated that the use of LNSP terms and conditions supports the efficient transfer of consumer connection points between retailers in the NEM.

NEMMCO proposed in this Rule change proposal to recognise practices developed in the market to facilitate efficient retail transfers for FRC. It is of the view that

[216] Queensland Electricity Industry Code Clause 6.8

reflecting this practice within the Rules will provide greater certainty to market practices and service providers and therefore build confidence in market processes. NEMMCO assume that reduced costs of this process efficiency would eventually flow on to the end-use customer.

5.18.2 Views in submissions

Origin stated (first round) in regards to clause, 7.2.3(d):

> "this clause as written, would allow the LNSP to potentially charge exorbitant and unrealistic fees for the management of the RP role."
>
> "Remove this clause and extend (b) and (c) or make reference to a regulated rate for RP services as determined by the jurisdiction in (f)." [217]

SP AusNet stated (first round) in reference to paragraphs (ca) and (d):

> "It would seem inappropriate [that] there should be an unqualified process within Chapter 7 for the dispute of a standard set of terms and conditions as generally these will be determined through the DNSP's access arrangement establishment process involving the AER. The dispute mechanism for these would be a more fundamental one of questioning the AER's determination."[218]

United Energy and Alinta submitted drafting amendments and in addition stated (second round):

> "The intended Rule change in clause 7.2.3 was to recognise the standard terms and conditions in responsible person arrangements for types 5-7 metering installations. The AEMC has accepted the substance of the original proposal with some minor amendments."[219]

SP AusNet submitted drafting amendments in addition stated (second round):

> "It would seem inappropriate there should be a unqualified process within Chapter 7 for the dispute of a standard set of terms and conditions as generally these will be determined through the DNSP's access arrangement establishment process involving the AER. The dispute mechanism for these would be a more fundamental one of questioning the AER's determination."
>
> "The Commission's response appears to have missed the point of our comment. The envisaged situation is that we as an LNSP have had approved by the AER, through their approval of our Terms and Conditions, a fee for

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[217] Origin submission, (First round), p.2.

[218] SP AusNet submission, (First round), p.5.

[219] United Energy and Alinta submission, (Second round), p.16.

a particular service of say $50. A Retailer then disputes this service fee suggesting that it should be only $40. This is fundamentally a dispute against the AER's approval of the $50 service fee. The issue raised by SP AusNet was: is a dispute under Rule 8.2 appropriate in this case, or if the Retailer considers the approved fee should be $40, should they rather approach the AER? We suggested that the use of Rule 8.2 was not appropriate."[220]

NEMMCO stated that it supported the Commission's draft Rule determination for this Rule change proposal.

5.18.3 Commission's considerations and decision

In its draft Rule determination the Commission supported NEMMCO's policy intent in regards to this Rule change proposal. The Commission considered that the proposed provision is consistent with current jurisdictional requirements and industry practice, provides consistency and removes any confusion with current practice.

Origin's suggestion in the first stage of consultation in relation to clause 7.2.3(d) is that the paragraph be deleted as it permits the LNSP to charge "exorbitant and unrealistic" fees. Instead, Origin suggested that clause 7.2.3(b) and clause 7.2.3(c) should be expanded to incorporate a regulated rate for LNSP services.

In its draft Rule determination the Commission noted that this does not alter the intent of the current provision. The current provision in clause 7.2.3(d) was first contained in Chapter 9 of the Rules as a jurisdictional derogation. This was included in the Rules in 2002 at the commencement of FRC. The jurisdictional derogation in Chapter 9 (for each jurisdiction) was harmonised into one provision and incorporated into clause 7.2.3 during the 2006 Rule changes. Clauses (d) to (h) were introduced into clause 7.2.3 in accordance with this harmonised approach. There is no known failure of these provisions. It is noted that clause 7.2.3 (f) controls clause 7.2.3(d) and should give parties a right to address any abuse of process. Accordingly the suggestion is not supported. The Commission upholds this view in this final Rule determination.

SP AusNet commented on clause 7.2.3(g). The suggestion was to permit an appeal to the AER in addition to the ability to dispute the offer in accordance with the Dispute Resolution Procedures. SP AusNet's suggestion would impose a function on the AER to receive the appeal and to deal with that appeal. In its draft Rule determination the Commission considered that the dispute resolution procedures were adequate and that no further mechanism was required. Accordingly this suggestion was not supported.

SP AusNet reiterated this concern in its second round submission. SP AusNet's concern involves a retailer challenging the "standard terms and conditions" which includes service prices approved by the AER. The Commission considers that the protection available to a Market Participant under clause 7.2.3(h)(2) is for the event

[220] SP AusNet submission, (Second round), pp.21-22.

that the "standard set of terms and conditions" offered by the LNSP is different to those approved by the AER. The Commission considers that while the provision does not prevent a Market Participant from disputing the terms and conditions approved by the AER, such a dispute would not succeed. The Commission considers that the challenge would only be of value if the approved AER conditions were varied in any way that was unfavourable to the Market Participant.

The Commission has not deviated from its position in the draft Rule determination and has decided not to support SP AusNet's suggestion.

5.18.4 Differences between the proposed Rule and the Rule to be made

The Commission has accepted the substance of NEMMCO's proposed amendment which is reflected in the draft Rule in clause 7.2.3.

5.19 Rule Change Proposal no. 19 – Address NEM efficiencies – time setting

5.19.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that within the NEM, the parties responsible for time setting in each metering installation may vary depending upon the type of metering. NEMMCO stated that the current rules relating to time setting are principally to support type 1-4 metering installations and do not recognise the time setting requirement or obligations for type 5-7 metering installations. Further the existing Rules do not assign responsibility for maintaining timing requirements.

NEMMCO stated that the proposed Rule change distinguishes between the different obligations of NEMMCO and the responsible person in maintaining timing requirements for a metering installation, metering database and metering installation database as a function of the type of metering installation. NEMMCO stated that this includes types 5-7 metering installations.

NEMMCO stated that the proposed arrangement provides NEMMCO and industry with a clear understanding of the allocation of responsibilities in a single clause which assists industry to understand the differences and similarities between the requirements of the various metering types. NEMMCO stated that this assists industry participants in their management of their responsibilities and with compliance.

NEMMCO stated that this Rule change will promote efficiency within participants while maintaining the integrity of metering related time. NEMMCO believes that bringing similar obligations together within the Rules assists participants to meet their compliance obligations, and aids market efficiency which in turn contributes to the NEM objective.

5.19.2 Views in submissions

ActewAGL stated (first round) in relation to clauses 7.12(b) and (ba):

"ActewAGL disagrees with having to set all desktop computers ± 1 second to AEST. This increases costs to maintain separate servers and PC's specifically for meter data, will only benefit Retailers, and most participants have corporate servers linked to desktop PC's used daily for appointments and meetings, etc."

"Revise this statement or set out a detailed document of why this must be so and possible solutions, as generally it may only be the MDM files to NEMMCO that may need to have the creation date/time stamp set to AEST." [221]

CitiPower and Powercor stated (first round) in relation to clause 7.12(ba):

"The term metering installation database is expressed in italics indicating that it is a defined term, however no definition is provided. Unless it is intended to provide a definition the italics should be removed from the word "database".[222]

United Energy and Alinta submitted some drafting amendments and in addition stated (second round):

"Clauses [7.12] (d) and (e) place obligations on NEMMCO and the responsible person to maintain the time accuracy for meter types 1-4 and meter types 5-7 respectively. However, clause (d) has been altered to provide an obligation on NEMMCO to maintain the metering installation database clock for meter types 1-4. If there is a metering installation database clock for meter types 1-4 then this obligation should be on the responsible person is covered by the wording in clause (a). The original proposal for clause (d) was to provide an obligation on NEMMCO to maintain the metering database time accuracy for meter types 1-4. The term metering installation database in clause (d) should be changed back to metering database as was originally intended so that it correctly reflects the obligations."[223]

NEMMCO stated (second round):

"As per earlier comments in Rules Change Proposal No. 12 regarding the difference between "metering installation database" and "metering database" for meter types 1-4 and 5-7, clause 7.12(d) should refer to the "metering database" not "metering installation database" as it is referring to type 1-4 metering installations."[224]

CitiPower and Powercor stated (second round):

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[221] ActewAGL submission, (First round), section 2.2.

[222] CitiPower and Powercor submission, (First round), p.10.

[223] United Energy and Alinta submission, (Second round), p.17.

[224] NEMMCO submission, (Second round), p.13.

> "The provisions of clause 7.12(a) and (d) seem to place the same obligations on both the responsible person and NEMMCO in relation to the accuracy of the "*metering installation*" clocks. It would be appropriate to amend 7.12(d) to oblige NEMMCO to maintain the accuracy of the "*metering database*" clock instead of the "*metering installation* database clock".[225]

SP AusNet submitted that it agreed with the Commission's draft Rule.[226]

5.19.3 Commission's considerations and decision

In its draft Rule determination the Commission supported NEMMCO's policy intent in relation to this Rule change proposal. The proposed provisions separate types 1-4 installations from types 5-7 and removes any difficulty in determining who has this responsibility for the metering database. The Commission remains of this view in this final Rule determination.

ActewAGL in its first round submission disagreed with the requirement for NEMMCO to maintain the "metering database" clock to ± one second. The Commission noted in its draft Rule determination that there was no explanation as to why ActewAGL has this concern with the NEMMCO database. It was not clear from the explanation provided by ActewAGL how desktop computers, to which the company refers, related to the NEMMCO "metering database" for types 1-4 metering installations. Accordingly, this suggestion was not been included in the draft Rule. The Commission has not deviated from this position with respect to this final Rule determination and Rule to be made.

ActewAGL disagreed in its first round submission with the requirement for the responsible person to maintain the "metering installation database" clock to ± 1 second. The Commission assumed that the concern was raised from the company's role as a responsible person. The concern appeared to relate to desktop computers. However it was unclear from the explanation why the desktop computer clock accuracy was raised in this instance as a problem. It was noted in the draft Rule determination that no other submission raised this concern. In the absence of any further information, this suggestion was not included. The Commission has not deviated from this position with respect to this final Rule determination and Rule to be made.

Three parties have commented in submissions to the second stage of consultation that the term "metering installation database clock" in clause 7.12(d) should actually be a reference to the "metering database clock". The Commission accepts that word "installation" in clause 7.12(d) has been included inadvertently and has amended the appropriate clause in the Rule to be made accordingly.

The Commission considers that time setting requirements need to apply to type 7 metering installations as they contain a data logger and metering installation database.

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[225] CitiPower and Powercor submission, (Second round), p.9.

[226] SP AusNet submission, (Second round), p.22.

5.19.4 Differences between the proposed Rule and the Rule

The Commission's intention was to incorporate NEMMCO's proposed changes with no substantive amendment. On this basis the Commission has clarified in the Rule to be made the distinction between the metering database and metering installation database.

5.20 Rule Change Proposal no. 20 – Address NEM efficiencies – design standards

5.20.1 NEMMCO proposal

NEMMCO in its Rule change proposal stated that the current arrangement for general design standards and requirements for meters and new instrument transformers under the Rules are spread over a number of provisions. NEMMCO stated that these standards and requirements rely on superseded Australian and International Standards, and National Standards Institute arrangements.

NEMMCO stated that the responsible person providing the relevant approval certificates to NEMMCO on request is also redundant, as the Federal enforcement mechanisms under the National Measurement Institute are sufficient.[227]

NEMMCO stated that the proposed Rule change reflects updates to Australian and International Standards and incorporate related provisions of Schedules S7.2.6.1(f) and (g) and S7.3.1(a) to provide a single location for these requirements. NEMMCO stated that that the changes also reflect the current practice under the National Measurement Institute in the application of type test certificates in transitional arrangements.[228]

NEMMCO stated that the proposed changes increase clarity and remove ambiguity from the specification of design standards, resulting in ease of compliance and thus improved market efficiency. According to NEMMCO the proposed changes reflect current industry practice and contribute to market certainty, and therefore build confidence in market processes.

5.20.2 Views in submissions

Ergon Energy stated (first round) in relation to clause S7.2.6.1(g):

> "Ergon Energy queries whether the pattern approvals and type test certificates for instrument transformers are required in circumstances of one off high voltage designs." [229]

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[227] Enforcement is carried out by an authorised officer set out in s18ZM of the Commonwealth National Measurement Act.

[228] These arrangements are found in the National Measurement Regulations (Commonwealth) 1999.

[229] Ergon Energy submission, (First round), p.8.

TransGrid stated (first round):

> "The re-drafted clause S7.2.6.1 (g) does not include a reference to AS1243 to provide for three phase inductive voltage transformers which is not covered by the AS60044 series of Australian Standards. It is recommended that S7.2.6.1(g) be amended to include a reference to AS1243." [230]

NEMMCO stated (first round) in its supplementary submission that:

> "The new AS60044 series of standards does not make provision for one category of voltage transformer widely used in the NEM – three phase inductive voltage transformers."
>
> "Adding AS1243 – 1982 to the list of standards under Clause s7.2.6.1(g) will not reduce the technical quality of the final installations, but will permit three phase inductive voltage transformers to continue to be used.
>
> "Although the standard is 25 years old, a significant volume for equipment in service in the NEM has been purchased to this standard, and equipment purchased under this standard will meet the overall accuracy standards of the NER.
>
> "NEMMCO recommends that the suggestion raised by TransGrid in their submission dated 27 July 2007 be accepted, and AS1243-1982 be retained in clause s7.2.6.1(g)." [231]

NEMMCO stated (second round):

> "NEMMCO considers the Commission's proposal to include Australian Standards in the Metrology Procedure acceptable and would support their recommendation should the Commission choose to adopt this approach."[232]

SP AusNet stated (second round):

> "[Sp AusNet agrees] with AEMC proposal."[233]

5.20.3 Commission's considerations and decision

In its draft Rule determination the Commission supported the policy position adopted by NEMMCO in relation to this Rule change proposal, with some amendments as to how the standards are identified to improve efficiency in the operation of the Rules. The Commission remains of this view in this final Rule

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[230] Transgrid submission, (First round), p.2.

[231] NEMMCO supplementary submission, (First round), p.4.

[232] NEMMCO submission, (Second round), p.13.

[233] SP AusNet submission, (Second round), p.22.

determination. The proposed provisions update the relevant standards without changing the objective of the clause.

The Commission considered that the need to have a valid pattern approval for a metering installation is consistent with the foreshadowed requirements of the National Measurement Act.[234] The need to have a valid type test certificate if the regulatory arrangements for pattern approval have not been enacted is consistent with current metrology arrangements under the National Measurement Act.[235]

Ergon Energy's comments in the first stage of consultation in relation to clauses S7.2.6.1 (g), seek clarification on the need for pattern approval and type test certificates for instrument transformers for one-off high voltage designs. From the description of the query, it was not clear if Ergon Energy is discussing the design of the assembled infrastructure. Instrument transformers used in the design must have pattern approval and type test certificates. In the case of the design of transformer characteristics, instrument transformers must receive pattern approval and type test certificates before they can be used. Accordingly there was no change to the proposed provision arising from this point of clarification.

TransGrid commented in the first stage of consultation that for clause S7.2.6.1(g), a reference to AS1243 "Voltage Transformers" as the nominated series should be included. NEMMCO advised in its supplementary submission that the AS60044 series of standards was not broad enough to cover three phase inductive voltage transformers. Furthermore TransGrid's suggestion to incorporate AS1243 was no longer relevant as the Commission amended the way standards were referenced in the Rules. The Commission has upheld this position in this final Rule determination.

In the draft Rule determination the Commission delegated the role of identifying standards to the Metrology Procedure where the power to identify a standard for a particular matter such as voltage transformers remained in the Rules. The Commission considered that given the fact that Australian and International Standards are regularly updated, identifying the standards in the Rules would require a Rule change every time the standard that is referenced has been superseded or replaced. In its draft Rule determination the Commission considered that identifying the standards in the Metrology Procedure is a more efficient process while still ensuring the relevant safeguards are in place so as not to give NEMMCO a broad power in imposing standards.

If the change to the standard is simply an update and not a substantive change, NEMMCO has the power to update the Metrology Procedure without consultation for administrative and minor matters. If the change to the standard involves a substantive change, NEMMCO will be required to undertake the Rules consultation procedures. Furthermore, the Commission considered in its draft Rule determination that the power to identify standards in the Rules is clear and quite narrow in the sense that is limited to a specific matter and not a general power to identify standards in the Metrology Procedure. The Commission remains of this view in this final Rule determination.

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[234] National Measurement Act s.19A.

[235] National Measurement Act s19A.

In its draft Rule determination the Commission considered that the Rule change proposal reflects updates to the Australian and International standards required for metering installations and new instrument transformers. The Rule to be made also provides a mechanism that allows for the ease of future updates to ensure the accuracy in the specification of the standards that are to apply. The Rule proposal therefore sets up a framework of standards that reduces ambiguity and provides clarification for service providers and Market Participants.

5.20.4 Differences between the proposed Rule and the Rule to be made

The Commission has amended the references in the proposed provisions to specific standards and instead deferred the identity of standards to NEMMCO by way of the Metrology Procedure. The Commission considers this approach will be a more efficient and accurate method of standards identification. The Commission has also replaced other references to standards in Chapter 7 with this phrase.

5.21 Rule Change Proposal no. 21 – Address NEM efficiencies – Recognition of International Laboratory Accreditation Cooperation (ILAC)

5.21.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that the Rule currently dealing with the source of measurement standards reflects a requirement to meet standards and practices established and maintained through Australian institutions. NEMMCO stated that this was industry practice at the time of the drafting of the original National Electricity Code.

NEMMCO stated that modern industry practice is to recognise international standards and accreditations where this is possible without reducing the technical standards of the Rules or procedure.

NEMMCO stated that some measurement and test equipment used in Australia must be sourced from overseas and that under current Rule requirements, this equipment must be tested at a National Association of Testing Authorities (NATA) accredited laboratory before it is placed into service. NEMMCO stated that this equipment, will have been tested prior to dispatch and hence the retesting in an Australian laboratory is a duplication of effort, which delays putting the equipment into service and is an unnecessary inefficiency.

NEMMCO stated that its proposed solution is to recognise the certification of overseas testing laboratories which are appropriately accredited. NEMMCO stated that the International Laboratory Accreditation Cooperation (ILAC) is a formal cooperation with a charter to establish a network of mutual recognition agreements among accreditation bodies. NEMMCO stated that NATA is a member of ILAC, and that NATA recognises the certification provided laboratories that are accredited by an ILAC member body.

NEMMCO proposed to accept test certificates issued by a body recognised by NATA under the ILAC mutual recognition scheme.

NEMMCO stated that the proposed Rule change will allow Metering Providers to arrange for the testing of imported test equipment prior to dispatch from the country of manufacture, and facilitate the equipment going into service at an earlier time.

NEMMCO stated that because the Metering Provider can have confidence that the equipment meets the requirement in the Rules at the time of receipt, there will be a shorter delay to place equipment into service. It stated that current practice requires that test equipment is received into the Metering Provider's depot, and then testing is arranged at the NATA laboratory which may involve a substantial delay (possibly twelve months) before the purchased equipment can be put in service.

NEMMCO stated that the proposed Rule change will reduce the period between expenditure on test equipment and commencement of service, and hence improve return on assets employed for Metering Providers which would contribute to market efficiency.

NEMMCO stated that certainty of investment will be improved for Metering Providers, who may be encouraged to invest in more efficient test equipment. It stated that competitive pressures between Metering Providers will ensure that the financial benefits of such investments will, in time, become benefits to NEM consumers.

5.21.2 Views in submissions

Ergon Energy stated (first round):

> "Ergon Energy believes that the proposed amendment to Schedule 7.3.2(b) goes well beyond the stated intent of recognising the certification of overseas testing laboratories which are appropriately accredited. In particular:
>
> - The drafting changes introduce a requirement that a current test certificate issued by a NATA accredited body be obtained for all reference / calibrated equipment, rather than tested to ensure full traceability to the reference standards. Currently, the highest specification standard is sent to NATA (or a NATA accredited laboratory) for calibration annually. All other test equipment is calibrated against this standard "in-house"; and
>
> - If left as proposed, the amendment will impose significant costs on the Metering Provider and impede market efficiency by requiring all meter test equipment to be sent to a NATA accredited laboratory for calibration each year, or in some cases, 6-monthly. A calibration test can cost around $2,000 for one standard, with a three week turnaround. Metering Providers could therefore face both delays and significant additional costs. These costs do not appear to have been considered in

the analysis of how the proposed Rule change will contribute to the achievement of the NEM objective." [236]

Ergon Energy proposed (first round) that, to address these concerns, Schedule 7.3.2(b) be amended to read:

"All reference/calibrated equipment used by Metering Providers for the purposes of meeting test or inspection obligations shall be tested to ensure full traceability to a test certificate issued by a NATA accredited body or a body recognised by NATA under the ILAC mutual recognition scheme." [237]

Energex stated (second round):

"The reference to ISO/IEC Guide 25 "General Requirements for the Competence of Calibration and Testing Laboratories" in Schedule S7.4.3(b)(6) should be changed to either:

1. AS ISO / IES 17025 "General Requirements for the Competence of Calibration and Testing Laboratories", or

2. ISO "Guide to the Expression of Uncertainty in Measurement". As used in Schedule S7.3.2(c)."

"With respect to Ergon Energy's comments, Metering Providers would need to retain evidence demonstrating that all reference/calibration equipment had current calibration status traceable to national standards maintained by the National Measurements Institute."[238]

Ergon Energy stated (second round):

"Ergon Energy supports full traceability to the reference standard rather than a requirement that a current test certificate issued by a NATA accredited body be obtained for all reference/calibrated equipment. "

"A requirement to obtain a test certificate for all reference / calibrated equipment will impose significant costs and impede market efficiency by requiring all meter test equipment to be sent to a NATA accredited laboratory for calibration each year, or in some cases, 6-monthly. Ergon Energy believes that this would require additional test assets to cover the equipment that is sent for testing and would increase test equipment calibration costs.

"Ergon Energy considers that its current in-house processes are appropriate and adequate to achieve the objectives of the National Electricity Market.

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[236] Ergon Energy submission, (First round), p.8.

[237] Ergon Energy submission, (First round), p.9.

[238] Energex submission, (Second round), p.12.

Ergon Energy's calibration system processes are developed in accordance with industry standards and industry best practice and are covered by business quality assurance.

"Ergon Energy considers that reference/calibrated equipment should relate to all test devices."[239]

NEMMCO stated (second round):

"Where a metering provider operates over a geographically spread area, the cost of NATA/ILAC tested equipment would tend to mitigate against providing test equipment to decentralised locations and hence the requirement for all test devices would introduce delays in getting suitable test equipment from the laboratory to the site for field testing."

"The quality assurance that field test equipment has been checked against NATA/ILAC reference equipment is part of the NEMMCO accreditation and audit of metering providers.

"NEMMCO agrees with the wording proposed by Ergon Energy.

"However NEMMCO notes that the location proposed by the Commission (at S7.4.3) does not fully address the issue. Clause S7.3.2 relates to the testing of equipment. Although the clause is headed "Notes (These are technical guidelines)" and are for convenience only and do not affect the interpretation of the Rules, clause S7.3.2 places requirements whenever a metering installation is tested or inspected. Therefore a failure to comply would make the installation non-compliant.

"In contrast the requirement at S7.4.3(b)(5) is prefaced by linking the requirement to the capability of a metering provider and hence non-compliance relates to the accreditation (or non-accreditation) of the metering provider.

"NEMMCO holds the view that the wording of S7.3.2(b) and S7.4.3(b)(5) should be aligned however it is not adequate to make the amendment at one place (S7.4.3(b)(5)) and just delete the provision at S7.3.2(b)."[240]

CitiPower and Powercor stated (second round):

"CitiPower and Powercor agrees with the concern raised by Ergon Energy and the drafting amendment proposed by Ergon Energy. It is important to note that NEMMCO takes particular interest in the processes and

[239] Ergon Energy submission, (Second round), p.6.

[240] NEMMCO submission, (Second round), pp.13-14.

procedures around calibration and certification of test equipment in the process of accrediting metering providers and approving asset management plans and would presumably refuse accreditation or approval of the asset management plan if appropriately calibrated test equipment was not assured."[241]

5.21.3 Commission's considerations and decision

In its draft Rule determination the Commission supported the policy intent of this Rule change proposal. The proposed provision was based on improved knowledge and processes that have emerged since the start of the NEM. The Commission considered it appropriate to update this provision to align it with best available knowledge and practice. In its draft Rule determination the Commission considered that it was also appropriate to realign the provision to the NATA which is a regulatory body established to control (in part) the standard of weights and trade measurement equipment.

Whilst the Commission accepted the substance of the proposed provisions, the Commission has made drafting amendments and the substance of the clause has been incorporated into clause S7.4.3. The Commission considered clause S7.4.3 which deals with the capabilities of Metering Providers as the more appropriate location for this provision. The NEMMCO proposal has been adopted in intent.

In relation to Ergon Energy's comments in the first round of consultation, the Commission agreed that the literal interpretation of the proposed provision required a Metering Provider to obtain a test certificate for all "reference / calibrated equipment". Ergon Energy suggested a marked up change to the proposed provision to address its concerns. On review the Commission considered that the Ergon Energy suggestion appeared to be reasonable. In the absence of any other comment on this issue the Commission sought comment from interested stakeholders as to:

- Why in-house calibration systems processes are used and what quality control surrounds these processes; and
- Whether the phrase "reference/calibrated equipment" should relate to ALL test devices or only to "reference standards".

In its draft Rule determination the Commission stated that it understands that there is a possibility that Ergon Energy and similar participants could exercise a choice to obtain accreditation status from NATA so as to manage its "in-house" quality control.

The Commission received three direct responses to the issue raised in its draft Rule determination. Energex stated in its submission in the second round of consultation that evidence of traceability of calibration status needs to be retained by Metering Providers.

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[241] CitiPower and Powercor submission, (Second round), p.9.

Ergon Energy in its second round submission reinforced its view that it does not support the need to hold a current test certificate issued by a NATA accredited body for all reference/calibrated equipment because of the direct cost of the certificate and the delay inherent in having the equipment tested.

Ergon Energy would prefer to demonstrate full traceability to the reference standard using in house processes. Ergon Energy currently operates on this arrangement. The Commission considers that this would be acceptable if Ergon Energy itself was a NATA accredited testing laboratory. In its second round submission Ergon Energy stated that its calibration systems have been developed in accordance with industry standards and industry best practice and are covered by business quality assurance. Documented details of the process however, have not been referenced by Ergon Energy in its submission.

The Commission considers that it would be reasonable for Ergon Energy to have to demonstrate to the market the soundness and consistency of their full traceability process. This could be achieved by regular accreditation of their arrangements, or by having a third party perform the full traceability process. The Commission considers that the proposed drafting submitted by Ergon Energy is limited due to the lack of compliance it imposes on the Metering Provider.

The Commission notes that in its submission in the second round of consultation NEMMCO has agreed with Ergon Energy's proposed wording. NEMMCO lists its reasons for agreement as:

- Assurance that field tested equipment has been checked against NATA/ILAC reference equipment is part of the NEMMCO accreditation and audit of metering providers. NEMMCO has advised that the availability of a documented procedure is audited on accreditation, and the use of that procedure is audited annually as part of the on-going audit arrangements;

- The cost of NATA/ILAC tested equipment would mitigate against its ready availability at diverse geographic locations and as a consequence limit the efficiency of the test/inspection program;

- The availability of robust secondary test equipment to be used for field testing provides efficiency benefits, as this arrangement only requires NATA/ILAC tested equipment as a primary reference.

The Commission considers that these reasons are sound, and would enhance market efficiency. The Commission further notes that CitiPower and Powercor in its second round submission agreed with Ergon Energy.

The Commission has therefore adopted Ergon Energy's suggestion of traceability rather than holding of current test certificates for all equipment into its final Rule with some drafting enhancements regarding an appropriate quality assurance system.

5.21.4 Differences between the proposed Rule and the Rule to be made

As noted above, the Commission has incorporated the proposed provision in clause S7.4.3 as opposed to the proposed location of clause S7.3.2. Clause 7.4.3(b)(5) has identical wording to the clause under consideration. To avoid unnecessary duplication in the Rules, the Commission considers this amendment appropriate.

In the Rule to be made the Commission also varied the provision to enable in house testing of equipment as long as traceability of the testing is to a current test certificate.

5.22 Rule Change Proposal no. 22 – Address NEM efficiencies – timeframes for inspection and testing of various metering installation types

5.22.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that the current timeframes outlined for inspection and testing of various metering installation types under the Rules limit the flexibility for development and innovation in the area of inspection and testing of metering installations by restricting the allowable timeframes.

NEMMCO proposed to recognise that alternate asset management strategies may be utilised, if approved by NEMMCO, to allow for innovation in maintenance programs without reducing the overall standard of performance.

NEMMCO stated that the amendments assist market efficiency by allowing for alternative testing strategies to be developed outside the "default" strategy. NEMMCO stated that this creates the opportunity for Metering Providers to innovate and develop more efficient business processes for the management of their installed metering equipment and promote more efficient investment. NEMMCO stated that this would lead to increased effectiveness of NEM processes and services and therefore add to the efficiency for the ultimate benefit of end-use customers.

5.22.2 Views in submissions

Origin Energy stated (first round):

> "With respect to the asset management strategy as approved by NEMMCO, it is not clear as to what requirements the strategy is to meet so approval will be obtained. Again the Local Retailer will carry the financial risk if errors occur as a result of incomplete or flawed strategies."

"It is suggested that NEMMCO develop a set of requirements that the asset management strategy would be measured against for approval and that this set of requirements be ratified by the Local Retailers." [242]

United Energy and Alinta stated (second round):

"Local retailers remain concerned that any alternative asset management plan may be flawed or incomplete and may result in financial risks to the local retailers."

"NEMMCO currently have a document to address what needs to be in an asset management plan in order for it to gain NEMMCO's approval. This document has been compiled with some industry input. The businesses do not consider that further guidelines are required in the Rules. NEMMCO could amend/consult on the current document if required."[243]

NEMMCO stated (second round):

"…that a "metering asset management plan: information paper" is published on NEMMCO's website."

"This information paper is available to industry to assist it in developing asset management plans. If industry believes this document requires further development, NEMMCO would be happy to facilitate the enhancement of the document with the assistance of industry working groups.

"NEMMCO believes this guideline should not be mandated by the Rules, which would increase the urgency of this task possibly at the expense of other work already underway."[244]

CitiPower and Powercor stated (second round):

"The Commission seeks comments on whether principles to guide NEMMCO in approving an asset management strategy should be identified in the Rules."

"CitiPower and Powercor believes this is unnecessary at this time and notes that NEMMCO have published their criteria for approving such plans."[245]

SP AusNet stated (second round):

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[242] Origin submission, (First round), p.4.

[243] United Energy and Alinta submission, (Second round), pp.17-18.

[244] NEMMCO submission, (Second round), p.14.

[245] CitiPower and Powercor submission, (Second round), p.9.

"SP AusNet supports the need for a guideline to be formally established for preparing and approving an asset management strategy."

"In our recent submission to NEMMCO re the changes to the Metrology Procedure associated with these Rules changes we suggested that the following clause should be added to Section 2.6 of the Metrology Procedure:

NEMMCO must establish and publish a guideline which it will use as the basis of asset management strategy and test plan approval and NEMMCO may revise the guideline from time to time in consultation with industry."

"There is a document to aid the development of asset management plans but the SP AusNet's Metrology Procedure comments were associated with making this more formal and bringing it under change control. These plans are long term and the associated costs are relatively high. Our view is that there needs to be clarity and stability and industry involvement in change. "[246]

5.22.3 Commission's considerations and decision

In its draft Rule determination the Commission accepted NEMMCO's proposed provisions. The provisions related to the range of devices identified in tables S7.3.2 and S7.3.3. The paragraph permits an "asset management strategy" to override the timeframes specified in the Tables. The Commission in its draft Rule determination considered the clear allocation to the responsible person of preparing the asset management strategy as appropriate. The Commission considered the proposed provision to be logical, clear and provides service providers with the opportunity to innovate and increase efficiency of their practices as new technology becomes available. The Commission upholds this view in this final Rule determination.

Origin's comments in the first round of consultation are that in relation to both tables, Origin would like the provision to contain a set of principles to which NEMMCO must abide when approving an "asset management strategy". The Commission considered in its draft Rule determination that while a set of principles to guide NEMMCO's decision would be beneficial, it would be inappropriate to introduce these without industry consultation. The Commission therefore sought comment from interested stakeholders on whether such principles should be identified in the Rules.

Four parties provided submissions directly addressing this issue in the second round of consultation. United Energy and Alinta indicated that the current publicly available NEMMCO document on the preparation of an asset management strategy is adequate. United Energy and Alinta submitted that further guidelines did not need to be provided for in the Rules.

[246] SP AusNet submission, (Second round), p.23.

NEMMCO stated that an information paper on this topic is publicly available on the NEMMCO website to assist industry in developing asset management plans. NEMMCO submitted that if industry required further development of this document, its enhancement would be facilitated by NEMMCO with the assistance of industry working groups and that this document should not be provided for in the Rules.

CitiPower and Powercor submitted that it is unnecessary to incorporate such a requirement into the Rules. CitiPower and Powercor noted that NEMMCO has published criteria for approving asset management plans.

SP AusNet supported the need for a guideline to be formally established in the Rules. SP AusNet stated that:

- Formality is required to bring the current document under change control;
- The plans are long term and the associated costs are relatively high; and
- There needs to be clarity and stability and industry involvement in the change.

The Commission considers that NEMMCO has actively introduced transparency into their decision making process without the need for formal regulation. NEMMCO has stated that it will continue to maintain and enhance the document with industry input. The Commission also notes that the majority of submissions that have commented on this issue have called for no formal arrangements to be provided in the Rules.

The Commission accepts this view and has not provided for formal guidelines to be adopted into its Rule to be made.

5.22.4 Differences between the proposed Rule and the Rule to be made

The Commission has accepted NEMMCO's proposed provisions with no substantive change.

5.23 Rule Change Proposal no. 23 – Address NEM efficiencies – review of overall accuracy tables

5.23.1 NEMMCO proposal

NEMMCO stated in its Rule change proposal that the accuracy tables contained within the current provisions of the Rules (Schedule 7.2 of the Rules) are based on Australian Standards for metering installations and instrument transformers that were current in 1998.

NEMMCO stated that subsequently, in 2003 Australian Standards for instrument transformers (AS1243-1982 and AS1675-1986) were superseded by new Australian Standards (AS60044.1 and AS60044.2) based on international instrument transformer standards.

NEMMCO stated that an industry working group convened by NEMMCO in 2004 (the Metering Technology Working Group) reviewed the accuracy requirements contained within the current Schedule 7.2. NEMMCO stated that the Metering Technology Working Group also developed recommendations for amendments to Schedule 7.2 for submission to the National Electricity Code Administrator (NECA). NEMMCO stated that, at the time of the conversion from the National Electricity Code to the Rules in 2005, NECA had not attempted to address this submission.

In this Rule change proposal NEMMCO proposes to address some of the issues initially raised by the Metering Technology Working Group in relation to the current Schedule 7.2 of the Rules, and issues that have been further refined by the Metrology Reference Group. These issues are that:

- The new Australian Standards for instrument transformers widen the allowable error tolerances at lower currents, and nominate test points for determining accuracy requirements that differ from the test points nominated in the Rules. This has the effect that the test points which must be tested to assure compliance with Australian Standards are different to the test points required for assurance of compliance with the Rules, forcing additional testing of instrument transformers;

- The errors in tables S7.2.3.2 to S7.2.3.5 are based on using instrument transformers compliant with the former Australian Standards. The errors have been re-calculated to accommodate the requirements under the new Australian Standards. The errors have been re-calculated to accommodate the requirements under the new Australian Standards. Industry practitioners are finding the test point at 50% rated load, 0.5 lagging is very difficult to achieve in practice and propose a loosening of the requirements at this point;

- There is no correlation of comparative errors across tables at load points where such a relation might be expected. For example, industry practitioners considered that there should be correlation between the 100% rated load point for a type 2 installation and the 10% rated load point for a type 1 installation; and

- Type 5 and 6 metering installations do not have tables of accuracy similar to the tables of accuracy used for types 1-4 metering installations. The publication of such tables would be beneficial to users of the Rules.

NEMMCO stated that accuracy standards are referred to 35 degrees Celsius, whereas international practice, reflected in current Australian Standards for metering equipment, is to use a reference temperature of 23 degrees Celsius.

In this Rule change proposal, NEMMCO proposed that the errors specified in tables S7.2.3.2 to S7.2.3.5 be amended to reflect the requirements under the Australian Standards for instrument transformers.

NEMMCO stated that industry also proposes that a correlation of comparative errors across tables be established for load points that are equivalent. For example, it would be appropriate to set the anticipated maximum errors for the 100% rated load point for a type 2 installation to a similar value to the 10% rated load point for a type 1 installation.

NEMMCO stated that the establishment of a table of errors for type 6 metering installations (Table S7.2.3.6) that is similar to the existing tables for types 1-4 is also part of the solution for this matter. NEMMCO also stated that the inclusion of type 5 in the heading of Table S7.2.3.5, to recognise that type 4 and type 5 accuracy standards are similar is also required. NEMMCO notes that Table S7.2.3.6 has also been amended to align the reference temperatures with international practice and current Australian Standards for metering equipment.

NEMMCO is of the view that in many instances instrument transformers can only be sourced from overseas, and hence there is a need for accuracy standards to be based on international technical requirements.

NEMMCO stated that the requirements under Australian Standards have been harmonised to equivalent international standards, and that the resultant changes need to be reflected into the Rules. NEMMCO stated that this is to allow Metering Providers to readily use equipment manufactured to international standards and which can often not be sourced locally.

NEMMCO is of the view that the changes to the values in the tables S7.2.3.2 to S7.2.3.5 and the new Table S7.2.3.6 add clarity and assist participants and service providers to understand the requirements necessary for compliance. NEMMCO stated that there is a benefit to all industry participants if compliance requirements are explicit and understood without the need for interpretation. NEMMCO stated that this benefit translates into a market efficiency which is to the ultimate benefit of end use consumers.

According to NEMMCO changes to values in the tables S7.2.3.2 to S 7.2.3.5 make compliance at some test points less technically onerous, without materially reducing the quality and accuracy of the metering installation. NEMMCO stated that those test points which were difficult to achieve for Metering Providers added to testing costs without adding to the overall quality of the metering installation. NEMMCO also stated that compliance with strict values in the current tables was not offering a value to end-consumers commensurate with the complication and cost of the testing.

NEMMCO stated that the alignment of the reference temperature with international standards greatly simplifies the comparison of test results from overseas, and eliminates the need for a translation or interpretation of the results.

5.23.2 Views in submissions

EnergyAustralia stated (first round):

> "In relation to smart meters, we consider one useful change that could be considered as part of the current Rule changes is relaxation of the Accuracy Tables (Rule change number 23). This approach has already been adopted in Victoria and we understand officials advising the MCE have considered relaxation of these requirements during the transition to smart meters as it

would reduce the quantity of non-smart meters installed in the meantime before mass market deployment, due to commence from 2009." [247]

TransGrid stated (first round):

"The rationale and relativities to the other S7.2.3. Tables for the proposed new Table S7.2.3.6 are not fully evident in the material included in the Rule change proposal."

"For example, it would appear that an additional 0.5% overall error allowance at full load is provided between Type 5 and Type 6 metering installations. This extra 0.5% seems also to apply for the 50% load and unity power factor test point, which is consistent, but does not appear to apply for the 50% 0.5 pf lagging and the 10% unity power factor test points. In fact, the Type 6 50% 0.5pf lagging test point overall error allowance is tighter (2.0%) than that allowed for the Type 4 and 5 metering installations (2.5%).

"It is also noted that overall errors have also been specified in Table S7.2.3.6 for 10% and 100% load 0.5 pf test points, whereas Tables S7.2.3.2 to 5 have these test points listed as not applicable. Is this a mistake, or is there some rationale for why Type 6 metering installations should have additional requirements that the Types 1 to 5 metering installations do not have?

"It is suspected that Table S7.2.3.6 was intended to be shown as:

	Power Factor		
% Rated Load	Unity Active	0.866 Lagging Active	0.5 Lagging Active
10%	3.0%	n/a	n/a
50%	2.0%	n/a	3.0%
100%	2.0%	n/a	n/a

Data source: [248]

NEMMCO stated in its supplementary submission (first round) that:

"The comments of TransGrid are also relevant in relation to this Rules change proposal."

"NEMMCO notes the assessment by TransGrid in the third paragraph of their comments on this proposal. It is not necessary to define accuracy at test points of 10% and 100% at 0.5 lagging power factor, provided the accuracy standard is established at 50% load, 0.5 power factor. We therefore accept the proposition that the test points be labelled n/a.

247 EnergyAustralia submission, (First round), p.2.

248 TransGrid submission, (First round), p.2.

"The need for the broadening of error bands for type 6 metering installations derives from the considerable spread of metering installation types which might be covered by the table. As indicated by TransGrid in the second paragraph of their comments on this proposal, it is not possible to meet the accuracy standards in the current table with a general purpose meter connected through an appropriate class instrument transformer. It is therefore appropriate to open out the error limits to provide for this form of installation.

"NEMMCO therefore recommends the adoption of the table proposed by TransGrid for table S7.2.3.6." [249]

Energex stated (second round):

"Energex questions whether there is a mistake in the values recorded. That is:

- The value for the accuracy of the active energy at 50% load and 0.5 lagging power factor in Table S7.2.3.2 for Type 1 installations has been changed from NEMMCO's proposed value of 0.7% to 0.75% with all other values in the table remaining as proposed.

- The value of the reactive energy at 10% load and 0.866 lagging power factor in Table S7.2.3.4 for Type 3 installations has been changed from NEMMCO's proposed value of 5.0% to 4.0% with all other values in the table remaining as proposed."[250]

NEMMCO stated (second round):

"Following the changes to Table S7.2.3.2, it appears during updating of the information for 0.5 lagging (active) and 50% rated load, that the "5" was not deleted. This value should be 0.7% rather than 0.75%."[251]

5.23.3 Commission's consideration and decision

In its draft Rule determination the Commission stated that NEMMCO's policy position in regards to this Rule change proposal is supported. The Commission stated that the proposed provisions address some of the issues raised by the Metering Technology Working Group in relation to Schedule 7.2 of the Rules.

Tables S7.2.3.2 to S7.2.3.5 contain the maximum allowable error for types 1-5 metering installations for three levels of rated load and different power factors. The proposed amendments relate to errors at 10% load (for unity and limited lagging power factor) and 50% load (for large lagging power factor).

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[249] NEMMCO supplementary submission, (First round), p.4.

[250] Energex submission, (Second round), p.12.

[251] NEMMCO submission, (Second round), p.14.

Table S7.2.3.6 is a new table and contains the maximum allowable error of the type 6 metering installation for three levels of rated load and different power factors. The maximum allowable error at full rated current has been relaxed to 2.0% which is consistent with international rating.

The Commission considered it appropriate to accommodate these amendments as it is necessary to update Chapter 7 to changes in Australian Standards. The Commission remains of this view in its final Rule determination.

EnergyAustralia suggested in its first round submission, in a broad statement, that the proposed provisions should be relaxed. The Commission noted that Energy Australia had not rejected or disagreed with the details of the proposed provision. It was noted that any change to the technical detail of the Tables would be subject to consultation with industry groups at an earlier stage to the Draft and Final determinations. Accordingly this suggestion is not supported. There were no further submissions on this issue in the second round of consultation therefore the Commission remains of this view in its final Rule determination.

TransGrid in its first round submission has queried the operation of Table S7.2.3.6. NEMMCO in its supplementary submission agreed with TransGrid in relation to the error limits given the broad range of metering installations that would be covered by this Table. The Commission considered the amendment to be appropriate as the requirements as proposed by TransGrid (and adopted by the Commission) will incorporate a greater number of metering installation types. This had the effect of incorporating further installations into the existing framework without the need to create further requirements for those installations outside the scope of the Table.

In the second round of consultation Energex and NEMMCO have commented on an error in table S7.2.3.2. The Commission has amended the error in the Rule to be made as per suggestions in submissions.

Energex has also identified an error in table S7.2.3.4. The Commission has also amended this error in the final Rule as per Energex's suggestion.

5.23.4 Differences between the proposed Rule and the Rule to made

The Commission has amended Table S7.2.3.6 in accordance with TransGrid's comments and NEMMCO's supplementary submission. The Commission has also rectified errors identified in submissions.

5.24 Rule Change Proposal no. 24 – Address NEM efficiencies – single table of requirements (Schedule 7.3)

5.24.1 NEMMCO proposal

NEMMCO in its Rule change proposal stated that testing uncertainty requirements are currently split across the Rules Schedule S7.3.1 (b) and Table S7.3.1. However, NEMMCO stated that the presence of these requirements at two locations creates the possibility of ambiguity and uncertainty about the requirements.

NEMMCO stated that in the case of current and voltage transformers, the uncertainties are currently expressed solely in terms of ratio error, whereas phase error specification is equally important. NEMMCO stated that, for voltage transformers, the phase error uncertainty (in crad) can be set the same as the ratio error – thus a ratio error of 0.1% matches a phase error of 0.1 crad. For current transformers, NEMMCO stated that the phase error limits need to be opened out to 50% greater than the ratio error; in this case a ratio error of 0.1% is matched to a phase error of 0.15 crad.

NEMMCO stated that in many cases metering equipment is tested before the metering installation type is determined. NEMMCO stated that it would therefore be more appropriate for testing uncertainty to be specified in terms of the class of the equipment rather than the metering installation type.

NEMMCO proposed that testing uncertainty requirements that are currently split across Schedule S7.3.1 (b) and Table S7.3.1 be amalgamated into a single table. In relation to the expression of uncertainties for current and voltage transformers, NEMMCO proposed new uncertainty values that better reflect the accuracies being sought. NEMMCO stated that these values, as stated by NEMMCO are expressed in terms of ratio error and phase error.

NEMMCO stated that if the maximum allowable testing uncertainties are specified in terms of the accuracy class of the equipment under test, the test house or Metering Provider is in an unambiguous position as to the standard of testing required. NEMMCO stated that this is the case because the class of the equipment is contained on the plant nameplate. NEMMCO proposed to re-cast Table S7.3.1 so that the requirements are in terms of the "metering equipment class" of the equipment being tested rather than in terms of the destination metering installation type.

NEMMCO stated that amalgamating the testing uncertainty requirements that are currently split across Schedule S7.3.1(b) and Table S7.3.1 into an amended Table S7.3.1 would improve the clarity of requirements. NEMMCO is of the view that removal of potential ambiguity aids efficiency in the NEM, and stated that the proposed amalgamation is effectively editorial, as it makes no material difference to the requirements that are being merged into the amended Table S7.3.1. NEMMCO stated that having a single source (Table S7.3.1) for requirements assists Metering Providers to meet their compliance obligations.

NEMMCO stated that the expression of uncertainties for current and voltage transformers in terms of ratio error and phase error reflects the industry standard in relation to defining transformer errors. NEMMCO stated that the current expression in terms of an absolute error requires interpretation, and one interpretation could result in an overly onerous requirement that adds cost to testing and hence unnecessary costs to the end-use consumer. NEMMCO stated that the proposed expression of errors reflects national and international standards for the expression of errors for instrument transformers, and is unambiguous.

NEMMCO stated that the expression of maximum allowable level of testing uncertainty in terms of the "metering equipment class" allows the laboratory conducting the test to establish the test requirements without needing to determine the ultimate location of the metering equipment, or the energy volumes anticipated

for the site. NEMMCO stated that it also facilitates the testing of equipment as "spares", knowing that the equipment may be installed in, type 1, type 2 or a type 3 metering installation with confidence that the equipment will have been tested to the requirements of the Rules. NEMMCO stated that this opens up flexibilities for metering providers and network providers in relation to preparation of instrument transformers for major connection points, which has potential benefits in relation to planning and investment decisions. NEMMCO stated that these benefits contribute to the NEM objective[252] by making the provision and testing of metering equipment more cost effective.

5.24.2 Views in submission's

TransGrid stated (first round):

> "The proposed amended table S7.3.1 would appear to include an error for the "In Field" "Class 2.0" "Meters Wh" table entry. The maximum allowable level of testing uncertainty is shown as 0.3/cosΦ%, however, class 2.0 Wh meters do not meet the minimum requirements for any metering installation in Table S7.2.3.1. the only class 2.0 meters permitted in Table S7.2.3.1 are class 2.0 varh meters."
>
> "Therefore, it would seem appropriate that the 'In Field" Class 2.0" meters Wh" Table S7.3.1 entry should read "n/a"." [253]

NEMMCO stated (first round) in its supplementary submission:

> "In their submission to the AEMC TransGrid notes that Class 3.0 active energy meters do not meet the minimum requirements of Table 7.2.3.1, and therefore the entry in table S7.3.1 under "In Field" "Class 2.0' "Meters Wh" should read "n/a"
>
> "NEMMCO concurs with the TransGrid submission on this point.
>
> "The unit crad (centiradians), which appears to be missing from the table in the submission document, is visible when the change marks are removed. This appears to be a quirk of the word pressing software." [254]

In the second stage of consultation NEMMCO submitted that it supported the Commission's draft Rule determination for this Rules change proposal.[255]

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[252] At the time this Rule change proposal was submitted the NEO was known as the NEM objective.

[253] TransGrid submission, (First round), p.3.

[254] NEMMCO supplementary submission, (First round), p.5.

[255] NEMMCO submission, (Second round), p.14.

5.24.3 Commission's considerations and decision

In its draft Rule determination the Commission stated that NEMMCO's policy position in relation to this Rule change proposal was supported. The Commission considered that the deletion of the current table in this clause and the relocation of the relevant information to Table S7.3.1 is logical, improves reading of the provisions and removes any possibility of ambiguity. The Commission remains of this view in this final Rule determination.

TransGrid raised a concern in its first round submission with the difference of information shown in Tables S7.2.3.1 and S7.3.1. In Table S7.2.3.1, the type 6 metering installation has a minimum class General purpose meter with an overall maximum error of 1.5% for Wh. It is noted that the marked up version of Chapter 7 submitted by NEMMCO, shows an increase in the maximum error to 2.0% for Wh, but this change does not appear to be explained in any of the 26 Rule change proposals. In Table S7.3.1 a column has been allocated to a class 2.0 Wh meter. There is no provision for this meter in a metering installation according to Table S7.2.3.1. On review it would appear that NEMMCO had intended relaxing the classification of meter for a type 6 metering installation to the class 2.0 standard, but has not adequately dealt with this in the Rule change proposal.

On the basis of the TransGrid comment, Table S7.3.1 should have the reference to a value for Class 2.0 Wh replaced by "n/a". NEMMCO confirmed this in its supplementary submission and the Commission has made this amendment to the Draft Rule.

The manner in which NEMMCO has achieved its policy intent is supported however in relation to Table S7.3.1. The entries in the table for CT errors (for class 0.2 and Class 0.5) are missing their unit of 'crad', which have now been included.

The level of testing uncertainty for meters that measure active energy (other than General Purpose meters) has not been changed in the proposed provisions. For general purpose meters, the level has been lowered from 0.3/cosΦ% to 0.2/cosΦ%. This reduction represents a tightening of the quality of the equipment and consequently is acceptable.

In its draft Rule determination the Commission considered that amalgamating testing uncertainty requirements into one amended table will improve the clarity and presentation of these requirements. Though this is largely an editorial matter as the requirements remain the same, it still provides benefits to metering providers. The Commission has not deviated from this position in this final Rule determination.

5.24.4 Differences between the proposed Rule and the Rule to be made

As noted the analysis above in relation the maximum error for Class 2.0 Wh, the Commission has made amendments as proposed by TransGrid which are supported by NEMMCO.

5.25 Rule Change Proposal no. 25 – Address audit issue – NEMMCO audit of meter 'test results'

5.25.1 NEMMCO proposal

NEMMCO, in its Rule change proposal, stated that the current provision of the Rules (clause 7.6.1 (c)) required NEMMCO to check the test results of every meter tested by the responsible person (under clause (a) and in accordance with Schedule 7.3). NEMMCO submitted that while this might have been possible at the commencement of the market, the requirement for NEMMCO to check the test results of every meter test is impractical and considered to be unnecessary, provided sufficient sample checking of test results is undertaken.

NEMMCO stated that the application of Chapter 7 to first tier metering installations will mean a huge increase in the number of metering installations operating under the Rules, increasing the difficulty and cost of checking the test results of every metering installation. NEMMCO stated that when these mass market metering installations were the responsibility of the jurisdictional metering codes similar test procedures for metering installation families did not require the regulator to view every test result.

NEMMCO proposed to vary the clause to put in place a more practical approach to the audit of meter tests so that NEMMCO must audit the test results and arrange for sufficient testing of meters to satisfy itself of the accuracy of metering installations.

In the Rule change proposal NEMMCO proposed to:

- Reduce the burden on NEMMCO that would otherwise result from checking the results of every metering installation tested which would increasingly include mass market metering installations; and

- Reduce costs and improve efficiencies compared with the existing requirement without any reduction in the overall accuracy of the metering installation population.

5.25.2 Views in submissions

No submissions explicitly commented on this Rule change proposal in the first round of consultation.

United Energy and Alinta, NEMMCO and CitiPower and Powercor submitted (Second round) drafting amendments in relation to this Rule change proposal.[256]

[256] United Energy and Alinta submission, (Second round), p.18; NEMMCO submission, (Second round), p.14; CitiPower and Powercor submission p.9.

5.25.3 Commission's considerations and decision

In its draft Rule determination the Commission stated that NEMMCO's policy position in relation to this Rule change proposal was supported. Under the current arrangements provided for in the Rules, NEMMCO is required to check every test result recording in the metering register. The Commission considered that while this was reasonable at the commencement of the NEM, it is no longer reasonable for an FRC environment where it is possible to store the details of around 8 million metering installations in NEMMCO's metering register. NEMMCO's proposed amendments relieve NEMMCO of this mandatory requirement for administrative reasons and to replace it with a more flexible arrangement. The Commission remains of this view in this final Rule determination.

The proposed provision will require NEMMCO to satisfy itself of the accuracy of the metering installations in general and to arrange sufficient audits to ensure metering installations remain accurate. The Commission considered that NEMMCO's role in this area has been maintained but how NEMMCO undertakes this role has been changed in the interests of providing a more efficient process.

In the second stage of consultation NEMMCO submitted a wording change in relation to conducting audits. NEMMCO proposed to change the requirement for it to undertake "sufficient audits" with a requirement for it to undertake "annual audits". The Commission has amended the draft Rule to provide for NEMMCO to undertake "sufficient audits annually". The Commission agrees that this wording provides an appropriate proportional requirement as to the frequency of audits.

In its draft Rule determination the Commission considered that removal of an unnecessary burden on NEMMCO to check the results of every metering installation tested would reduce its costs (and therefore improve the efficiency of the NEM) without reducing the overall accuracy of the metering installation population. The Commission remains of that view in this final Rule change determination.

5.25.4 Differences Between the proposed Rule and the Rule to be made

The Commission had adopted NEMMCO's proposed amendments with no substantive change. In the rule to be made, the Commission amended "sufficient audits" to "sufficient audits annually".

5.26 Rule Change Proposal no. 26 – Address editorial changes – editorial changes within chapter 7

5.26.1 NEMMCO proposal

NEMMCO stated that this proposed Rule change addresses a number of minor issues identified in the course of developing the "first tier" Rule change proposals including issues relating to readability of the Rules, errors, use of language, and updates to relevant Australian Standards.

In the Rule change proposal, NEMMCO stated that it identified the following issues/improvements:

- Clause 7.2.1(1):
  - The current wording contains duplication between sub clause (1) and (3) in reference to Chapter 7 that could be removed.
- Clause 7.2.3(a):
  - Clause 7.2.3(a) needs to be made subject to Rules clause 7.2.4 to address joint metering installation requirements in a manner that is consistent with clause 7.2.2(a).
- Clause 7.8.1 (a) & (b)
  - Industry considered the terminology used to describe the security of metering installations outdated. The use of the terms such as seals and devices is based on historical metering security practices, and do not reflect accurately the wider security means now available or acceptable. An amendment is required to recognise these differences.
- Table S7.2.3.1 - Item 1
  - The Australian Standard 1284.1 referenced within this clause has been superseded and as a result the reference requires updating.
  - Schedule S7.2.5 The Australian and International Standards referenced within this Schedule have been superseded and as a result the references require updating.

In the Rule change proposal, NEMMCO proposed the following improvements:

- Clause 7.2.1 (1)
  - Reword the sub clause to improve readability and remove redundancy.
- Clause 7.2.3 (a)
  - It is proposed to amend this clause to include "Subject to clause 7.2.4, the…".
  - The provision is subject to the same conditions as clause 7.2.2 and the amendment improves clarity relating to joint (shared) metering installations.
- Clause 7.8.1 (a) & (b)
  - Update the heading to read "Security of metering installations", to align with terminology used in section paragraphs.
  - Amend terminology in paragraphs (a) and (b) to more accurately reflect industry practice for the security of a metering installation.
- Table S7.2.3.1 - Item 1

- Correct the reference to Australian Standards.

- Schedule S7.2.5

  - Correct the references to Australian and International Standards."

NEMMCO stated that the collective purpose of these proposed Rule changes is to clarify and improve the accuracy of the expressed requirements. NEMMCO stated that ambiguity or errors in the Rules introduces increased compliance risk to service providers and NEM participants.

NEMMCO stated that the correction of errors and improved readability will improve industry understanding of the Rules, and make the operation of NEM processes and services less costly, and therefore add to efficiency.

NEMMCO also stated that better understanding the Rules will reduce regulatory risk, which will reduce the need to factor higher costs into pricing and investment decisions to the ultimate benefit of consumers.

5.26.2 Views in submissions

Ergon Energy stated (first round) in relation to clause 7.2.3(a):

> "Ergon Energy proposed that this clause be amended to clarify that its operation is also subject to an election by a Market Participant under clause 7.2.2. That is:
>
> "(a) Subject to clause 7.2.2 and 7.2.4…"." [257]

Origin Energy stated (first round) in relation to Clause 7.8.1:

> "As the Local Retailer carries the financial risk of energy losses associated with faulty or unreliable security devices the security mechanisms accepted by NEMMCO should also be ratified by the Local Retailers." [258]

United Energy and Alinta stated (second round):

> "We note that the industry raised issues in the first round of consultation regarding the drafting of "subject to… Clause 7.2.4" in clause 7.2.2 (a). Clause 7.2.4 should not alter the primary responsibilities in clause 7.2.2. In view of the responses received, we suggest that the editorial change to clause 7.2.3 (a) not proceed and the drafting in clause 7.2.2. (a) also be removed in line with

[257] Ergon Energy submission, (First round), p.10.

[258] Origin submission, (First round), p.2.

industry comments. The current drafting of clause 7.2.4 already requires arrangement under clause 7.2.2 and 7.2.3 to be entered into."[259]

Ergon Energy stated (second round):

"In its previous submission, Ergon Energy proposed a change to clause 7.2.3(a) which clarified that its application was subject to clause 7.2.2. The AEMC has not incorporated this change nor provided a reason for not including the change. Ergon Energy continues to support the proposed change."

"Ergon Energy maintains that clause 7.2.3(a) should be amended to clarify that its operation is also subject to an election by a Market Participant under clause 7.2.2. That is:

(a) Subject to clause 7.2.2 and 7.2.4…"[260]

NEMMCO stated (second round):

"NEMMCO supports the Commission's draft determination for this Rules Change Proposal."[261]

Sp AusNet stated (second round):

"It would appear that this clause which is considering the responsibility of the LNSP should not be subject to clause 7.2.4 because that clause does not contemplate the LNSP being nominated by NEMMCO, only one of the FRMPs."[262]

5.26.3 Commission's considerations and decision

In its draft Rule determination the Commission stated that the policy intent of the proposed changes is supported. The Commission considered editorial changes that correct errors and improve the understanding of the Rules to be appropriate. The Commission has also made editorial amendments identified during its analysis of the proposal and in response to submissions.

In the second round of submissions United Energy and Alinta has reiterated a point made in their first round submission that the qualifier "subject to the requirements relating to joint metering installations under clause 7.2.4" be deleted from clauses 7.2.2(a) and 7.2.3(a).

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[259] United Energy and Alinta submission, (Second round), p.19.

[260] Ergon Energy submission, (Second round), p.7.

[261] NEMMCO submission, (Second round), p.15.

[262] Sp AusNet submission, (Second round), p.6.

In the draft Rule determination, the Commission considered the qualifying words in clause 7.2.2 and 7.2.3 would assist in providing a cross reference to clause 7.2.4 and the responsibility in relation to joint metering installations. On further reviews the Commission considers that the qualifying words add more confusion than clarity. As such the Commission agrees with United Energy and Alinta and has deleted the word. Ergon Energy has suggested that the qualifier be retained and expanded. The Commission considers the suggestion to be inappropriate because the provision can only operate if the clause 7.2.2 provision does not operate. That is clause 7.2.3(a) is mutually exclusive to clause 7.2.2.

In addition the Commission notes that the impact on clause 7.2.4(a) of the change to clause 7.2.2(a) is that the cross reference to clause 7.2.2 is no longer required. The variation to clause 7.2.2(a) was to remove all reference to the word "agreement", rendering part of clause 7.2.4(a) redundant.

5.26.4 Differences between the proposed Rule and the Rule to be made

The Commission has made various editorial changes as identified by NEMMCO, submissions and the Commission's own analysis.

5.27 Savings and transitional provisions

The Commission has included a number of savings and transitional arrangements in Chapter 11 of the Rule to be made that are required to implement the Rule. These amendments largely relate to the integration of first tier metering installations into Chapter 7 of the Rules where some of the amendments have been proposed by NEMMCO. The amendments are identified below.

- Metering installations for non-market generating units that meet the applicable jurisdictional requirements as identified in the Metrology Procedure for that installation on 30 June 2008 and continue to comply with those requirements, are taken to satisfy the requirements for metering installations for non-market generating units under the Rules (clause 7.3.7). A requirement has also been included that the applicable jurisdictional requirements be identified in a separate document called "the Jurisdictional Requirements Publication" (as opposed to the metrology procedure which was suggested in the draft Rule determination) so the obligations are transparent for both the party required to comply and the party required to enforce compliance;

- In relation to first tier load metering installations, similar transitional arrangements to those proposed for metering installations for non-market generating units have been included. First tier load metering installations that meet the applicable jurisdictional requirements on 30 June 2008 and continue to comply with those requirements, are taken to satisfy the requirements for first tier load metering installations. A requirement for the applicable jurisdictional requirements to be identified in a separate document has been included in the interests of transparency and to facilitate efficient compliance monitoring;

- Transitional arrangements have been included for particular first tier load metering installations in Victoria. These arrangements relate to first tier load

metering installations that have a type 5 or type 6 metering installation and the Market Participant is the responsible person for the installation. The objective of the provisions is to maintain the status quo in Victoria for these installations;

- The Minimalist Transitional Approach in Queensland as proposed by NEMMCO has been accepted by the Commission; and

- Provisions have been included to ensure that any action NEMMCO takes to update the Metrology Procedure for the purposes of the Rule but prior to the Rule commencing operation are taken to satisfy the requirements of the Rule. If NEMMCO undertakes the amendment of the Metrology Procedure in accordance with the Rules, NEMMCO's actions will be valid.

- In the draft Rule determination NEMMCO was required to update the Metrology Procedure by 30 June 2008, which is consistent with the timeframe for NEMMCO incorporating data validation, estimation and substitution procedures into the Metrology Procedure. NEMMCO have advised additional time is necessary to update the Metrology Procedure and the incorporated data validation, estimation and substitution procedures. The Commission has accordingly amended the Rule to be made to require the amendments to the Metrology Procedure to be completed by 31 July 2008. There is however no change to the date of commencement of the Rule to be made, which is 6 March 2008.

- NEMMCO must prepare and publish the first tier jurisdictional requirements in consultation with participating jurisdictions.