

1 July 2010

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Dear John,

**Draft Rule Determination: Provision of Metering Data Services and Clarification of Existing Metrology Requirements**

Thank you for this opportunity to respond to your draft Rule determination.

The AEMC's draft Rule determination has accepted AEMO's proposal to have a market participant, rather than AEMO, responsible for the remote collection of metering data, to create metering data providers as a new category of service providers and to clarify many of the terms relating to metering and metering services in chapter 7 of the Rules.

AEMO makes this submission to the draft Rule determination to address the following issues:

- the need for a single service provider to provide metering data services for complex transmission connection points;
- which market participant should have the responsibility for metering data services for metering installation types 1 to 4; and
- the drafting of a number of clauses and glossary terms.

A statement relating to the above issues in the draft Rule and our proposals to deal with these issues, consistent with the National Electricity Objective, is in the Attachment.

AEMO would be pleased if you could have these matters considered by the AEMC. For further details, please do not hesitate to contact Roy Kaplan, Manager Metrology Regulation, on (03) 9609 8331.

Yours sincerely,



**Terry Grimwade**  
Executive General Manager Market Performance

Enc. Attachment: Submission to the draft Rule determination ERC0092

# AEMO submission to Draft Rule Determination: Provision of Metering Data Services and Clarification of Existing Metrology Requirements

## 1. Introduction

In its draft Rule determination the AEMC has accepted AEMO's proposals that a market participant should be responsible for the remote collection of metering data, that "metering data provider" should be created as a new category of service provider and that many of the terms relating to metering and metering services in chapter 7 of the Rules should be clarified.

This submission to the AEMC's draft Rule determination addresses:

- In relation to the provision of metering data services for each transmission connection point, the need for a single service provider accredited for that task.

In its Rule change proposal, AEMO proposed that for complex wholesale transmission connection points that AEMO is able to nominate the metering data provider. The AEMC has proposed in the draft Rule a new category of metering data provider for transmission connection points. AEMO's view is that this approach would not meet all of the requirements for the efficient management of metering data at these sites. We propose an alternative approach whereby AEMO nominates the metering data provider (MDP) for these sites.

- Which market participant should have the responsibility for metering data services for metering installation types 1 to 4.

AEMO agrees that the AEMC's proposal whereby the financially responsible market participant (FRMP) is responsible for metering data services and for engaging the MDP is workable and we note that approach has the same outcome as AEMO's proposal for most type 1 to 4 metering installations. AEMO submits however that due to the importance of having a single party accountable for the metering and metering data that this matter requires further consideration.

The AEMC expressed concern about the efficiency of the arrangements for determining the responsible person for metering installation types 1 to 4. This concern gives rise to another option; that the responsible person for the metering installation be determined in the same way the AEMC has proposed in its draft Rule the responsible person is determined for metering data services. Consistent with this approach we propose that the responsible person being responsible for metering data services.

- The AEMC's proposed drafting of a number of clauses and glossary terms.

Our proposed drafting is designed to increase its consistency with the determination and to deal with for minor errors. Some of this drafting is in relation to the completeness of the AEMC's drafting for its proposal that the FRMP should be responsible for metering data services and some relates to other matters. We endeavour to make this distinction clear in the submission.

This submission is set out as follows:

- Section 2 sets out our views on the arrangements for the provision of metering data services for transmission connection points;
- Section 3 sets out our views on the party responsible for metering data services;
- Section 4 sets out our views on some further matters in the draft Rule;

- Section 5 provides some minor changes to proposed drafting;
- Section 6 sets out our views on transitional requirements for the Rule change; and
- Section 7 provides some examples of complex connection points that are discussed in section 2.

## **2. Provision of metering data services for transmission connection points**

The National Electricity Market (NEM) has a number of connection points at transmission boundary points, interconnectors and cross-border supply points have a greater degree of complexity than a “normal” connection points. Examples are provided in the discussion below. While it is important to ensure the MDP that is engaged has the relevant capabilities for these more complex connection points, it is essential in AEMO’s view that only one MDP manages the metering data at each of these connection points.

AEMO believes that the AEMC’s approach to defining a further category of registration does not fully resolve the issues relating to transmission connection points.

As an attachment to this submission we provide some examples of actual transmission connection points in the NEM that we regard as complex and where currently AEMO ensures this is only a single MDP. These cases are relatively common within the NEM and occur across all jurisdictions. These connection points need to be viewed relative to the most common connection point in the NEM, a customer’s connection point with a single meter housed on the customer’s premises with minimal access restrictions.

In summary our concerns for complex connection points are:

- The number of complex connection points totals approximately 1,500 out of a total of around 8.03 million connection points in the NEM. While the absolute number of these connection points is small it accounts for some 70% of the energy traded in the NEM, hence the key importance to the NEM of the integrity of this data.
- Meters at these complex connection points are often linked or ‘daisy chained’ together to a single communications interface. Access to the meters and interface are managed through passwords and access protocols. Some bus configurations have anywhere up to 10 feeders, feeding 3 different local retailers, allied to 3 different networks. The meters, may be nodal configured or not, and may total up to 20 meters (master and check) all daisy chained together to a single communications link. A single MDP allows a metering design that eliminates additional check meters that would be required if individual connection points had separate MPs and MDPs (Refer to case 1 and case 2 in the Attachment).
- Some transmission nodes have a number of connection points which constitute market connection points for a number of different local retailers or FRMPs. Under the Deeds arrangements today a single metering data agent (MDA) is responsible for these connection points across each region because of the complexity relating to data collection, data validation and nodal point validation. Our view is that it would be inefficient to have more than a single MDP involved at these connection points (case 1 and 2 in the Attachment).
- Additionally, there are also complex connection points in distribution networks where there are cross-border flows (flows between distribution regions) that fall into the complex category, not just transmission connection points. These need to be accounted for in wholesale settlement by an algorithm that refers the respective connection point energies back to the relevant transmission node for settlement (case 2 in the Attachment).

- There are situations where simple connection points become complex by the development of the market. For instance, where the physical connection of another market connection point which adjoins an existing connection point results in a complex arrangement of the installed metering (Refer to case 3 in the Attachment).
- Establishing a new category of registration for these connection points will not resolve the issue of maintaining a 'common' MDP across these complex transmission connection points. A single MDP is required so that all the requirements of data validation, calculation and substitution can be undertaken efficiently (case 1, 2 and 3 in the Attachment).
- There are no FRMPs associated with interconnectors, which are a subset of transmission network connection points; AEMO has traditionally engaged the MDP in these circumstances.

To date AEMO has managed the arrangements for data collection at transmission connection points under the deeds arrangements where the MDAs are agents of AEMO. Under these arrangements while the FRMP engages the MDA, AEMO can reject the nominated MDA under defined circumstances.<sup>1</sup> This approach is also underpinned by the metrology procedure which specifies that AEMO is "required to appoint" the MDP for "wholesale market boundary point transmission nodes and interconnectors".<sup>2</sup> This approach has been accepted by industry as providing an efficient outcome. The suggested drafting in our initial response allowed AEMO to determine the MDP for these connection points reflecting the position under the Deeds which has been accepted practice industry since the start of the NEM.

AEMO submits that the current arrangements will not be replicated by the AEMC's draft Rule nor will it be an efficient outcome for metering and metering data services for these connection points. We note the AEMC's view that there is adequate justification for AEMO to retain its power to nominate the Metering Data Provider for unusual points of supply on the transmission network.<sup>3</sup> AEMO proposes that the Rules incorporate the current provisions of the Deeds whereby AEMO may, in effect, nominate the MDP for wholesale metering points.

If the AEMC's draft Rule for a category of registration for MDPs for transmission connection points is retained then under AEMO's proposal above it would appoint MDP's registered under this category. However with the ability to appoint the MDP the additional category of registration, which would add administrative costs, is not required in our view. Consequently we recommend that the category of registration, "T", for MDPs is not proceeded with (see section 4 for our proposal for Table S7.6.2).

Consistent with the proposal discussed above we propose a new a paragraph for clause 7.2.5 (similar to paragraph (ab) in our original submission) as follows:

*AEMO may nominate the Metering Data Provider to be engaged under paragraph (aa) for a type 1, 2, 3 or 4 metering installation connected to, or proposed to be connected to, the Local Network Service Provider's network at a transmission network connection point, interconnector or wholesale market settlement connection point between distribution networks.*

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<sup>1</sup> MDA Nomination Rules clause 6.2(d) which sets out that AEMO may reject the nomination of an MDA if "AEMO reasonably considers that the appointment of the MDA would interfere with AEMO's market processes, including circumstances where measurements affecting more than one Market Participant are or will be taken at the relevant metering installation."

<sup>2</sup> Metrology procedure Part B, clause 9.1.1.

<sup>3</sup> AEMC, Rule Determination, National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010, 6 May 2010, page 47

### 3. The party responsible for metering data services

The Commission has asked for views on the efficiency of making the party responsible for metering data services for metering installation types 1 to 4 the financially responsible market participant. The AEMC's draft Rule is one of two options presented by AEMO in its Rule change submission, but not the option that AEMO recommended. AEMO proposed that the responsible person be assigned the responsibility for metering data services and for engaging the MDP. We are still of the view that this is the best option.

In its draft rule determination the AEMC asks whether there will be more audits if the responsibility for metering data services is transferred from AEMO to a market participant and whether compared to current arrangements there would be a material increase in the aggregate costs incurred by market participants needing to conduct their own quality assurance processes.<sup>4</sup> Compliance audits are currently conducted by AEMO under the service level requirements at the MDPs cost. Our view is that the audit regime will not change (increase or decrease), regardless of whether MDPs exist as agents of AEMO or directly under the rules. The market participants would not need to conduct their own audits and would be able to see the outcomes of AEMO's audits under their contract with the metering data provider replicating the current MDA arrangements.

In commenting on the AEMC's draft Rule we outline a further option (see 3.3) that was introduced above and provide some analysis on which approach represents the most efficient outcome for the market and customers. In considering these options our view is that the outcome should provide for a single party to have accountability for the metering installation and the metering data and the Rules framework for the responsible person should ideally be retained. We expand on our reasoning for adopting these principles in the next section.

#### 3.1 Single point of accountability

Under the AEMC's draft Rule, where the responsible person is not the FRMP, there would no longer be a single party with the Rules responsibility across the metering provision and metering data collection and processing. This policy could result in a de-linkage between the type of installed metrology and the technology employed by the MDP. Currently for 99.1% of the some 8.03 million connection points in the NEM there is a common party responsible for metering provision and metering data services.

AEMO's submission provided for the responsible person to engage both parties in order to ensure this de-linkage does not occur. With the expansion in methods for remote acquisition of data this is an important issue. The decision of what meter and communications interface to install must be integrated with the decision of which MDP to engage based on their capabilities.

Even in the market today mismatches between how the metering installation presents the data for collection and the MDA's capability to collect the data have occurred and AEMO has had to resolve some of these cases. Issues arising include:

- the meter installed is a 'data push' technology, but the MDP's system is based on a 'data request' functionality; or
- the MDP's system does not support the meter protocol of the device installed by the metering provider (MP).

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<sup>4</sup> AEMC, Rule Determination, National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010, 6 May 2010, page 22

Additional efficiency concerns where there is not a single point of accountability include:

- Where data errors occur as a result of a fault in the metering installation. AEMO's experience is that a meter repair or changeover will occur sooner where there is a single point of accountability for the metering installation and metering data services.
- Where changes to metering data need to be made as a result of the injection of current through the meter under a test (Rules clause 7.8.4). A single party with the responsibility for the metering installation and for metering data services will make it easier for the correction to metering data to be made as a result of the metering installation test.
- Whether, under the AEMC's proposal, a relationship between the FRMP, the RP and the service providers needs to be formalised. For instance, how does the MDP interact with the RP or can the MDP only interact with the FRMP? This is not a significant issue if there is a single point of accountability for metering provision and metering data services.

In its Rule determination the AEMC notes that "a consequence of this analysis, with respect to the provision of metering data services for metering installation types 1-4, is that it would not necessarily follow that there would be one party responsible for end-to-end collection and processing of metering data"<sup>5</sup>. Despite this acknowledgement the AEMC does not consider this detriment in its analysis against the National Electricity Objective (NEO). Our view is that having a single point of accountability for metering and metering data is important and will provide benefits to the market.

For smart meters, policy makers intend there to be a single party responsible for metering provision and metering data services. While this Rule change is not designed to accommodate smart meters it is important however that the service provision arrangements do not compromise the introduction of smart meters. In our view a single point of accountability is essential for avoiding any possible de-linkage of the metering, the telecommunications (which itself will be subject to choice) and data collection.

### **3.2 Responsible person**

We note that the AEMC's draft Rule has changed the party responsible for metering data services for metering installation types 5 to 7 from the responsible person to the local network service provider (LNSP) (noting that the LNSP is the exclusive responsible person for these metering installation types).

In analysing the role of the LNSP and the FRMP the Commission applies current arrangements whereby the LNSP is responsible for the provision of metering data services so that for metering installation types 5-7, the LNSP would be responsible for both the provision of the metering installation and the provision of metering data services. Based on this approach clause 7.2.3 (j) sets out that the LNSP rather than the responsible person is responsible for engaging an MDP to carry out metering data services.

Our submission was not concerned with metering installation types 5-7; however it is the responsible person who is currently engages metering data services for these

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<sup>5</sup> AEMC, Rule Determination, National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010, 6 May 2010, page 23

metering installation types. While AEMO agrees that this is not an effective change in the party that performs these services we submit that the AEMC further consider:

- Its policy for the responsible person framework in the Rules including whether the responsible person is or is not to be associated with metering data services as well as with metering provision. While it is clear that the responsible person is either the FRMP or the LNSP, assigning responsibilities to the responsible person allows the Rules to set out separately;
  - clear responsibilities of the responsible person, and
  - which party can be or is the responsible person based on certain criteria which currently includes metering installation type.
- Whether providing some choice in who takes on the role of the responsible person provides valuable flexibility.
- That allocating to the responsible person the responsibility for the provision of metering data services may better provide for the responsibilities for further meter types or change in responsibility for meter types.
- The relationships in the market where the MDP is required to advise the responsible person, for instance where a meter malfunction has been detected. There is a question of whether it is appropriate for the MDP to advise the responsible person directly or whether the MDP should only advise the person who engaged them, the FRMP.<sup>6</sup>
- Whether consistent with the removal of the responsible person as the party responsible for metering data services for metering installation types 5-7, that the Rules should designate the LNSP as being responsible for the provision of metering installation types 5-7, rather than the responsible person.

The change in the framework for the responsible person needs to be fully considered against the NEO. The change appears to have been predicated on there being no choice in responsible person and therefore that it required minimal justification. AEMO would support a comprehensive consideration of this matter that includes the consideration of the responsible person's role in metering data services for metering installation types 1 to 4 as discussed above.

### **3.3 Options for party responsible**

The AEMC in its Rule Determination presented the view that the obligation on the LNSP to make an offer to be the responsible person may not be efficient. Considering this view gives rise to a further option that AEMO introduced above for the AEMC's consideration. The new option is that the obligation on the LNSP to act as the responsible person for the metering installations type 1 to 4 be removed and replaced by a provision that allows them to make an offer. The responsible person would be responsible for metering provision and metering data services under this proposal.

With this new option there are three options available for the responsibility for metering data services for metering installation types 1 to 4 that have nearly equivalent outcomes for the market. These options are, with a summary of their benefits or detriments, as follows:

- Option 1. The AEMC's position in the draft Rule whereby the FRMP has the responsibility for metering data services and the LNSP may make an offer to perform this role. Features of this approach include:

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<sup>6</sup> Relevant clauses identified include; 7.3.7 (d), 7.11.2 (a) (10)

- no clear single point of accountability for metering and metering data;
  - removes responsible person as being responsible for metering data services; and
  - AEMC view that the existing obligation on LNSP to act as responsible person is likely to be inefficient.
- Option 2. The position in AEMO's original submission where the responsible person (determined as currently) is responsible for metering data services and where the LNSP must make an offer to perform the role of responsible person. Features of this approach include:
- there is a single point of accountability for metering and metering data;
  - retains the responsible person framework and role in metering data services; and
  - AEMC view that the obligation on the LNSP to act as responsible person for metering data services is likely to be inefficient.
- Option 3. A new related option introduced above whereby how the responsible person is determined is varied so that the LNSP is not obligated to be the responsible person but the responsible person is responsible for the metering installation and for providing metering data services. Features of this approach include:
- there is a single point of accountability for metering;
  - retains responsible person roles in the metering installation and metering data services; and
  - LNSP not obligated to make offer to perform responsible person role increasing efficiency.

### **3.4 Consideration of the 3 options**

In presenting our views on the advantages and disadvantages of each of the three options outlined above, our principal concern is that the outcome of this matter should provide for a single party to have accountability for the metering installation and the metering data and the broad Rules framework for the responsible person should be retained.

There is not much difference in outcome between AEMO's proposal that the responsible person is responsible for metering data services and engages the MDP, and AEMC's proposal that the FRMP is responsible for metering data services and engages the MDP. Additionally there is not much difference in the option where the LNSP does not have an obligation to undertake the responsible person role where the responsible person is again either the FRMP or the LNSP. This is because for type 1 to 4 metering installations, the FRMP most often chooses to be the responsible person and accepts responsibility for the metering installation and for engaging the MP.

The outcome is either that the FRMP as responsible person or the FRMP directly would be responsible for metering data services. Hence under either AEMC's or AEMO's proposal the FRMP most often would have the responsibility for the metering as well as the metering data which in our view is an advantageous outcome.

The key point of distinction between the two approaches is the party who has the obligation to carry out metering data services. Under the AEMC's draft Rule for metering installation types 1 to 4 the FRMP has the obligation to carry out metering data services and under AEMO's proposed approach it is the responsible person. Currently the responsible person's role for metering installation type 1 to 4 is limited to metering provision; AEMO's proposal extends that role to metering data services. The responsible person is determined by the FRMP who can take on the Rules responsibilities for metering services itself or, if it accepts the LNSP's offer, the LNSP is the responsible person and has the relevant Rules obligations for metering services.

### *3.4.1 Option 1: FRMP as the party that engages the MDP for metering installation types 1-4*

As noted there are occasions when the FRMP chooses not to be the responsible person for metering installation types 1 to 4. Under the AEMC's draft Rule, the FRMP would not be able to avoid having the Rules responsibility for metering data services, as it would if it were the responsible person who had the Rules responsibility.

Currently in the NEM, 6.5% of registered connection points with metering installation type 1 to 4 do not have the FRMP as the responsible person. If participants choose not to be the responsible person then, if they had the option, they may also choose not to be responsible for metering data services.

Just as the Rules provide for the FRMP to choose whether or not they want the Rules responsibilities for the metering installation, further consideration needs to be given to whether the Rules should give the same choice with respect to metering data services. While this approach places a final obligation on the LNSP, under the AEMC's proposal the FRMP cannot avoid the responsibilities.

The AEMC states that "making the FRMP responsible for the provision of metering data services for metering installation types 1-4 is the efficient outcome because the FRMP receives clear and direct benefits from the provision of metering data services".<sup>7</sup>

While the FRMP might have the greatest incentive to innovate, as well as the FRMP, the market, the LNSP and the local retailer all benefit from the market data. Indeed, half hourly data that is collected for weekly market settlement is not a requirement that the FRMP would always specify to meet its customer billing requirements efficiently.

Under AEMO's proposal the FRMP flags its interest in metering and metering innovation through accepting the responsible person role and taking on the Rules responsibilities.

The AEMC notes that making the FRMP responsible represents an incremental change that is consistent with current operational practice where a FRMP engages a service provider to provide metering data services. AEMO notes that there is also an acceptable incremental change where the FRMP is the responsible person or where the LNSP is the responsible person. The current approach allows the FRMP to engage the MDA without the attendant Rules responsibilities, hence there a change in their responsibilities in the FRMP taking on the formal Rules responsibilities. As

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<sup>7</sup> AEMC, Rule Determination, National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010, 6 May 2010, pages 5-6

noted above the LNSP performing metering data services for metering installation types 1 to 4 is also a similar and acceptable incremental change.

In our view there are changed responsibilities if the FRMP undertakes metering data services, whether as the responsible person or as the FRMP, and clearly a greater change for those FRMP's that have not chosen to carry out the responsibilities of the responsible person. The AEMC has not clearly established, in our view, that their preferred approach best meets the efficiency requirements of the NEO

### *3.4.2 Option 2: Responsible person undertakes metering data services with an LNSP obligation*

While the FRMP chooses to be the responsible person the advantages of a single party having end-to-end responsibility for the meter and the metering data is achieved. There are occasions however when the FRMP chooses the LNSP to be the responsible person. In this situation the FRMP demonstrates a preference not to accept the Rules obligations and have the LNSP as the responsible person carry out the Rules obligations. Under AEMO's proposal, the FRMP's choice of whether to perform the responsible person role is the mechanism whereby the FRMP makes the decision to accept the Rules metering obligations.

The AEMC notes that it "is concerned about AEMO's recommendation because it effectively confers a new regulatory obligation on the LNSP without there being any ostensible efficiency benefit".<sup>8</sup>

The obligation for metering data services must be placed on the FRMP or the LNSP and it will be a new obligation for either of these parties. AEMO agrees that its proposal obligates the LNSP to accept the responsible person role if the FRMP declines it, in this sense the LNSP could be considered the provider of metering data services of last resort for this market segment. The alternative of placing the obligation on the FRMP means that the FRMP cannot avoid this obligation as discussed above.

While it is not explicit in the Rules (this is one of the issues this Rule change proposal is addressing), the LNSP is currently responsible (as the responsible person) for metering data services and for engaging the MDP for metering installation types 5-7.

The FRMP today does not have the responsibility for remote acquisition and metering data services, AEMO has that responsibility. Hence the FRMP's role under AEMC's proposal would change from nominating and engaging the MDA to responsibility under the Rules for metering data services and for engaging the MDP.

On efficiency grounds it is not clear that an obligation should not be placed on the LNSP. The LNSP has developed the capability to comply with the Rules for metering installation types 5 to 7 and performing the responsible person role for metering installation types 1 to 4, hence, in our view; it is capable of accepting the metering data services obligations for metering installation types 1 to 4. On the other hand, the FRMP has had no experience carrying out the Rules obligations for metering data services but has experience as the responsible person and engaging the MDA.

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<sup>8</sup> AEMC, Rule Determination, National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010, 6 May 2010, page 22

### 3.4.3 Option 3: Responsible person undertakes metering data services with no LNSP obligation

AEMO notes the AEMC's concern that the existing obligation for the LNSP to make an offer to be responsible person for the metering installation may not be efficient. The AEMC states, "The Commission considers that conferring an obligation on the LNSP to respond to a request for an offer to be the Responsible Person would not likely contribute to the achievement of the NEO".<sup>9</sup> AEMO understands that this concern relates to the need for the LNSP to have the capability of providing these services yet cannot be sure if its services will be required.

AEMO agrees that this obligation adds some inefficiency to the market and it is for this reason that we suggest a further option, that is the obligation on the LNSP to make an offer to act as the responsible person, for the provision of the metering installation, be deleted allowing them to voluntarily make an offer if they wish to provide these services. The responsible person under this arrangement would be responsible for metering provision and metering data services for metering installation type 1 to 4.

The responsible person undertaking metering data services without an LNSP obligation to act as the responsible person retains some valuable features associated with metering responsibilities; there being a single point of accountability and the retention of the responsible person framework for the metering installation and for metering data services. While these benefits are also available under AEMO's original proposal this approach also removes the inefficiency identified by the AEMC in requiring the LNSPs to have the capability to be responsible person whether it is used or not.

### 3.5 Drafting for responsible person for metering installations type 1 to 4

AEMO proposes the following drafting for clauses 7.2.2, 7.2.3 and 7.2.5(a) for the AEMC's consideration dealing with the proposals above for:

- removing the obligation on the LNSP to act as the responsible person for metering installation types 1 to 4;
- for completeness, the drafting for clause 7.2.5 that was set out in section 2 for transmission connection points; and
- a revised glossary term for responsible person.

If the AEMC agrees that the responsible person should have the responsibility for metering data services, the drafting in our original submission for clauses 7.2.1, the remaining paragraphs of clause 7.2.5 for the responsibilities of the responsible person and for later clauses that set out the more detailed responsibilities of the responsible person are consistent with this approach.

#### 7.2.2 Responsibility of the Market Participant

- (a) *A Market Participant may elect to be the responsible person for a metering installation that is a type 1, 2, 3 or 4 metering installation.*
- (b) *A Market Participant is the responsible person for a type 1, 2, 3 or 4 metering installation if:*

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<sup>9</sup> AEMC, Rule Determination, National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010, 6 May 2010, page 22

- (1) the *Market Participant* elects not to request an offer from, or does not accept ~~any~~the offer of, the *Local Network Service Provider* for the provision of a *metering installation* under clause 7.2.3; or
- (2) an agreement under clause 7.2.3 is terminated due to a breach by the *Market Participant*.

### 7.2.3 Responsibility of the Local Network Service Provider

- (a) The *Local Network Service Provider* is the *responsible person* for:
  - (1) a type 1, 2, 3 or 4 *metering installation* connected to, or proposed to be connected to, the *Local Network Service Provider's network* where the *Market Participant* has accepted an offer from the *Local Network Service Provider's offer* in accordance with paragraphs (b) and (c); and
  - (2) a type 5, 6 or 7 *metering installation* connected to, or proposed to be connected to, the *Local Network Service Provider's network* in accordance with paragraphs (d) to (i).

#### Types 1 - 4 metering installations

- (b) A *Market Participant* may request in writing an offer from the *Local Network Service Provider* to act as the *responsible person* where a type 1, 2, 3 or 4 *metering installation* is, or is to be, installed.
- (c) If the *Local Network Service Provider* receives a request under paragraph (b), the *Local Network Service Provider* must either:
  - (1) -no later than 5 business days after the Local Network Service Provider receives the written request from the Market Participant advise the Market Participant that it will not be providing an offer to act as the responsible person in respect of that metering installation; or
  - (2) no later than 15 business days after the Local Network Service Provider receives the written request from the Market Participant provide an offer to the Market Participant to act as the responsible person in respect of that metering installation that includes:
    - (i) provide the Market Participant with the name of the *Metering Provider* that would be engaged under clause 7.2.5(a) and the name of the Metering Data Provider that would be engaged under clause 7.2.5(aa); and
    - (ii) provide the Market Participant with the terms and conditions relating to the offer to provide that service under clause 7.2.1(a),  
no later than 15 business days after the Local Network Service Provider receives the written request from the Market Participant.

### 7.2.5 Engagement of a Metering Provider and Metering Data Provider

- (a) A *responsible person* must for each *metering installation* for which it is responsible:
  - (1) engage a *Metering Provider* or *Metering Providers* for the provision, installation and maintenance of that installation unless the *responsible person* is the *Metering Provider*; or

- (2) subject to the *metrology procedure*, allow another person to engage a *Metering Provider* to install that installation.

(aa) A responsible person must for each *metering installation* for which it is responsible, engage a *Metering Data Provider* for the provision of *metering data services* unless the *responsible person* is the *Metering Data Provider*.

(ab) AEMO may nominate the *Metering Data Provider* to be engaged under paragraph (aa) for a type 1, 2, 3 or 4 *metering installation* connected to, or proposed to be connected to, the *Local Network Service Provider's network* at a *transmission network connection point, interconnector* or *wholesale market settlement connection point* between *distribution networks*.

Glossary term for responsible person

Consistent with the responsible person undertaking the responsibility for metering data services, we suggest the Glossary term for responsible person is varied to read;

The person who has responsibility for:

- (1) the provision, installation and maintenance of a *metering installation*; and  
(2) the provision of *metering data services*,

-as described in Chapter 7.

#### 4. Further matters

This section contains deals with some less substantive matters in the AEMC's draft Rule where we propose some variations to the draft Rule.

#### **Voluntary role for LNSP to provide metering data services for metering installation types 1-4**

The draft Rule (clause 7.2.2 (c)) provides for the LNSP "to be responsible for metering data services" if the FRMP receives and accepts a relevant offer from the LNSP. The draft Rule places no obligation on the LNSP to make such an offer.

Our comments on the drafting of this provision are:

- It is important to ensure that the drafting of this clause does not confuse this voluntary provision with the obligation the LNSP has to act as the responsible person for metering installation types 1-4 under clause 7.2.3.
- Draft clause 7.2.2 (d) sets out that the market participant must ensure that metering data services are provided in accordance with the Rules. If the LNSP performs this function under draft paragraph (c) then the LNSP is, we assume, responsible for ensuring the functions are carried out in accordance with the Rules. There appears to be no corresponding obligation on the LNSP to ensure that metering data services are carried out in accordance with the Rules.
- There does not seem to a clear obligation in this section on the LNSP to engage an MDP, if the LNSP makes an offer that is accepted by the FRMP to be responsible for metering data services. There is such an obligation on the FRMP if they are responsible under paragraph (c). Despite there being such an obligation on the LNSP under the registration

requirements (clause 7.4.2A (c)) consideration should be given to setting out the clear requirement to engage an MDP in clause 7.2.2.

### **Rules Clause 7.1.3**

AEMO accepts the intent of new clause 7.1.3 as providing clarity regarding procedures developed under the Rules. AEMO suggests that it would be helpful if this clause allowed minor changes to be undertaken without the application of the Rules consultation procedures. If AEMC accepted this proposal clause 7.14.4 (e) or a clause with similar intent could be added as a new paragraph to clause 7.1.3, with appropriate change to ensure it applies to all procedures under the Rules. If this was done then clause 7.14.4 (e) would no longer be required.

### **Guidelines for participants**

It is proposed (7.2.1 (b), 7.2.2 (e) and 7.2.3 (l)) that AEMO establish Guidelines for the responsible person, the FRMP and the LNSP. Given the overlap in these proposed documents AEMO proposes instead that the Rules requires AEMO to establish a Guideline entitled, “Guideline for Metering Services” or “Guideline for Participants undertaking Metering Services” which would apply to all the above parties.

### **Rules clause 7.3.1 - Metering installation components**

We suggest that paragraph (a)(4) in the draft Rule be clarified so that it is clear that a communications interface is not required for all metering installations. We suggest the following drafting for paragraph (a)(4):

include, where required, a *communications interface* to meet the requirements of clause 7.2.5(d)(4);

Consistent with this proposal, our view is that clause 7.3.1(b)(6) can be deleted as the paragraph above deals with the need or not to include a communications interface.

### **Rules clause 7.3.1 - Metering installation components**

Clause 7.3.1 (g) allows the metering installation to be used for additional purposes. AEMO notes that while the AEMC has varied this provision to acknowledge that data is available to other parties apart from AEMO that a weakening of the requirement to ensure that other purposes do not interfere with the metering installation’s primary purpose has been introduced without explanation or justification. Additionally a “best endeavours” requirement in this clause is not consistent with proposed clause 7.11.2 (b)(2) where MDPs may supply additional data services provided, “the provision of additional data services must not impact the provision of *metering data services*.”

We propose the following revised drafting for paragraph (g):

- (g) Where a *metering installation* is used for purposes in addition to the provision of *metering data* to AEMO and persons eligible to receive *metering data* under clause 7.7, then the *Responsible Person* when agreeing to any additional purpose(s) under paragraph (c) must: ~~use reasonable endeavours to ensure that:~~
  - (1) ~~ensure~~ that use ~~does must~~ not cause an infringement of the requirements of the *Rules*;

- (2) ~~the responsible person must~~ co-ordinate with the persons who use the *metering installation* for such other purposes; and
- (3) ensure the *metering installation* ~~must comply~~complies with the requirements for operational *metering* as detailed in Chapter 4 of the *Rules*.

### **Rules clause 7.4.2 - Qualifications and registration of Metering Providers**

Clause 7.4.2 (bb) and 7.4.2A (f) are matters that have been included in the service level procedures under the existing paragraph (bc) and do not relate to accreditation. To account for this we propose that these paragraphs are included under clause 7.14.1A which is concerned with service level procedures with appropriate redrafting of clause 7.4.2.

### **Rules Clause 7.4.2 and 7.4.2A - Network service providers**

Clarification of the role of NSPs is suggested for clarity and accuracy. NSPs are not responsible for metering provision services; this is the responsibility of the responsible person who may be the NSP depending on the circumstances.

AEMO proposes 7.4.2 (c) for Metering Providers reads:

*Network Service Providers*, who are responsible persons for metering installations, must either register as a *Metering Provider* or enter into agreements with *Metering Providers* for ~~the provision, installation and maintenance of~~ services related relating to metering the metering installations for which they are responsible.

Similarly for clause 7.4.2A (c) for metering data services, AEMO proposes:

*Network Service Providers*, who are responsible for metering data services, must either register as a *Metering Data Provider* or enter into agreements with *Metering Data Providers* for the provision of *metering data services* for those metering installations.

### **Proposed Rules clause 7.7 (c1)**

AEMO suggests that this clause is not necessary and can be deleted. This proposed clause substantially duplicates proposed clause 7.11.2 (a) (6), it is this clause 7.11.2 that places obligations on MDPs. Clause 7.7 is concerned with entitlement to data rather than obligations of MDPs.

### **Rules Clause 7.7 (e)**

While AEMO did not propose a change to this clause in its initial proposal, however we now propose a change following further review.

AEMO considers that clause 7.7(e) of the Rules requires additional clarification because, if interpreted literally, this clause could require AEMO to provide a registered participant with information that it is not entitled to have. Under this clause, it appears that AEMO must supply a requesting registered participant with a copy of the information the Ombudsman has requested from AEMO. Potentially, AEMO could be required to provide the requesting registered participant with information associated with the NMI for periods when they were not financially responsible. AEMO considers that providing this information in this circumstance is a privacy issue and would be contrary to the requirements of clause 7.7(a)

which allows registered participants to have this information when they have a financial interest in the metering installation.

We propose the following revised drafting for paragraph (e):

*AEMO must notify the relevant Registered Participant of any information requested by an Ombudsman under rule 7.7(d) and, if it is requested by that Registered Participant, supply the Registered Participant with a copy of any information provided to the Ombudsman for the period or periods that the Registered Participant is financially responsible.*

#### **Rules Clause 7.8.1 (b)**

While AEMO did not propose a change to this paragraph further review, taking into account that AEMO would be no longer responsible for the remote acquisition of metering data, suggests that this paragraph can be deleted.

#### **Rules Clause 7.8.2 (c)**

AEMO proposes the following change to clause 7.8.2(c) to ensure that it is clear that only read-only passwords are required and that this mechanism only provides access to the metering installation. It does not provide access to metering data which is held in the relevant database, customers have a right to metering data under clause 7.11.2(a)(6):

*The Metering Provider must only allocate 'read-only' passwords to Market Participants and Local Network Service Providers. For the avoidance of doubt, a financially responsible Market Participant may allocate only a that 'read-only' password to its customer who has sought access to its *energy data* ~~or metering data~~ in accordance with rule 7.7(a)(7).*

#### **Rules Clause 7.8.4 (c)**

Consistent with the AEMC's proposal that the FRMP (or the LNSP) is responsible for metering data services for metering installation types 1 to 4 and that the LNSP is responsible for metering data services for metering installation type 5 to 7, rather than the responsible person then this clause requires redrafting. While AEMO has initially proposed minimal changes to paragraphs (a) and (b), our view is that 7.8.4 (b) as well as paragraph (c) should be clarified to ensure these obligations are clarified especially where different parties may be responsible.

AEMO interprets paragraph (b) as allowing the energy used in the meter test, where this is material, to be subtracted from the data in the metering data services database. The current drafting does not make this clear. We propose the following revised drafting for paragraphs (b) and (c):

(b) If an on-site test of a *metering installation* requires the injection of current, the *responsible person* must ensure that:

- (1) the *energy data* stored in the *metering installation* is inspected; and
- (2) if ~~necessary~~ following the inspection under subparagraph (1), alterations are made-necessary to the *metering data* ~~in accordance with paragraph (c)~~;

to ensure that the *metering data* in the *metering data services databases* and the *metering database* is not materially different from the *energy* consumed

by the financially responsible Market Participant's customer volumes flowing through the connection point during the period of the test, the financially responsible Market Participant or Local Network Service Provider (whoever is responsible for metering data services) is advised that alteration of metering data is required.

- (c) If ~~a responsible person~~ considers alterations are necessary under paragraph (b)(2), the financially responsible Market Participant or Local Network Service Provider (whoever is responsible for metering data services) ~~the responsible person~~ must:
- (1) notify AEMO that alteration to the *metering data* is necessary; and
  - (2) advise the ~~financially responsible Market Participant~~ Metering Data Provider of the need to change the *metering data*, and ~~the financially responsible Market Participant must~~ arrange for the *Metering Data Provider* to:
    - (i) alter the *metering data* for the *connection point* held in the *metering data services database* in accordance with the validation, substitution and estimation procedures in the *metrology procedure*;
    - (ii) submit the altered *metering data* to the *Registered Participants* and the *Network Service Provider* who are entitled to the data in accordance with rule 7.7 and AEMO.

## Heading for Rules clause 7.11.2

AEMC proposes “Metering Data Services” for the heading of this section. AEMO considers that AEMC’s proposal could be interpreted as meaning that this clause contains all of the requirements of metering data services. This would be incorrect, for example, clause 7.11.3 sets out for data storage requirements which are a part of the metering data services task. In its submission AEMO proposed an alternative heading for this section to avoid any possible confusion, for clarity we suggest the heading originally proposed or a heading other than “metering data services” is considered.

## Rules clause 7.11.2 (a) paragraphs (6) and (7)

AEMC proposes paragraphs that have substantial overlap and do not include AEMO as a specific party to whom data must be delivered. We propose that these paragraphs can be combined. Additionally while AEMO is “entitled” to receive data under clause 7.7, AEMO considers that because of the importance of the settlements to the market that a specific requirement to deliver data to AEMO for this purpose is included rather than just an “entitlement”. Currently while AEMO is responsible for the remote acquisition of data such a clause was not required as AEMO or its agents already had the data.

AEMO proposes that clause 7.11.2(a)(7) in its original submission be considered for inclusion as a clear obligation. It is proposed that these paragraphs read:

- (6) ~~delivery of providing~~ metering data, relevant NMI Standing Data or information from the *metering register* for a *metering installation* to persons entitled to receive data in accordance with rule 7.7;
- (7) the delivery of metering data and relevant NMI Standing Data to AEMO for settlements; ~~the delivery of metering data and relevant NMI Standing Data for a~~

~~metering installation to persons entitled to receive data in accordance with rule 7.7;~~

### **Rules clause 7.11.2 (a)(10)**

This paragraph requires the MDP to notify the responsible person of a metering installation malfunction. Given the respective responsibilities for metering provision and metering data services that have been proposed it is unclear whether it is appropriate that the MDP notify the responsible person. Rather, the MDP should notify the party that engaged it to carry out metering data services; this is the FRMP under the AEMC's proposal.

As noted earlier, clarity is required in the relationships of all the parties involved with metering. There is question of whether, under the AEMC's proposal, a relationship between the FRMP and the RP needs to be formalised.

### **Rules clause 7.11.3 (e)**

In paragraph (e) AEMO considers it would be clearer if "Market Participant" were replaced with "financially responsible Market Participant".

### **Rules clause 7.11.3 (j)**

AEMO proposes a change to this paragraph to ensure it is consistent with the terminology in other paragraphs for the party responsible for metering data services under the AEMC's proposal. AEMO proposes, which also corrects a grammatical issue in this paragraph:

The *Metering Data Provider* must arrange with the financially responsible Market Participant or the Local Network Service Provider (whoever is responsible for the provision of metering data services) ~~the party responsible for the provision of metering data services for a particular metering installation (either the financially responsible responsible Market Participant or the Local Network Service Provider as the case may be)~~ to obtain the relevant *metering data* if *remote acquisition*, if any, becomes unavailable, and the *responsible person* must assist the *financially responsible Market Participant* or the Local Network Service Provider (whoever is responsible for the provision of metering data services) in obtaining that *metering data*.

### **Rules clause 7.12 (f)**

Under AEMC's proposal both subparagraphs (1) and (2) are in effect the same. They both require the clock to be "set" or "reset". AEMO's view is that there is a need for a distinction between these two requirements. That is, in one case the clock is checked and the in the other it is reset (it is the MP who "sets" the clock, not the MDP). In this way the clock is only reset if it is outside the required specification. This is important because when a clock is reset the data is checked to ensure that it is correctly allocated with respect to the "reset" time intervals.

AEMO proposes the following drafting for subparagraph (1):

~~check set~~ the accuracy of the clock of the *metering installation* ~~so that it is with~~ referenced to *Eastern Standard Time* to a standard of accuracy in accordance with schedule 7.2 relevant to the *load* through the *connection point* on each occasion that the *metering installation* is accessed;

### Rules clause 7.14.3 (a)(vi)

We suggest that this subparagraph needs to specify that these obligations in the metrology procedure are limited to the metering provision and metering data services. Hence we propose the following change for subparagraph (a)(vi):

with respect to the provision, installation and maintenance of metering installations and the provision of metering data services, the obligations of *responsible persons, financially responsible Market Participants, Local Network Service Providers, AEMO, and Metering Providers and Metering Data Providers*;

### Rules S7.1

In the boxes showing the responsibility for metering data services we suggest that the brackets around “or Local network Service Provider” be removed as the LNSP is clearly responsible for metering data services for metering installation types 5 to 7. Additionally the service provider for metering data services is the “metering data provider” Not the financially responsible market participant.

### Rules S7.2.1 (b)

We suggest the following change for clarity:

*A Registered Participant may* require the *responsible person* to arrange for a *metering installation* to meet a higher level of accuracy, with the full costs of this work being met by that *Registered Participant*.

### Rules S7.2 - Table S7.2.3.1

In this table, concerned with accuracy of metering installations, for clarity duplicated provisions have been removed. We suggest there are further opportunities to remove duplicate material and clarify the table and propose:

- Item 3 (6) can be deleted as item 3 (2) already says that the value of “x” is to be included into the metrology procedure by AEMO, and (6) (ii) is a data processing matter that duplicates the requirement of clause 7.14.1 (in any case accumulated metering data does not apply to metering installation type 5, interval metering data applies).
- Item (4)(5) subparagraphs (i), (ii) and (iii) are not required similarly to the above discussion. That the metrology procedure must include the value of “y” is included in (4)(2), clause 7.14.1 already includes the requirements regarding the conversion of data and substitution and estimation. Additionally, the reference to periods when data may not be available seems to relate to other clauses that are proposed to be deleted relating to “delays” in transferring data.

### Rules S7.2.4

AEMO had proposed a change to the table of requirements for check metering that included the deletion of the centre column of the table in (a). AEMC has not adopted this approach.

AEMO’s view is the centre column of this table, with its reference to energy volume associated with “metering points”, is inconsistent with table S7.2.3.1 for the volumes associated with metering installation types at “connections points”. Our view is that this is an important element of consistency in clarifying the distinction between connection points and metering points and hence the column should be removed from the table.

## Rules S7.4

AEMO has proposed new categories of registration for metering providers in S7.4 for metering installation types 5 & 6. These categories include "installation only" that were not previously specified in the Rules where it was understood that metering providers were registered for "Provision, installation and maintenance" of metering installations.

While the AEMC has accepted our proposal to include "installation only" categories for metering installation types 5 and 6, to ensure that the revised arrangements are clear we propose a further change to S7.4.2 (a) and (b) "categories of registration" as follows:

- (a) Registrations for Metering Providers, in relation to the provision, installation and maintenance of metering installation types 1, 2, 3 and 4, must be categorised in accordance with Tables S7.4.1, S7.4.2 and S7.4.3 or other procedures approved by AEMO.
- (b) Registrations for Metering Providers in relation to the provision, installation and maintenance (unless otherwise specified) of metering installation types 5 and 6 must be categorised in accordance with Table S7.4.4 with the capabilities established in the *metrology procedure*.

We propose a corresponding change to the new table S7.4.4 to that "installation only" is clearly associated with the category of registration.

Category	Competency
5A <u>Installation only</u>	Class 1.0 and class 1.5 whole current Wh meters with <math><0.3/\cos\phi\%</math> uncertainty. <u>Installation only</u>
6A <u>Installation only</u>	Class 1.5 whole current Wh meters with <math><0.3/\cos\phi\%</math> uncertainty. <u>Installation only</u>
5B	Class 1.0 and class 1.5 whole current or CT connected Wh meters with <math><0.3/\cos\phi\%</math> uncertainty. <u>Provision, installation and maintenance services</u>
6B	Class 1.5 whole current or CT connected Wh meters with <math><0.3/\cos\phi\%</math> uncertainty. <u>Provision, installation and maintenance services</u>

## Rules S7.6

In section 2 we recommended that the category of registration "T" for MDPs is not proceeded with. Consistent with this recommendation our proposal for Table S7.6.2 is as follows;

Metering installation type	Categories of registration	
1, 2, 3 and/or 4	Category 1D, 2D, 3D, and/or 4D (for <i>remote acquisition, processing and delivery of metering data</i> )	
5 and/or 6	Category 5C and/or 6C (for manual collection of <i>metering data</i> only)	Category 5D and/or 6D (for manual collection, processing and delivery of <i>metering data</i> )
7	Category 7D (for processing and delivery of <i>metering data</i> )	

### Rules S7.6.3

If the LNSP can have responsibility for metering data services for metering installation types 1 to 4 then LNSP needs to be added to the list in paragraph (b).

### Rules Glossary term – Metering installation malfunction

AEMO proposes a change to this new glossary term to make it clear that a malfunction is associated with the metering installation and one type of malfunction is that “incorrect” data is recorded:

The full or partial failure of the *metering installation* which means that: ~~*metering data that meets the requirements of the Rules or procedures authorised under the Rules cannot be collected.*~~

- *the metering installation does not meet the accuracy requirements of schedule 7.2, or*
- *the metering installation does not record or records incorrectly the energy data, or*
- *the metering installation does not present the energy data for collection.*

### Rules Clause 7.11.1

AEMO proposes further changes to this clause. While we note the changes that the AEMC has proposed, we are concerned that:

- this clause now appears to have little value, all of the substantive requirements duplicate requirements in other parts of the chapter;
- paragraph (c) appears to specify a case that does not correspond to an operational metering installation type;
- references to “capability” are likely to be increasingly ambiguous;
- the lack of specificity in the obligations including that metering installation types are not specified has the potential to confuse the market;
- the requirement to “ensure compliance with chapter 3”, where chapter 3 does set out the relevant matter; and
- some of the submissions sought clarification of the matters addressed in this clause.

This clause, earlier in the development of the market, set out important requirements for market settlement based on whether the metering installation had remote communications. The focus now is more balanced on the need of the market and the broader business needs of the participants. AEMO now routinely manages market settlement that allows for data that might not be received for 3 months after the energy was consumed.

There is however an important principle embodied in paragraphs (a) and (b) that should be retained, that is, that metering installations with remote communications and where interval data is collected should be classified as type 1 to 4. The requirements covered by other clauses are as follows:

- that metering installations should be compliant with the accuracy requirements of S7.2 is covered by clause 7.3.4(a);
- that data should be delivered in accordance with the timeframes and performance standards of the service level procedures is covered by 7.11.3(c) and 7.14.1A; and

- that data is validated, estimated and substituted in accordance with the metrology procedure is covered by clause 7.11.2(a) sub-paragraphs (2), (3) and (4).

Our proposal retains the intent of paragraph (a) while increasing specificity and moves the requirements of clause 7.11.5 to this clause which brings key detailed requirements for metering data together.

If the AEMC accepts this approach there are consequential changes to S7.2 (Table S7.2.3.1) which are outlined below in our proposed drafting.

Our proposed drafting (not marked-up) for clause 7.11.1 is as follows.

Metering data

- (a) *Metering installations* that have *interval metering data* collected by *remote acquisition* must be registered as a *metering installation type* 1, 2, 3 or 4 in accordance with S7.2.
- (b) [Deleted]
- (c) [Deleted]
- (d) [Deleted]
- (e) For type 1, 2, 3, 4 and 5 *metering installations metering data* relating to:
  - (1) the amount of *active energy*, and
  - (2) *reactive energy* (where relevant) passing through a *connection point*,must be collated in *trading intervals* within a *metering data services database* unless it has been agreed between AEMO, the *Local Network Service Provider* and the *Market Participant* that *metering data* may be recorded in sub-multiples of a *trading interval*.
- (f) Despite anything to the contrary in the *Rules*, AEMO may obtain *metering data* directly from a *metering installation* for the *settlement* process.

Consistent with this approach we propose:

- In clause 7.11.2(a) paragraphs (2), (3) and (4), “in accordance with the *metrology procedure*” is added to the end of each paragraph to ensure that it remains clear that the metrology procedure is the source of these processes;
- The reference to clause 7.11.1(d) in clause 9.9B.8 is changed to 7.11.1(a), and
- Changes to 7.14.1(c)(6)(i) and (ii) as follows:
  - (6) procedures for:
    - (i) the validation and substitution of *metering data* ~~in accordance with clause 7.11.2~~;
    - (ii) the estimation of *metering data* ~~for the purposes of clause 7.11.1~~; and

### Rules 7.14.1A

Currently there are four “service level requirements” managed by AEMO covering metering provision and metering data services applying to all metering installation types.<sup>10</sup> Our view is that these existing “service level requirements” need to apply as the “service level procedures” when the proposed new Rule takes effect for continuity and clarity.

To this end AEMO suggests a transitional Rule in chapter 11 to allow the existing documents to become the first procedures without Rules consultation. Additionally we propose varying paragraph (b) to take into account our broad proposal for the timing of the application of the Rule that is discussed in section 6 and for the proposed transitional Rule. AEMO would propose further integration and review of these related documents for overlap and coherency in accordance with our ongoing metrology work program.

#### **11.33 Rules consequent on the making of the National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010**

##### **11.33.1 Initial service level procedures**

- (1) *AEMO* is not required to comply with the requirements of rule 7.14.1A for the purpose of making the first *service level procedures* after the commencement of the National Electricity Amendment (Provision of Metering Data Services and Clarification of Existing Metrology Requirements) Rule 2010.

Our proposal for the drafting of this clause allowing for the transitional arrangements for the service level procedures discussed above and some minor drafting changes follows;

##### **7.14.1A**

- (a) *AEMO* must develop and *publish* the *service level procedures* that will apply to the relevant categories of registration [that apply to Metering Providers and Metering Data Providers](#) in accordance with this Chapter 7 and this rule 7.14.
- (b) *AEMO* must develop and publish the ~~first~~ *service level procedures* in accordance with the *Rules consultation procedures* ~~by [INSERT DATE], and there must be service level procedures in force at all times after that date.~~
- (c) The *service level procedures* must include:
  - (1) the ~~services associated with requirements for~~ the provision, installation and maintenance of *metering installations* by *Metering Providers*;
  - (2) requirements for the systems and processes for the collection, processing and delivery of *metering data* by *Metering Data Providers*;

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<sup>10</sup> Service Level Requirements - Metering Provision Services for the Provision, Installation and Maintenance of Metering Installation Types 1 – 6, AEMO, 23 Feb 2010

Service Level Requirements : Metering Data Collection, Processing and Delivery Services for Metering Data Agents Category Installation Types 1-4, AEMO, 15 Mar 2010

Service Level Requirements : Metering Data Collection, Processing and Delivery Services for Metering Provider - Category Type 5D, 6D and 7D, AEMO, 28 Apr 2010

Service Level Requirements : Metering Data Collection Services for Metering Provider Category Type 5C and 6C, AEMO, 3 Sep 2009

- (3) the performance levels associated with the collection, processing and delivery of *metering data*;
  - (4) the data formats that must be used for the delivery of *metering data*;
  - (5) the [requirements for the](#) management of relevant *NMI Standing Data*;
  - (6) the requirements for the processing of *metering data* associated with *connection point* transfers and the alteration of *metering installations* where one or more devices are replaced ('meter churn'); and
  - (7) other matters in the Rules required to be included in the *service level procedures*.
- (d) *Metering Providers and Metering Data Providers* must comply with the *service level procedures* relevant to their category of registration.

**Rules S7.2**

We propose some further changes to Table S7.2.3.1 for completeness and to accommodate other changes proposed earlier:

Type	Volume limit per annum per connection point	Maximum allowable overall error (±%) at full load (Item 7)		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to EST
		active	reactive		
1	greater than 1000 GWh	0.5	1.0	0.2 CT/VT/ <i>meter Wh</i> 0.5 <i>meter varh</i> ; <ul style="list-style-type: none"> <li>• <a href="#">meets requirements of clause 7.3.1(a)(10); and</a></li> <li>• <a href="#">meets the requirements of clause 7.11.1 paragraphs (a) and (e)</a></li> </ul>	±5
2	100 to 1000 GWh	1.0	2.0	0.5 CT/VT/ <i>meter Wh</i> 1.0 <i>meter varh</i> ; <ul style="list-style-type: none"> <li>• <a href="#">meets requirements of clause 7.3.1(a)(10); and</a></li> <li>• <a href="#">meets the requirements of clause 7.11.1 paragraphs (a)</a></li> </ul>	±7

Type	Volume limit per annum per connection point	Maximum allowable overall error ( $\pm\%$ ) at full load (Item 7)		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to EST
		active	reactive		
				<a href="#">and (e)</a>	
3	0.75 to less than 100 GWh	1.5	3.0	0.5 CT/VT 1.0 <i>meter Wh</i> 2.0 <i>meter varh</i> ; <ul style="list-style-type: none"> <li>• <a href="#">meets requirements of clause 7.3.1(a)(10); and</a></li> <li>• <a href="#">meets the requirements of clause 7.11.1 paragraphs (a) and (e)-</a></li> </ul> (Item 1)	$\pm 10$
4	less than 750 MWh (Item 2)	1.5	n/a	Either 0.5 CT and 1.0 <i>meter Wh</i> ; or whole current general purpose <i>meter Wh</i> : <ul style="list-style-type: none"> <li>• meets requirements of clause 7.3.1(a)(10); and</li> <li>• meets the requirements of <a href="#">clause 7.11.1 paragraphs (a) and (e)</a> <del>clauses 7.11.1(a) and (b) or 7.11.1(a) and (e)</del>.</li> </ul> (Item 1)	$\pm 20$ (Item 2a)
5	Less than x MWh (Item 3)	1.5 (Item 3b)	n/a	Either 0.5CT and 1.0 <i>meter Wh</i> ; or whole current connected general purpose <i>meter Wh</i> : <ul style="list-style-type: none"> <li>• meets requirements of clause 7.3.1(a)(11); and</li> <li>• meets the requirements of</li> </ul>	$\pm 20$ (Item 3a)

Type	Volume limit per annum per connection point	Maximum allowable overall error ( $\pm\%$ ) at full load (Item 7)		Minimum acceptable class or standard of components	Metering installation clock error (seconds) in reference to EST
		active	reactive		
				clause 7.11.1 <del>paragraph (de)</del> . (Item 1)	
6	Less than y MWh (Item 4)	2.0 (Item 4b)	n/a	CT or whole-current general purpose <i>meter</i> Wh recording <i>accumulated energy data</i> only:- <ul style="list-style-type: none"> <li>• <a href="#">meets requirements of clause 7.3.1(a)(14); and</a></li> <li>• Processes used to convert the <i>accumulated metering data</i> into <i>trading interval metering data</i> and to <i>estimated metering data</i> where necessary are included in the <i>metrology procedure</i>. (Item 1)</li> </ul>	(Item 4a)
7	Volume limit not specified (Item 5)	(Item 6)	n/a	No <i>meter</i> . The <i>metering data</i> is <i>calculated metering data</i> determined in accordance with the <i>metrology procedure</i> .	n/a

## 5. Minor changes to proposed drafting

The following are drafting changes that we propose that are not substantive but where the AEMC's drafting appears to be in error or is grammatically incorrect.

### Rules Clause 7.4.3 (d)

If following a review under paragraph (c), *AEMO* deregisters or suspends from some categories of registration or allows the *Metering Provider* or *Metering Data Provider* to continue to operate under constraints, then *AEMO* must inform the relevant *responsible person(s)*, the relevant *financially responsible Market Participant(s)* and the relevant *Local Network Service Provider(s)* of the outcome of that review.

### Rules Clause 7.7 (c)

The *financially responsible Market Participant* or the *Local Network Service Provider* ~~(as the case may be)~~ ~~(who~~ever is responsible for the provision of *metering data services*)~~person~~ must ensure that access is provided to *metering data* from the *metering data services database* to persons eligible to receive *metering data* in accordance with paragraph (a).

### Rules Clause 7.9.4 (e)

Where a *Metering Data Provider* receives notification under paragraph (d), the *Metering Data Provider* must use its best ~~endeavors~~endeavours to provide corrected *metering data* to *AEMO* within 24 hours or advise *AEMO* that this time limit ~~can not~~cannot be achieved, and the reason for the delay, in which case the parties must agree on a revised time limit by which the corrected *metering data* will be provided.

### Rules Clause 7.9.4 (f)

Where *metering data* fails validation by *AEMO* in the preparation of *settlements ready data* and replacement *metering data* is not available within the time required for *settlements* then *AEMO* must prepare a substitute value in accordance with the *metrology procedure*.

### Rules Clause 7.9.5 (c)

If any substitution is required under paragraph (b), *AEMO* must request the ~~responsible person~~financially responsible Market Participant or the Local Network Service Provider (whoever is responsible for the provision of metering data services) to arrange for a suitable substitution of the incorrect *metering data* to be undertaken in accordance with the recommendations of any audit report provided by *AEMO* (under clauses 7.6.1(j), 7.6.3(a) and 7.6.3(d)), or if no audit report is provided, in accordance with the substitution requirements of the *metrology procedure*.

### Rules Clause 7.11.3

*Metering data* may only be altered by a *Metering Data Provider* except in the preparation of *settlements ready data* ~~by~~, in which case *AEMO* may alter the *metering data* in accordance with clause 7.9.4(d).

### Rules Clause 7.14.1 (c)(6)(iii)

“in relation to” can be deleted to improve readability.

### Rules Glossary term – Metering data services database

To account for the possibility that the FRMP or LNSP engages the MDP rather than the responsible person, AEMO proposes that this glossary term reads:

The database established and maintained by the *Metering Data Provider* that holds the *metering data* and relevant *NMI Standing Data* relating to each *metering installation* for which the *financially responsible Market Participant or the Local Network Service Provider (whoever is responsible for the provision of metering data services)* ~~responsible person~~ has engaged the *Metering Data Provider* to provide *metering data services*.

### **Rules Glossary term – Registered participant**

A person who is registered by AEMO in any one or more of the categories listed in clauses 2.2 to 2.7 (in the case of a person who is registered by AEMO as a *Trader*, such a person is only a *Registered Participant* for the purposes referred to in clause 2.5A). However, as set out in clause 8.2.1(a1), for the purposes of some provisions of clause 8.2 only, AEMO, ~~and~~ *Connection Applicants*, *Metering Providers* and *Metering Data Providers* who are not otherwise *Registered Participants* are also deemed to be *Registered Participants*.

### **Rules Glossary term – Remote acquisition**

The acquisition of *interval metering data* from a *metering installation*, where a *telecommunications network* transmits the *metering data* from the *communications interface* at the site of the *metering point* to the *metering data services database*, and:

- (a) does not, at any time, require the presence of a person at, or near, the *interval meter* for the purposes of data collection or data verification (whether this occurs manually as a walk-by reading or through the use of a vehicle as a close proximity drive-by reading), and
- (b) remote acquisition includes but is not limited to methods that transmit *metering data* [Italics added] via:
  - (1) fixed-line telephone ('direct dial-up');
  - (2) satellite;
  - (3) the internet;
  - (4) wireless or radio, including mobile telephone networks;
  - (5) power line carrier; or
  - (6) any other equivalent technology.

Note:

For the requirements of clause 7.3.4(f) remote acquisition may collect other than interval metering data.

### **Rules Glossary term – Service level procedures**

The reference to clause 7.2.9 in the draft Rule is incorrect, the reference should be to clause 7.14.1A as follows;

The procedures established under the *Rules consultation procedures* by AEMO in accordance with clause ~~7.2.9~~7.14.1A.

## Rules Glossary term – Substituted metering data

Italics need to be applied to all glossary terms as follows (not shown as marked-up):

The substituted values of *accumulated metering data*, *interval metering data* or *calculated metering data* prepared in accordance with the *metrology procedure*. *Substituted metering data* is held in a *metering data services database*.

## 6. Transitional arrangements

Many regulatory instruments and contractual arrangements depend on the service provider arrangements currently set out in Chapter 7 of the Rules and other documents such as the Deeds. Changes to these arrangements will need to follow the proposed Rule change. The principal Rule change that establishes MDPs will vary the authority for these matters in some cases without changing the operational requirements.

The transition to the new arrangements would however need to deal with, for example:

- making consequential changes to the metrology procedure, for authority, revised terms and ensuring responsibilities are correctly allocated;
- making consequential changes, for authority, to the existing service level requirements to transition them to the new service level procedures under proposed clause 7.14.1A;
- formally terminating the deeds arrangements (AEMO is required under the deeds to give an MDA 60 days notice of termination where termination relates to relevant changes to the Rules);
- varying the deregistration procedures for service providers to take account of the changes to Rules clause 7.4.3;
- changing the accreditation guidelines, checklists and procedures so that MDPs are accredited under the Rules in their appropriate new categories; and
- allowing for the engagement of the MDPs for metering installation types 1 to 4 by the a market participant under the Rules rather than under the Deeds.

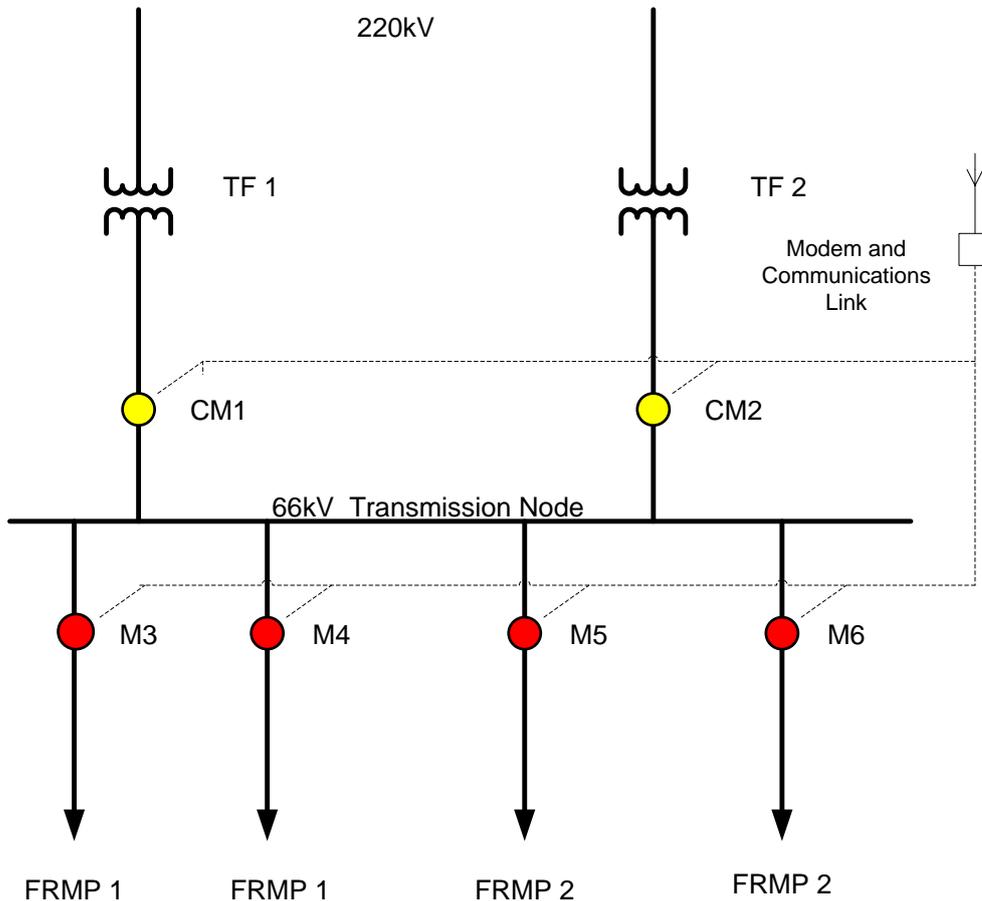
AEMO expects that these changes can be accommodated and not disrupt the provision of metering data in the market. Additionally, it would be AEMO's intention that at the time that the new Rule commences all existing businesses accredited to provide metering data services (currently MDAs, MPCs and MPDs) will retain their accreditation at the commencement of the new Rule as MDPs in their appropriate MDP categories.

To allow these changes to be made and to accommodate the existing work program AEMO proposes that the AEMC commence the Rule change twelve months following its final decision. AEMO's view is that this would allow sufficient time for all the arrangements to be established to meet the requirements of industry, service providers and AEMO.

We have proposed in this submission to the draft Rule a change to clause 7.14.1A consistent with this transitional plan and also proposed a transition Rule in chapter 11 to allow for the initial set of service level procedures.

## 7. Attachment – complex connection points

CASE 1



Transmission connected – ‘market connection points’ located at a single Transmission node feeding more than one host retailer area. The above configuration shows:

1. Each market connection point is metered with meters M3, M4, M5 and M6.
2. The connection points are Type 2, the check meters being CM1 and CM2.
3. Due to location being within a single zone substation, all metering is located within switch room.
4. All meters are ‘daisy chained’ to a single communications interface, therefore only one point of interface for metering data collection for all meters.

Under the above configuration, to meet Rule and procedure requirements:

1. All meter data must be validated against the check metering data and in accordance with the Metrology Procedure Part B. .
2. Any data substitutions for missing or erroneous data must be undertaken in accordance with Metrology procedure part B.

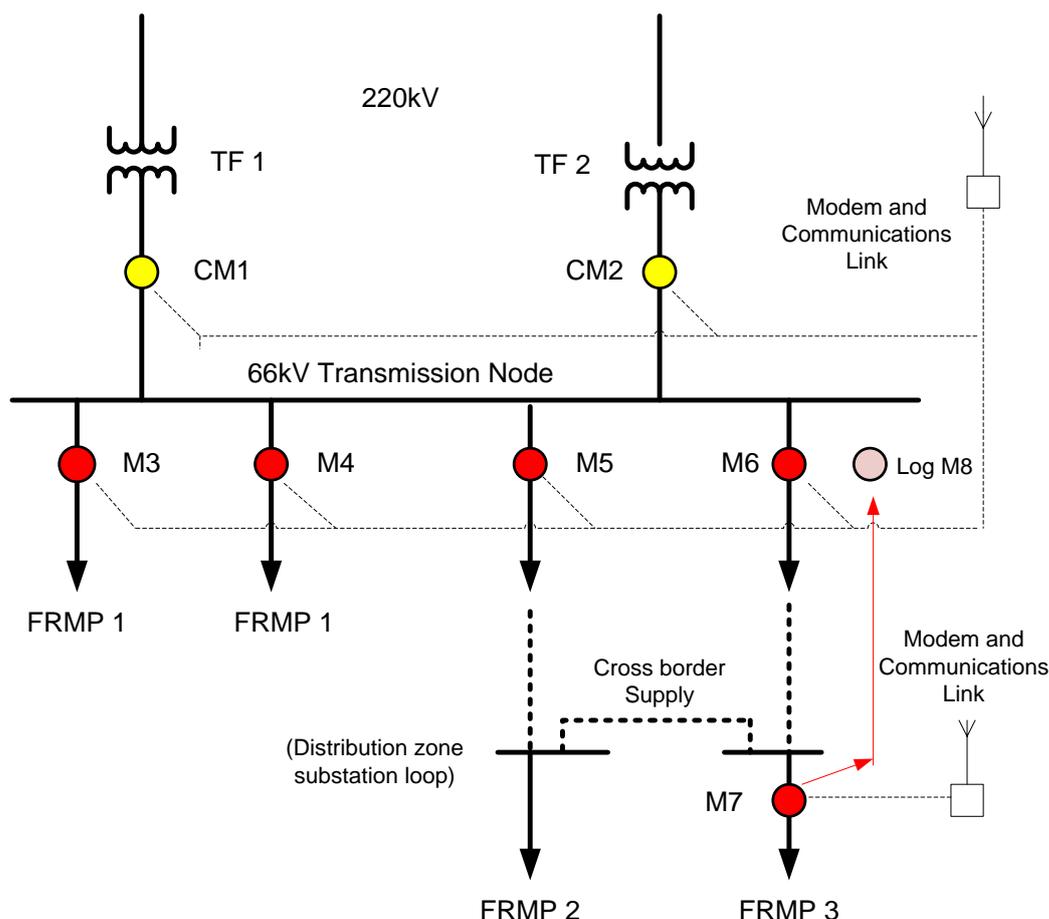
Validations test to be performed is  $(CM1 + CM2) = (M1 + M2 + M3 + M4)$

Substitution scenario: Metering data for FRMP2 feeder through M6 is in error. Substitution value can be calculated from  $(CM1 + CM2 - M1 - M2 - M3)$

NOTE: Configuration therefore requires that only 1 MDP be appointed for these connection points otherwise the metering data collection, validation and substitution capability cannot be otherwise effectively undertaken.

AEMO therefore needs to control the MDP appointed for these type of transmission connection points.

CASE 2



Transmission connected – ‘market connection points’ located at a single Transmission node feeding three host retailer areas. The above configuration shows:

1. Primary market connection points are metered with meters M3, M4, M5 and M6.
2. The connection points are Type 2, the check meters being CM1 and CM2.
3. Due to location being within a single zone substation, all metering is located within switch room.
4. Meters M3, M4, M5 and M6 are ‘daisy chained’ to a single communications interface.
5. Feeders via meters M3 and M4 are market connection points to Retailer 1
6. Feeders via meters 5 and 6 are complex market connection points to Retailers 2 and 3 with a ‘cross border’ connection.
7. The energy to Retailer 3 metered via M7 which has its own communications link and interface.
8. The energy to Retailer 3 must be corrected / referenced back to the transmission node by correcting for line losses).

Under the above configuration, to meet Rule and procedure requirements:

1. All meter data must be validated against the check metering data and in accordance with the Metrology Procedure Part B. .
2. Any data substitutions for missing or erroneous data must be undertaken in accordance with Metrology procedure part B.

Validations test to be performed is  $(CM1 + CM2) = (M3 + M4 + M5 + M6)$

Logical Calculations to be performed are:

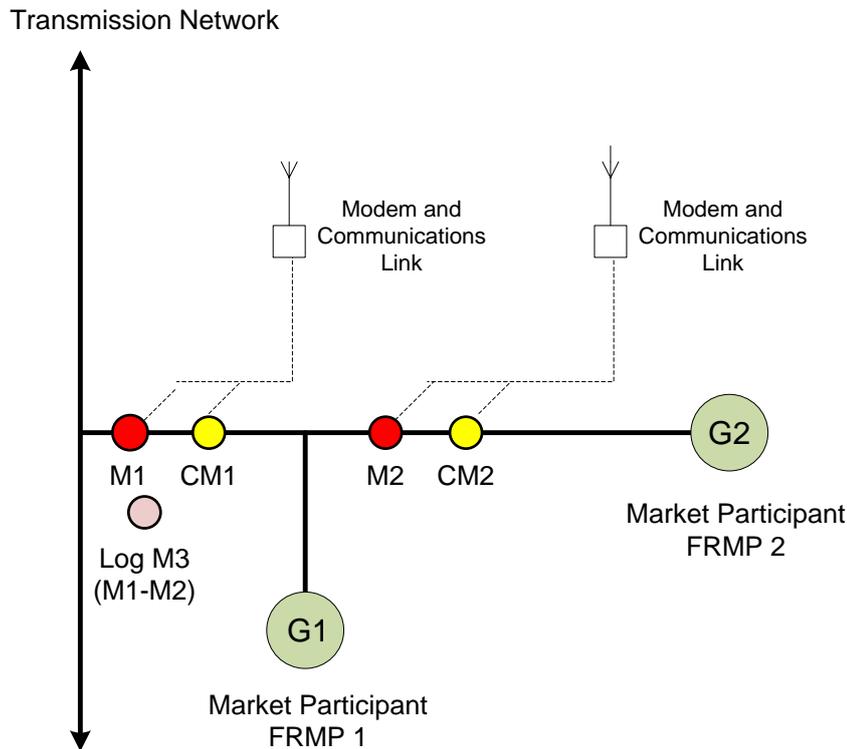
$$\text{Retailer 2 energy (Logical)} = M5 + M6 - \text{Log M8}$$

$$\text{Retailer 3 energy (Log M8)} = \text{Log M8} = M7 + \text{Line losses from Tx Node}$$

NOTE: Configuration requires that only 1 MDP be appointed for all these connection points otherwise the validation and substitution and data calculations cannot be otherwise effectively undertaken.

AEMO therefore needs to control the MDP appointed for these type of transmission connection points.

## CASE 3



Transmission connected – ‘market connection points’ for complex generator connections.  
The above configuration shows:

1. Generator 1 is a registered market connection point with AEMO. Metering is a type 1 or 2 for the generator 1 connection point. Meters installed are M1 and Check meter CM1
2. Subsequent to the above registration and connection of Generator 1, Generator 2 is accepted into the market and is similarly a type 1 or 2 connection point but metering for generator 2 is located down stream of the generator 1 metering. This necessitates the use of an algorithm to calculate the settlement energy for generator 1 (Log M3).
3. Both generators have the same recognised connection point, but the metrology is complex.
4. The installed metrology for the generators are physically separated from one another.
4. The market participants for the generators are different.

Under the above configuration, to meet Rule and procedure requirements:

1. All meter data must be validated against the check metering data and in accordance with the Metrology Procedure Part B. .
2. Any data substitutions for missing or erroneous data must be undertaken in accordance with Metrology procedure part B.

Validations test to be performed are  $CM1 = M1$  and  $CM2 = M2$

Substitutions: To enable any accurate substitutions for Generator 1, both sets of metering data are required.

Settlement energy for Generator 2 = M2 energy  
Settlement energy for Generator 1 = Log M3 = (M1 – M2)

NOTE: Configuration therefore requires that only 1 MDP be appointed for these connection points otherwise the metering data collection, validation and substitution capability cannot be otherwise effectively undertaken.

AEMO therefore needs to control the MDP appointed for these type of transmission connection points.