POWER OF CHOICE PROCEDURE CHANGES (PACKAGE 1)

DRAFT REPORT AND DETERMINATION

Published: 29 JUNE 2016

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

NOTICE OF SECOND STAGE CONSULTATION – POWER OF CHOICE PROCEDURE CHANGES (PACKAGE 1)

NATIONAL ELECTRICITY RULES – RULE 8.9

Date of Notice: 29 June 2016

This notice informs all Registered Participants, registered Service Providers and interested parties (**Consulted Persons**) that AEMO is commencing the second stage of its consultation on the PoC Procedure Package 1. AEMO has developed the PoC Procedure Package 1 in response to the following rule amendments (Amending Rules):

- The National Electricity Amendment (Expanding competition in metering and related services) Rule 2015 No. 12,
- The National Electricity Amendment (Embedded Networks) Rule 2015 No. 15, and
- The National Electricity Amendment (Meter Replacement Processes) Rule 2016 No. 2

The table below provides a list of procedures (Procedures) which AEMO has developed and amended to meet its obligations under the Amending Rules.

INSTRUMENT	NEW / AMENDED	NER REFERENCE
Emergency Priority Procedures[1]	New	7.8.5(b)
Glossary and Framework	New	N/A[2]
Meter Churn Procedure[3]	Amended	7.8.9(f)
Meter Data File Format	Amended	7.16.6
Metrology Procedure: Part A	Amended	7.16.3
Metrology Procedure: Part B	Amended	7.16.3
Minimum Services Specifications[4]	New	7.8.3(b)
MSATS Procedures: CATS Procedure Principles and Obligations	Amended	7.16.2
MSATS Procedures: MDM Procedures	Amended	7.16.2
MSATS Procedures: Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs	Amended	7.16.2
NEM RoLR Process Part A and B - MSATS Procedure: RoLR Procedures	Amended	7.16.2
Network Device Procedure[5]	New	7.8.6(i)
NMI Standing Data Schedule	Amended	3.13.12
Service Level Procedures for MDP	Amend	7.16.6
Service Level Procedures for MP	Amend	7.16.6

[1] To be included in Metrology Procedure: Part A
[2] This document is incorporated into and forms part of all the other Procedures.
[3] To be included in Metrology Procedure: Part A
[4] To be included in Metrology Procedure: Part A
[5] To be included in Metrology Procedure: Part A

Invitation to Make Submissions

AEMO invites written submissions on this Draft Report and Determination (Draft Report) and the accompanying Procedures, to reach AEMO **by 5.00pm (Melbourne time) on 20 July 2016**.

AEMO may consider late submissions, but is not obliged to do so. Late submissions should explain:

1. The reason for lateness.
2. The detriment to you if AEMO fails to consider your submission.

Contact Details and Publication

Please send all submissions by email to: **poc@aemo.com.au**.

All submissions must be forwarded in electronic format (**both pdf and Word)**.

To assist AEMO in collating these submissions in a timely manner, Consulted Persons are requested to provide submissions using the template included in this consultation pack.

Please send any queries about this consultation to the same email address.

All submissions will be published on AEMO's website, other than content that AEMO deems to be confidential.

EXECUTIVE SUMMARY

The publication of this Draft Report and Determination (Draft Report) commences the second stage of the consultation on the PoC Procedure Changes (Package 1).

AEMO has developed and amended the Package 1 procedures (Procedures) to fulfil its obligations under the Amending Rules and to make a number of improvements requested by participants at the PoC workshops. AEMO has also undertaken significant drafting enhancements on all Procedures in accordance with the drafting principles set in AEMO's Information Paper (section 3), which was published on 8 April 2016.

On 22 April 2016, AEMO published the Notice of First Stage Consultation and the Consultation Paper for Package 1. AEMO received 24 submissions in response to that Notice from Retailers, LNSPs, Service Providers and intending participants.

A number of material issues were raised, and these are addressed in this Draft Report and Determination, including the following:

- Participants were concerned about the content of 'jurisdictional metrology material', some of which appeared to be redundant.
- A number of concerns were raised in the context of the MSATS Procedures, the more significant ones being:
    - The manner in which embedded network NMIs were being addressed.
    - How VICAMI meters were to be accommodated.
    - The manner in which remote disconnections and reconnections will be addressed.
    - The need for changes to Change Request Codes as a result of the Amending Rules.
    - The removal of the BADMETER Objection Code.
    - The reduction of the Objection Logging Period to one business day.

The sections below provide a summary of all issues raised by the Consulted Persons through their submissions. AEMO has assessed all issues and addresses them in **Appendix A**.

After considering stakeholder submissions, and evaluation against the requirements of the NER and the Amending Rules, AEMO proposes the following:

- 'Jurisdictional metrology material' is a matter for the Jurisdictions to address. Instructions have been received from the Jurisdictions and AEMO will be updating the Metrology Procedure (Part A & Part B) as instructed.
- In the context of the MSATS Procedures:
    - The MSATS framework for dealing with embedded networks is largely appropriate, with minor changes required to adjust the responsibility for the input of certain data.
    - There is no need for further granularity in the manner in which the MSATS framework deals with VICAMI meters.
    - AEMO will make a number of changes to the manner in which disconnections and reconnections are addressed.
    - AEMO will adjust a few Change Request Codes to accommodate the Amending Rules.
    - AEMO will be reinstating the BADMETER Objection Code for the reasons raised by participants.
    - The reduction of the Objection Logging Period was justified on the basis of empirical evidence that the overwhelming majority of Objections are lodged within one business day.

AEMO's draft determination is to make the Package 1 Procedures in the form published with this Draft Report and Determination and as published on AEMO's website at:

http://www.aemo.com.au/Consultations/National-Electricity-Market/Power-of-Choice-AEMO-Procedure-Changes-Package-1

Contents

1 Stakeholder Consultation Process

As required by the Amending Rules, AEMO is consulting on the PoC Procedure Changes (Package 1) in accordance with the Rules consultation process in clause 8.9 of the NER.

AEMO's indicative timeline for this consultation is outlined below. Future dates may be adjusted depending on the number and complexity of issues raised in submissions.

DELIVERABLE	INDICATIVE DATE
Submissions due on Draft Report and Determination	20 July 2016
Final Report and Determination published	31 August 2016

The publication of this Draft Report and Determination marks the commencement of the second stage of this consultation.

Note there is a link to all submissions received during the initial stage of consultation in **Appendix A**.

The updated draft Procedures are published on AEMO's website at:

http://www.aemo.com.au/Consultations/National-Electricity-Market/Power-of-Choice-AEMO-Procedure-Changes-Package-1

2 Background

2.1 NER requirements

AEMO is required to amend and publish existing procedures and develop and publish new procedures to take into account the Amending Rules in accordance with the consultation procedures in clause 8.9 of the NER.

The following is a list of the procedures AEMO is proposing to amend and develop (as appropriate). The NER Reference in the table is a reference to the clause in the NER as amended by the Amending Rules.

INSTRUMENT	NEW / AMENDED	NER REFERENCE
Emergency Priority Procedures[6]	New	7.8.5(b)
Glossary and Framework	New	N/A[7]
Meter Churn Procedure[8]	Amended	7.8.9(f)
Meter Data File Format	Amended	7.16.6
Metrology Procedure: Part A	Amended	7.16.3
Metrology Procedure: Part B	Amended	7.16.3
Minimum Services Specification[9]	New	7.8.3(b)
MSATS Procedures: CATS Procedure Principles and Obligations	Amended	7.16.2
MSATS Procedures: MDM Procedures	Amended	7.16.2
MSATS Procedures: Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs	Amended	7.16.2
NEM RoLR Processes: Part A - MSATS Procedure: RoLR Procedures; and Part B – B2B Procedure	Amended	7.16.2
Network Device Procedure[10]	New	7.8.6(i)
NMI Standing Data Schedule	Amended	3.13.12
Service Level Procedures for MDP	Amend	7.16.6
Service Level Procedures for MP	Amend	7.16.6

2.2 Context for this consultation

In 2012, the AEMC commenced the Power of Choice Review. Its objective was to ensure that the community's demand for electricity services was met by the lowest cost combination of demand and supply side options. This objective was best met when consumers were using electricity at the times when the value to them was greater than the cost of supplying that electricity (i.e. the cost of generation plus poles and wires).

A number of recommendations made as a result of this Review are being implemented through a series of amendments to the NER.

The scope of this consultation is limited to the Procedures AEMO is required to amend and develop by 1 September 2016, in accordance with the Amending Rules.

[6] To be included in Metrology Procedure: Part A
[7] This document is incorporated into and forms part of all the other Procedures
[8] To be included in Metrology Procedure: Part A
[9] To be included in Metrology Procedure: Part A
[10] To be included in Metrology Procedure: Part A

2.3 First stage consultation

On 22 April 2016, AEMO issued a Notice of First Stage Consultation, and published a Consultation Paper and draft procedures for Package 1. This information is available on AEMO's website[11].

The Consultation Paper included details on AEMO's stakeholder engagement in the course of developing the draft procedures, including specific topics that were discussed at workshops with industry representatives. The issues and related discussion arising from these workshops was detailed in a pre-consultation Information Paper which was published on AEMO's website on 8 April 2016.

All the procedures have undergone drafting enhancements in accordance with the principles set out in the Information Paper (section 3). The Consultation Paper included a summary of the specific amendments proposed in the initial consultation pack.

AEMO received 24 written submissions in the first stage of consultation and has held the following meetings with stakeholders:

- Monthly updates and discussion at the Retail Market Consultative Forum from November 2015.
- Discussions with stakeholders at AEMO-led PoC workshops on 2-3 February 2016, 15-16 February 2016, 2 March 2016 and 21 June 2016.
- Discussions with stakeholders at the Metering Providers Forum on 16 May 2016.

Copies of all written submissions, minutes of meetings and issues raised in forums (excluding any confidential information) have been published on AEMO's website[12].

[11] Available at: http://www.aemo.com.au/Consultations/National-Electricity-Market/Power-of-Choice-AEMO-Procedure-Changes-Package-1

[12] Available at: http://www.aemo.com.au/About-the-Industry/Working-Groups/Retail-Meetings/Power-of-Choice

3 Summary of Material Issues

Table 1 summarises the material issues raised by Consulted Persons.

Table 1 Summary of Material Issues raised by Consulted Persons

NO.	ISSUE	RAISED BY
1.	Metrology Procedure: Part A – Jurisdictional Matters (see section 4.1)	Active Stream, AGL, Ausgrid, AusNet, Endeavour, Energex, Energy Australia, Ergon, Momentum, Pacific Hydro, Red/Lumo, United Energy
2.	Metrology Procedure: Part A – Type 4A Metering Installations (see section 4.2)	ActewAGL, Active Stream, AGL, AusNet, Endeavour, Ergon, Momentum, Origin, Pacific Hydro, Red/Lumo, United Energy
3.	MSATS Procedures – Embedded Networks (see section 4.3)	Ausgrid, Endeavour, Red/Lumo
4.	MSATS Procedures – Type 4 Meter Identification (see section 4.4)	Ausgrid, AusNet, CitiPower/Powercor, Endeavour, Energy Australia, ERM Power, Jemena, Momentum, Origin, Pacific Hydro, United Energy
5.	MSATS Procedures: Adopting changes to 'RP' and the introduction of 'MC' and 'ENM' (see section 4.5)	Pacific Hydro
6.	MSATS : Disconnection & Reconnection – Site Identifier (see section 4.6)	Active Stream, AGL, Ausgrid, Endeavour, Energy Australia, Metropolis, Momentum, Origin, Red/Lumo, United Energy
7.	MSATS Procedures: Change Request Codes (see section 4.7)	ActewAGL, Active Stream, AGL, Ausgrid, AusNet, Endeavour, Energex, Origin, Pacific Hydro
8.	MSATS Procedures - Objection Codes (see section 4.8)	Active Stream, Acumen, AGL, Ausgrid, AusNet, Energex, Energy Australia, Ergon, Lendlease, Metropolis, Pacific Hydro, Red/Lumo, TransGrid, United Energy
9.	MSATS Procedures - Network Tariff Code (see section 4.9)	Active Stream, Acumen, AGL, Ausgrid, AusNet, Endeavour, Energy Australia, ERM Power, Lendlease, Metropolis, Momentum
10.	MSATS Procedures: AEMO Administered Fields (see section 4.10)	Endeavour Energy
11.	MSATS Procedures: Read Type Codes (see section 4.11)	ActewAGL, Active Stream, AGL, Ausgrid, AusNet, Endeavour, ERM Power, Red/Lumo
12.	Meter Data File Format Specification - Inclusion of NMI Suffixes (see section 4.12)	Ausgrid, Momentum

A detailed summary of issues raised by Consulted Persons in submissions, together with AEMO's responses, is contained in **Appendix A**.

4 Discussion of Material Issues

This section details the material issues AEMO identified during the review process. It also provides AEMO's assessment of the issues and how AEMO proposes to address them.

Where an issue relates to a specific procedure, the procedure name is included in the name of the issue.

4.1 Metrology Procedure: Part A - Jurisdictional Metrology Material

4.1.1 Issue summary

The Metrology Procedure (Parts A & B) is the outworking of a project to harmonise (1) jurisdictional metrology procedures, and (2) requirements for 1st tier and 2nd tier customers in the NEM.

In addition, the NER permits Jurisdictions to choose certain parameters to support their policies by mandating the inclusion of 'jurisdictional metrology material' in the Metrology Procedure. Any update to this jurisdictional metrology material needs to be submitted to AEMO by the COAG-EC.

4.1.2 Summary of submissions

A number of submissions have proposed changes to the jurisdictional metrology material.

4.1.3 AEMO's assessment

AEMO has no power under the NER to amend jurisdictional metrology material as it is the Jurisdictions' prerogative to amend. AEMO has engaged the COAG-EC and Jurisdictional regulators, through DOIIS, to review all jurisdictional metrology material for relevance. They have broken the work into two tranches:

- Tranche 1 – update terminology to accommodate the Amending Rules (e.g. replace RP with MC etc.)
- Tranche 2 – review all material for relevance.

A letter from COAG for Tranche 1 has been received in time to update the Metrology Procedure. The outcomes of Tranche 2 will only be available at a later stage during this consultation.

4.1.4 AEMO's conclusion

AEMO will update the jurisdictional metrology material in the Metrology Procedure as requested by the COAG-EC.

4.2 Metrology Procedure: Part A - Type 4A Metering Installations

4.2.1 Issue summary

A number of participants raised issues with the definition and use of small customer (type 4) and type 4A metering installations.

4.2.2 Summary of submissions

Many submissions expressed concern with the definitions of small customer metering installations, the metering installation requirements, and the metrology requirements for small customer (type 4) and type 4A metering installations.

4.2.3 AEMO's assessment

The VICAMI Meter is a small customer metering installation and, by definition, is a type 4 metering installation that also has the capability to deliver the Minimum Services Specification where installed for a small customer after the commencement date of the Amending Rules.

A small customer metering installation and a type 4A metering installation are identical. They both contain type 4 metering installations that comply with the Minimum Services Specification. The key difference is that the type 4A is not connected to a telecommunications network, and so is manually read rather that remotely read.

From a metrology perspective, a small customer metering installation is a remotely read type 4 metering installation (i.e. same as current type 4 – daily remote reads). A type 4A metering installation is a manually read interval meter, and will be treated similarly to a type 5 (i.e. monthly, quarterly manual read, NSRDs, forward estimates etc.).

4.2.4 AEMO's conclusion

AEMO has clarified these issues in **Appendix A**.

4.3 MSATS Procedures - Embedded Networks

4.3.1 Issue summary

AEMO has proposed a process/method for each of the following areas of Embedded Network changes:

- Linking of parent and child connection points
- Identification of ENM at the parent NMI
- NMI creation
- NMI status of an on-market NMI that moves off-market
- When a NMI connected to an LNSP's network moves to an Embedded Network

4.3.2 Summary of submissions

ENM and Parent NMI

Ausgrid believes that the obligation to allocate Embedded Network Code to the parent NMI should be on the ENM and not the LNSP. Ausgrid believe that the ENM must be in the NSP2 on the parent NMI.

Red Lumo suggests including the Embedded Network Manager participant Id in the NSP2 field in the Embedded Network Parent NMI.

A NMI connected to a LNSP's network moves to be within an embedded network

Ausgrid maintains that a NMI shouldn't be moved from a 'real' network to an embedded network. The 'real' network NMI needs to be made extinct and a new embedded network child created.

Endeavour Energy notes that allowing a market NMI to become a child NMI would cause significant system and procedural issues because they have been designed to comply with clause 11.3 of National Metering Identifier Procedure

Endeavour Energy suggests that for an existing market NMI to change to a child NMI the physical location of the connection point must be changed. Therefore extinction of the market NMI and creation of a new Child NMI is the current obligation and business practice. AEMO suggested that a NMI was to be made extinct then retrospectivity in MSATS would be disabled, however this is incorrect because it is still possible to make changes in MSATS for the period that the NMI is still active. AEMO also stated that '… it was confirmed that all retailers, MDPs and MPs would have to accommodate complex and costly processes should a NMI need to be made extinct and a new NMI created'. However AEMO's proposal would also introduce complexity and cost for LNSPs, MDPs and MPs too. Therefore Endeavour Energy suggests that when market NMI become a Child NMI the LNSP extinct the market NMI and the ENM create a new Child NMI if required.

ENM Obligations

Endeavour Energy suggests that there should be an obligation for an ENM to update the NMI status from 'N' to 'A' when a child NMI is again being settled in the NEM.

4.3.3 AEMO's assessment

ENM and Parent NMI

AEMO does not believe it is appropriate to impose the obligation for allocating the Embedded Network Code to the Parent NMI on the ENM, as the ENM is not a party associated with the parent NMI(s) in MSATS, nor does the ENM have any rights to data or any responsibilities for the management of data at the parent NMI(s).

AEMO also does not believe it is appropriate to include the ENM in the NSP2 field on the Parent NMI. The NSP2 field is only used for wholesale NMIs to store the DNSP. Using it to store the ENM will cause confusion for wholesale NMIs and will change the field's purpose. Parent and child NMIs are currently linked through the embedded network identifier fields (parent and child) and no changes to MSATS are required to achieve this link.

A NMI connected to a LNSP's network moves to be within an embedded network

AEMO considers that a NMI should only be made extinct when it is abolished. Moving the NMI from an LNSP network to an embedded network does not create a new connection point or abolish an existing connection point; it is the same connection point.

Whilst few LNSPs highlighted challenges within their own systems if a NMI moved from the LNSP list to that of the ENM (i.e. no NMI is made extinct and replaced, it is transferred to the ENM from the LNSP as it is), it was confirmed that all retailers, MDPs and MPs would have to accommodate complex and costly processes should a NMI need to be made extinct and a new NMI created. In addition, retrospectivity in MSATS would be disabled. Role changes and embedded network ID fields will denote connection to the embedded network.

ENM Obligations

AEMO agrees that the ENM is the only responsible party for updating the NMI status on child NMIs, and hence they will also have the obligation to update NMI status from 'N' to 'A' when a child NMI is again being settled in the NEM.

4.3.4 AEMO's conclusion

ENM and Parent NMI

No change.

A NMI connected to a LNSP's network moves to be within an embedded network

AEMO proposes that when a NMI connected to an LNSP's network moves to an embedded network:

- The NMI of the connection point is not required to be changed (i.e. there is no need to extinct and replace the existing NMI); and
- Role changes and embedded network ID fields will enable parties to clearly identify the NMI as being connected within an embedded network and will ensure correct settlement.

AEMO is considering making this requirement clearer while reviewing the National Metering Identifier Procedure in POC work package 2.

ENM Obligations

AEMO will add an obligation on the ENM to update NMI status from 'N' to 'A' when a child NMI is again being settled in the NEM.

4.4 MSATS Procedures - Type 4 Meter Identification

4.4.1 Issue summary

AEMO has proposed to keep the existing codes in the meter installation type code and introduce an additional four codes to allow the market to identify the different type 4 metering installations. These additional four fields are:

- Type 4 advanced whole current (code - COMMS4D)
- Type 4 advanced current transformer (code - COMMS4C)
- Type 4A (code - MRAM)
- VIC AMI (code - VICAMI)

4.4.2 Summary of submissions

Metering Installation Type Codes Description

Ausgrid noted that the description of COMMS4 should be "Meter is not capable of minimum services functionality", and that the date of installation is irrelevant in the current description as many metering companies will have minimum services metering in the field prior to December 2017.

Ausgrid requests AEMO to clarify the intent of the Manually Read Flag for Interval Meters, and the meaning of Manually Read Flag for Non-Interval meters.

Origin note that COMMS4D metering installation type code applies to large sites, and requests that AEMO modifies its description accordingly.

AusNet Services notes that smart meters (type 4) with MSS capabilities will be installed on sites with greater than 40 MWh pa consumption. In fact where meters are installed at the FRMP choice (rather than due to meter failure) these are more likely to be on larger customers where the benefits to customer and retailer are greater. Hence it is essential that the relevant parties seeking smart meter services (e.g. distributors, or retailers seeking to make a transfer offer) understand the site meter capability. AusNet notes that the Metering Installation Type Codes as proposed does not facilitate this. As a large customer (>40MWh pa) with a metering installation that meets the Minimum Services Specification will be indistinguishable from a large customer installation which does not meet the MSS.

AusNet Services considers that the Type Codes should be:

- COMMS4 Interval Meter with communications – Type 4 (Note: This code is used for large and small customer type 4 metering installations which do not meet the minimum services specifications.
- COMMS4D Whole Current large and small customer metering installation that meets the minimum services specifications including large and small customer type 4 metering installation installed before 1 December 2017
- COMMS4C Current Transformer connected large and small customer metering installation that meets the minimum services specifications including large and small customer type 4 metering installation installed before 1 December 2017

AusNet Services' proposed Type Code approach achieves the outcome of having the installation capability identified at Type Code level in MSATS. Further the proposed approach removes the need for Type Code changes as customers move above or below the small customer threshold.

Metering Installation Identification

Ausgrid suggests that an additional MSATS field to show if Minimum Service Functionality exists would remove the need for any new Metering Installation Type Codes. Ausgrid questions whether AEMO will provide a cost benefit analysis on the different ways that this change could be implemented.

Ausgrid suggests the following mandatory fields to be recorded at the Meter Level:-

- Transformer: Yes / No
- Minimum Services: Yes / No
- Remote COMMS: Yes / No

Ausgrid notes that alternatively if AEMO insists on identifying the differences in Metering Installation characteristics using the Meter Installation Code then the 'MRAM' code must have an MRAMC and MRAMD to be consistent with COMMS4C and COMMS4D.

Endeavour Energy suggests that the requirement to distinguish a Current Transformer or Whole Current for type COMMS4 small customer metering installation would also apply to a Type 4A. It suggests that the Code MRAM be removed and MRAMD and MRAMC be added.

ERM Power believes that further granularity is required to differentiate different meter types (Single Phase, Dual Element, Three Phase) which may incur different pricing and meter functionality. This request is to ensure fully scalable processes between FRMP & MC.

EnergyAustralia requests to be able to identify the reason as to why a meter is type 4A metering installation. It needs to be able to know the reason from the customer or is it communications failure. It also prefers if the type 4 metering installation code could differentiate between a large and small customer. Its questions how will the new codes be implemented, whether there will be a global change and a coordinated approach will be required.

Momentum notes that the identification of various meter type codes are not entirely aligning with the discussions in POC forums. E.g. Meter type codes are CT and not CT are only applicable for small customers, and once you go above 40MW there's no transparency. It also requests that Meter type 4A needs to have some information in MSATS (background data to advise if it is 4A because of customer prevention or comms issue).

VICAMI Metering Installation Type Code

Pacific Hydro agrees with the inclusion of the new meter Installation Type codes. They noted that Vic AMI meters are registered in MSATS as MRIM currently, and raised the question of whether AEMO will update the code in MSATS for each Vic AMI meter, and whether the Vic AMI will apply to all 'advanced' meters in Victoria or will those 'advanced' meters still delivering data manually remain as MRIM.

CitiPower and **Powercor** note that AEMO has attempted to provide the Victorian Distributors with the ability to leave Vic AMI Meters as AMI Type 5 (as they are under the Chapter 9C Derogation) and therefore avoid the need for IT system changes and accreditations to achieve type 4 validation/substitution rules etc. However the creation of the "VICAMI" Metering Installation Code will still require the Victorian Distributors and Retailers to undertake a massive migration of the 2.8 Million existing regulated AMI Meters across to this new Metering Installation Type Code on market start. There will need to be some arrangement and time provided for that work load to be undertaken, over the top of the introduction of the rules and market start on 1 December 2017 and this requirement for the Victorian Meters could possibly be delayed.

Jemena notes that AEMO has provided for a metering installation type code VICAMI. Jemena welcomes the ability of Victorian LNSPs to leave AMI Meters as 'AMI Type 5' (installed under derogation 9.9C) thus avoiding the need for IT system changes and accreditation to achieve Type 4 validation and substitution rules.

United Energy notes that there is no Meter Type definition stated for the "VICAMI" code. It is necessary to clearly define here that VICAMI will be Type 5 (but remotely connected).

Origin requests that AEMO confirm and clarify in the description for VICAMI metering installation type code whether it should be treated as type 4 or type 5 metering installation.

4.4.3 AEMO's assessment

Metering Installation Type Codes Description

AEMO substantially agrees with the submissions, except for the request to extend the metering installation type codes to indicate the range, scope, or cost of services, as those metering installation type codes are there to identify the characteristics of the metering installation.

AEMO agrees that the definition of the "Manually Read Flag" and what it is used for in relation to the Metering Installation Type codes is not clear and will be clarifying that this flag is used to indicate whether an Actual Change Date must be input by a Participant other than the initiator of the Change Request regardless of the metering installation being an interval meter or an accumulation meter.

Metering Installation Identification

AEMO does not see the need for further levels of differentiation such as a variation to the Type 4A code to include the reason that the Type 4A rather than Type 4 was installed, or distinguishing a Current Transformer or Whole Current for type 4A. AEMO considers this to be adding a level of complexity to a field that is unwarranted, when there are other ways to identify the rationale for the installation of a type 4A metering installation. A type 4A metering installation is considered in the NER to be installed in exceptional circumstances and the MC will have to ensure that it manages any exemptions allowing the installation of type 4A, and therefore must keep records outside of MSATS.

AEMO does not see the need to provide further granularity to differentiate metering installation types such as (Single Phase, Dual Element, Three Phase) or add an additional level of differentiation at the Meter Level, as the Metering Installation Type Codes in MSATS are there to identify the characteristics of the metering installation, and not to indicate the range, scope, or cost of services for different metering installation types.

AEMO notes that details on how the newly proposed metering installation type codes to be implemented is a market readiness activity and recommends considering it further in due course.

VICAMI Metering Installation Type Code

AEMO considers that an update of VICAMI NMIs from the currently used metering installation type codes to the proposed VICAMI code, needs to be dealt with as part of the market readiness activities. Accordingly, the matter has been captured on the issues log for that work stream.

In response to the request to define whether VICAMI Metering Installation Type Codes are to be treated as type 4 or type 5 metering installations, AEMO notes that the CATS procedures do not seek to specify the assignment of meter type to a metering installation, rather the MC must ensure that it is maintaining the metering type for each NMI in accordance with the NER.

4.4.4 AEMO's conclusion

Metering Installation Type Codes Description

AEMO will amend the COMMS4D, and COMMS4C and Manually Read Flag definitions as required.

Metering Installation Identification

AEMO will not make changes to further classify or differentiate type 4 or type 4A Metering Installation Type Codes.

VICAMI Metering Installation Type Code

The Procedures will not specify whether a VICAMI metering installation is a type 1, 2, 3, 4, 4A, 5 or 6 metering installation.

4.5 MSATS Procedures: Disconnection & Reconnection – Site Identifier

4.5.1 Issue summary

AEMO has proposed a new NMI status code in MSATS, status "R", to indicate a remote disconnection. The existing status "D" is to indicate a physical disconnection. The responsibility to update the NMI status code will be with the LNSP, or the ENM for a child NMI.

4.5.2 Summary of submissions

Remote Disconnection/Reconnection Notification

Ausgrid believes that more than one party must not have the same obligation when it comes to remote disconnection and remote reconnection notification, and that the MC should be solely responsible for advising the LNSP and the FRMP upon completion of a remote disconnect or reconnect. Ausgrid requests a new obligation to be added to the MC Inform the LNSP and FRMP when a *meter(s)* is *disconnected or reconnected remotely* within 1 business day.

Ausgrid requests a new obligation is added to the New FRMP to inform the LNSP when a *connection point* is to be remotely *disconnected* or remotely reconnected prior to the work being performed. The new obligation is required to ensure Ausgrid does not reconnect a site that has been remotely disconnected when Ausgrid is contacted directly by the customer.

Origin requests that the obligation on the FRMP to "inform the LNSP when a connection point is remotely disconnected or remotely reconnected unless the remote disconnection or remote reconnection has been performed by the LNSP", should be removed as this is shouldn't be a FRMP obligation, and rather it should sit with the party doing the work.

Origin requests that the obligation on the Metering Coordinator to "Inform the LNSP when a connection point is remotely disconnected", should be removed as this obligation should be an MP obligation.

Endeavour Energy suggests that having the same obligations on both the FRMP and the MC to notify the LNSP of the remote disconnection and the remote reconnection is not a good ideas as placing similar or same obligations on different parties is inefficient and would cause confusion. Only one party should be responsible for notifying of the intent for a remote disconnection or reconnection and notifying when the remote disconnection or reconnection is completed. They suggest that the party who requests the remote disconnection or reconnection notifies all other impacted or interested parties and the party who completes the remote disconnection or reconnection notifies all impacted or interested parties. For the request of a remote disconnection or reconnection the requesting party can be the Current FRMP, New FRMP or Current LNSP. For completing the request the party could be the Current MC, Current MP or Current MDP – a discussion and decision that AEMO has deferred to consultation package 2. The channel and form of communication should be via SMP as it would support the requirement for the notification to be near real time. Using MSATS as the communication channel would be problematic given its nightly batch processing model. AEMO should not add any obligations until further workshops are held to resolve the issue.

AGL does not agree with the new obligation on the FRMP to notify the LNSP of remote disconnection or remote reconnection. AGL requests the obligation should be that the FRMP must ensure the LNSP is informed when the FRMP initiates the remote disconnection/reconnection. AGL questions why the responsibility is only on the LNSP to change the NMI status as remote services might be initiated by other parties.

AGL requests that where the MC has an obligation to inform the LNSP of remote disconnection and remote reconnection, they should also notify the FRMP and any other interested parties. AGL also notes that the obligation should not only be limited to remote disconnection, and provided an example of an MP de-energising a site for meter replacement where they leave it off for safety reasons, this will be manual de-energisation and should be advised to the LNSP to take over responsibility, as well as to the FRMP. AGL suggests that the obligation should only apply to MC when they initiate the request.

Active Stream notes that the obligation to notify the LNSP of the remote disconnection and remote reconnection should only be on one party, and that since MDP/MP can instigate a remote disconnection themselves, and they are contracted to the MC, it makes more sense for the MC to hold this obligation.

United Energy suggests modifying the obligation on the FRMP to inform the LNSP of remote disconnection and remote reconnection to say that "Where there are two or more remotely operated meters at a connection point the FRMP must ensure that all meters have been successfully remotely disconnected or reconnected and updated before informing the LNSP of the change of connection status".

United Energy suggests modifying the obligation on the MC to inform the LNSP of remote disconnection and remote reconnection to say that "Where there are two or more remotely operated meters at a connection point the MC must ensure that all meters have been successfully remotely disconnected or reconnected and updated before informing the LNSP of the change of connection status".

AusNet Services believes there needs to be timeframes regarding the obligation on the FRMP and the MC to notify the LNSP of remote disconnection and remote reconnection. If this notification is not going to be via CATS then this needs to be removed from the CATS procedure and ensured it's captured in the procedure that is going to provide these timeframes and notifications. If the notification is going to be via MSATS then timeframes need to be added to this clause. AusNet believes the timeframe should be within 10 minutes of performing the action.

Red Lumo suggests specifying a timeframe of two business days for the obligation on the MC to inform the LNSP when a connection point is remotely disconnected.

NMI Status Update Obligation

Endeavour Energy suggests that placing an obligation on the LNSP to update the NMI Status to 'R' and 'A' when notified of a remote disconnection or reconnection respectively is inefficient as this places an obligation on a party who did not perform the actual service but must have systems and processes in place to manage the status of another party's asset and it does not provide the granularity of information because it is at the NMI level when the service can be performed at a meter register level. Another complexity is when a meter is remotely disconnected and subsequently the site was manually de-energised and later manually re-energised the LNSP will need to keep a history so that the NMI Status goes from 'A' to 'R' to 'D' and then back to 'R' instead of 'A'. It suggests that the obligation should be with the party who performed service work to update the Meter Register Status to indicate if it is remotely disconnected or reconnected.

Metropolis notes that making the DNSP responsible to mark sites as (A)ctive, (R)emotely deenergised or (D)eenergised, does not allow for remote de-energisation followed by fuse pull. And there will also be delays in updating remote status changes, due to the DNSP being a middle-man.

AGL questions the obligation on the ENM to be the only responsible party for updating the NMI status for child NMIs, especially in the case when they do not undertake the work and how the ENM will know what the status is if they are not transactional, and that the status options available to the ENM are inadequate.

United Energy suggests that the obligation to update the NMI status should not be on the LNSP if it did not perform the change, rather it should be the responsibility of FRMP or MC to update MSATS if the FRMP / MC has made the change.

Remote Disconnection Status at Meter Level

Ausgrid has reviewed the impacts to systems to include a new NMI Status of 'R' and the cost was very high with no benefit to the LNSP. Ausgrid notes that the disconnection method (Remote in this instance) is not represented in MSATS for any other disconnection types (Pole Top / Main Switch / Fuse etc). Ausgrid believe alternate update methods to reflect the remote disconnection are available and should be considered against a cost benefit analysis. Alternate update methods directly reflect the action taken by participants involved in the minimum services transaction. Under the new procedures Market Participants must use Standing Data stored at the Meter Level to determine if a meter is capable of minimum services functionality e.g. Meter Installation Type of COMMS4D. Ausgrid therefore propose that a remote disconnection could be represented in MSATS at the Meter Level using a new Meter Status of 'D' – Disconnected Remotely.

United Energy note that by recording the Metering Connection Status "R" in the same field as the NMI Status, an issue can occur where the connection was remotely disconnected by an MC (NMI Status goes to "R") followed by a Fuse removal by the LNSP (NMI Status goes to "D"). By having just one field the fact that both the Meters and the fuse are disconnected will be lost. This will result in confusion when attempting to properly re-energise the site again as it will; not be clear that a Remote re-connection must also occur as the Status only shows "D". It would be better to have a new field "MeteringStatus" that is held at the NMI level and whose state is changed when ALL meters at a site are Remotely Connected or Disconnected.

AusNet Services believe there should be two levels of 're-en/de-en' and it should be at NMI level which the LNSP is responsible for and the second should be at a meter status level which the service provider should be responsible for. This more correctly places the obligation on the actioning party and hence eliminates potential delays and handling errors. Both of these statuses could sit at the NMI Standing Data level. A new field on that table should be created called Supply Contactor Status this field would be controlled by the service provider. This allows the LNSP to just be responsible for the physical status of the NMI. This removes the obligation on the LNSP to update a field to a status that they have no involvement in and can't be 100% assured that the meter is actually remotely disconnected or reconnected.

This will add new obligation on the MP to update the Supply Contactor Status to R or A. AusNet note that this does not eliminate the need for the DNSP to receive a notification to ensure that the DNSP system is correct at all times and not just driven by the delayed notification from MSATS.

Momentum request that information on each service and who has performed it should be available. They suggest having statuses on NMI (Connected or not connected) and on a meter level (connected, remotely disconnected, and physically disconnected).

AGL note that the list of NMI status codes is inadequate. As there are 2 parties who can manually or remotely disconnect a site:

- LNSP/ENO – Remote
- LNSP/ENO – Manual
- MC/MP – Remote
- MC/MP – Manual

AGL note that Safety and Service Order obligations on who can reconnect not clearly shown in these codes as they stand, and that a status of meters for multiple meter sites is required.

VIC AMI Meters

Origin raised the question on whether VIC AMI meters will be updated with NMI status 'R' when remotely disconnected and what NMI Status Code will apply when the fuse is removed after the meter has been remotely disconnected.

EnergyAustralia & **Momentum** question whether VIC AMI is going to be R or D in NMI status.

"N" NMI Status

As a prospective ENM **Ausgrid** questions the relevance of the 'N' NMI Status. MSATS has the ability to identify an Off Market Child by comparing the FRMP of the Parent and Child NMI for settlements. Ausgrid does not agree with the requirement to update NMI Status when the FRMP changes on a Child NMI or Parent NMI. Ausgrid feels this change has been implemented to simplify settlements, not for the betterment of the market. Alternatively, this could be updated automatically by MSATS.

4.5.3 AEMO's assessment

Remote Disconnection/Reconnection Notification

AEMO notes that, as per the NERR, the obligation is on the retailer to notify the distributor of remote disconnection and remote reconnection, therefore, AEMO removed this obligation from the Metering Coordinator in MSATS..

AEMO does not think it necessary to specify timeframes for the FRMP obligation to notify the LNSP of remote disconnection and remote reconnection as the NERR provide sufficient guidance on the timeframes for those notifications.

NMI Status Update Obligation

AEMO agrees to add the remote disconnection status at the meter level and hence the party responsible for updating the remote disconnection status will be the MP. AEMO proposes to add an obligation on the MPB to ensure that the new Meter Register Status is always updated to reflect the actual meter status. AEMO confirms that the LNSP will remain the responsible party for updating the NMI status, and that the NMI status will remain to have the status of "D" which only refers to physical de-energisation (i.e. fuse removal). The FRMP will still have an obligation to notify the LNSP of remote disconnection and remote reconnection as per the NERR.

Remote Disconnection Status at Meter Level

AEMO agrees to have the remote disconnection status at the meter level and proposes to add a new value of "D" for remote disconnection to the existing Meter Register Status field, which will be maintained and updated by the MP. AEMO confirms that the "D" NMI status at the NMI level will refer to the physical de-energisation of the site, and that the "D" meter register status at the meter level will refer to the remote disconnection of the site.

Participants should note that adding a new value to the list of possible values of the Meter Register Status field will require a schema change that might require participant system changes.

VIC AMI Meters

With the addition of a new meter register status at the meter level for remote disconnections, the VICAMI providers will be able to use the new status for remote disconnection and the NMI status field for physical de-energisation.

"N" NMI Status

The settlements process is not associated with and does not depend on the NMI status. The new NMI status of "N" is required to confirm that the status of a NMI is not on a market contract as this cannot be determined through the relationship between the parent and child NMI. It is also useful for the MDP as it can be used to de-activate the NMI datastream. Automatically updating the NMI status to "N" is not appropriate, either, as determining this status is at the discretion of the retailer.

4.5.4 AEMO's conclusion

Remote Disconnection/Reconnection Notification

AEMO will apply the obligation for notifying the LNSP of remote disconnection/reconnection to the FRMP only as per the NERR.

NMI Status Update Obligation

AEMO will remove the new NMI status of "R" and will insert a new Meter Register Status of "D" at the Meter level where the responsibility will be on the MP to update for remote disconnections and remote reconnections.

Remote Disconnection Status at Meter Level

AEMO will add a Meter Register Status of "D" at the meter level for remote disconnection.

VIC AMI Meters

The VIC AMI providers will be able to use the meter level, or NMI status identifiers depending on the nature of the disconnection (i.e. remote or physical).

"N" NMI Status

AEMO will include a new NMI status of "N".

4.6 MSATS Procedures: Change Request Codes

4.6.1 Issue summary

AEMO has proposed changes to the following series of change requests to accommodate for changes in the Amending Rules:

- CR 1000 series
- CR 2000 series
- CR 3000 series
- CR 5000 series
- CR 6000 series

4.6.2 Summary of submissions

Tier 1 only CRs

Endeavour Energy notes that the tier 1 only Change Reason Codes (i.e. CR2003, CR3003, CR3053, CR4003, CR4053, and CR5053) provide limited notifications to participants due to their history and intent which will no longer be applicable. It suggests removing all tier 1 only Change Reason Codes or review the notification rules for each of these Change Reason Codes. Performing the latter option would only result in a Change Reason Code that would be the same as the equivalent Change Reason Code for all tiers. Therefore it suggests the first option which is to remove all tier 1 only Change Reason Codes.

Origin requests that CR2003, CR3003, and CR4003 should be removed as notifications are not sent to participants requiring update such as LR or FRMP.

Ausgrid requests that all streamline codes e.g. CR3003, CR3053, CR4003, CR4053 and CR5053 should be removed from use. The LNSP and MPB businesses should not be aligned. The LNSP and MDP businesses should not be aligned.

CR 1000 series (Nomination of Roles by FRMP)

Ausgrid believes that CR1000 is a prospective transaction, therefore a FRMP is not entitled to nominate Service Provider Roles that are changing (if Service Provider Roles are not changing then there is no need to nominate them). Only the MC is allowed to change the MDP, the MPB and the MPC Roles. Nominating the MDP, the MPB and the MPC Roles in the CR1000 is changing them, because they will update contracts in MSATS when the MDP supplies the CR1500. The new MDP cannot supply the CR1500 until the meters have changed, otherwise they take ownership of data they cannot obtain or provide (BASIC to COMMS). The meters cannot change until the FRMP is in contract. Therefore the FRMP and MDP cannot change in a single prospective transaction under the current procedures.

Ausgrid requests AEMO to remove the creation of the Service Provider roles from the CR10xx transactions, as the FRMP is not entitled to nominate the MDP in the CR1000 transaction. The MDP (MPB, MPC etc.) must be nominated by the MC under the new rules. Participants who add the MPB, the MDP and/or the MPC in a CR10xx should have their transaction Objected. AEMO must supply new Objection Codes for the new and current MDP / MPB if Service Provider Roles are not restricted.

AGL notes that the FRMP should not be changing the MDP, MPC, and MPB roles in the CR1000 series and that this is the obligation on the MC.

Active Stream requests removing the FRMP obligation to provide MDP details in CR1000 series, and they also suggest deleting the optional FRMP obligations to provide MPB and MPC role in the CR1000 series to reduce ambiguity, as while the CR can handle this information, the FRMP would be in breach of churn rules if they change the MP. It also suggests that the current MC is the one who can provide the MP role details and not the new MC.

CR 1000 series (Metering Coordinator Obligations)

Ausgrid suggests that the current obligation on the new MC under CR10xx to ensure that the name of the New MDP is recorded in MSATS using Change Reason Code 6200 prior to the Actual Change Date is misleading. If an MC puts in a Prospective 6200 the MDP would always object, because the MDP party cannot ensure a prospective date is the day that a meter exchange occurs. CR6200 is rarely used today, clauses need to updated to support the new Meter Replacement rules to ensure MDP and MPB can only be updated on the meter exchange date.

Ausgrid and **Active Stream** suggest that Metering Coordinator Obligations related to CR 6000 series should be moved out from CR 1000 series and put under CR 6000 series.

AGL notes that the obligation to change the MC for transfer CRs falls on the FRMP and not the Metering Coordinator.

AusNet Services believes that the obligations for Metering coordinator to change roles using CR6000 series under the transfer CRs does not belong to this section, and that the obligation on the MC under the transfer CRs should change to be "The new MC must ensure MDP, MPC and MPB roles are correct and if not raise appropriate Change Request to update. Refer to section 29 to 36 for Change Request types for Role Changes."

CR 2000 series (Creating NMI without roles)

Ausgrid notes that under the rules, the LNSP can only update the LNSP, FRMP, MC (optional), LR and RoLR. Therefore changes to the NMI Creation procedure CR200x are required to support the new rules. Further, the ENM (LNSP Role id) can only update the LNSP, FRMP, MC (optional), LR and RoLR. Therefore changes to the NMI Creation procedure CR202x are required to support the new rules.

Ausgrid believe that the LNSP must populate all Roles in NMI creation. B2B SO Allocate NMI must support this process. The FRMP raising an Allocate NMI must populate all Roles required or the NMI Creation process to MSATS must change to only require LNSP and FRMP with MC as optional.

ActewAGL notes that there are no rules to indicate mandatory requirement for a LNSP to create a NMI with a FRMP, or any participants, it is only that way in the MSATS procedure. Therefore ActewAGL suggests to improve NMI discovery and competition, the requirement for the LNSP to create NMI with FRMP and other roles should be optional. Same thing applies to the ENM when they create child NMIs. ActewAGL notes that Rules 7.2.1 (3), 7.8.2 (c) (1), 7.8.2 (d) would indicate a NMI already exists, Rule 7.13.1 would infer that the NMI should already be in MSATS for a retailer to discover, Rule 7.8.2 (c) & (d) would then be less onerous if the NMI was in MSATS, and would enhance metering timeframes and allow automation for the retailer. Other Rule clauses that would also infer the NMI already exists are 7.2.1 (a) (3); 7.13.3.

CR 2000 series (CR25xx for Create NMI, Meter and Datastream)

Ausgrid believe the 25xx transactions can be removed from use. LNSP and Metering companies should not be aligned to allow a single transaction to be sent.

AusNet Services and **Pacific Hydro** question why CR2520 and CR2521 were deleted. As the CRs could be used by the ENM if they had all of the information required. If the answer is they can use the CR2500/01 then that needs to be made clear in that section.

CR 3000 series

Ausgrid requests the removal of CR308x and CR309x. Effectively these are streamlined transactions where businesses (LNSP and MPB) are aligned. In most instances the MC will not have the Metering and Datastream information to provide this information as required. Incorrect updates by the MC may be objected to, resulting in metering not being updated in MSATS. If industry determines that those transactions will remain then the contract updates must be removed from the transactions.

Energex request that consideration should be given to modifying the current CATS 3xxx series to include final readings from the new MPB from the meters removed (i.e. type 6 to type 4).

CR 5000 series

Ausgrid believes that ENM obligations under CR509x are not consistent if the NMI Status of N remains. Upon addition of the Embedded Network Name to the Child NMI the NMI Status must update dependent on the FRMP relationship to the Parent NMI.

Ausgrid suggests AEMO should delete CR5090/5091.

AGL questions why AEMO initiates a CR509x change request for a child NMI, especially as AEMO has been stricken out from the descriptive section of the applications.

CR 6000 series (Nominating Roles)

Ausgrid believes that the FRMP should be allowed to change the MC using a CR63xx transaction. And that the MC should only be allowed to update the MC where the NMI Classification is LARGE.

Ausgrid believes that the FRMP should not be allowed to raise a CR68xx as they are not entitled to update the Service Provider Roles. And that the MC should not be nominated in this transaction if the FRMP cannot initiate.

Endeavour Energy suggests that only a FRMP should be allowed to nominate a MC in MSATS which is consistent with the NER intent. They suggest that only a FRMP can initiate Change Request 6300 and 6301.

AGL notes that a FRMP should not be able to change the MDP in the CR6000 series as this is an MC obligation.

Active Stream notes that for CR68xx, the new MC should be added as an initiating role where they can make themselves the MC and change the MP/MDP roles.

Endeavour Energy suggests that only an ENM should be allowed to nominate a LR in MSATS for a Child NMI. They suggest that only the Current ENM can initiate Change Request 6421.

AusNet Services believe that CR6421 could also be used by the ENM to ensure the standing data in MSATS is correct. This will allow both parties (LR and ENM) to update this information.

CR 6000 series (Relationship with CR1500)

Ausgrid believes that CR6200 must be updated to complete on an Actual Change Date (CR1500) supplied by the MDP. The CR6200 has similar functionality to the CR6800. Changes in MDP must validated before the transfer can complete. Example BASIC to COMMS must align to a Meter Exchange Date. Ausgrid believes that the FRMP should not be allowed to initiate the MDP change in CR62xx as only the current MC can nominate the MDP.

CR 6000 series (Replacing all CRs with 68xx)

Ausgrid believes that CR62xx, 63xx, 65xx, 67xx can be deleted and CR680x can be used instead. Ausgrid requests AEMO to consider the removal of those CRs and only use the CR6800 with special conditions dependent on the roles updated.

AGL & **Active Stream** question whether CR620x are remaining and whether they should be replaced with CR6800.

4.6.3 AEMO's assessment

Tier 1 only CRs

AEMO agrees to delete the tier 1 only Change Requests as those CRs were introduced when retailers, MPs, MDPs and DNSPs businesses were aligned or were part of the same company. AEMO's preferred option is to disable those CRs.

CR 1000 series (Nomination of Roles by FRMP)

AEMO does not consider it appropriate to remove the ability for FRMP to nominate or change roles in the Change Retailer CR1000 series. Change Requests should facilitate various business models and arrangements between participants where it is reasonable to do so, rather than seeking to restrict the market to one method of operation or another. For example, if a FRMP and an MC have agreed that, for efficiency, the FRMP will nominate a new MP in a CR, MSATS can facilitate that arrangement; the requirement to ensure that the CR is compliant with the NER resides with the party raising the CR.

AEMO does not propose to add new Objection Codes if the nomination of MPs and MDPs is not restricted in the CR1000 series as the current objection codes are sufficient and allow participants to perform their obligations under the NER.

CR 1000 series (Metering Coordinator Obligations)

AEMO agrees that having the obligations for the Metering Coordinator to change roles using the CR6000 series under the CR1000 series is not appropriate and can cause confusion.

CR 2000 series (Creating NMI without roles)

AEMO does not agree to allow LNSP to create NMIs in MSATS without adding all the other roles (i.e. FRMP, MP, and MDP). The NER have specific requirements for parties to appoint roles, and as such, no NMI should be created without the retailer being able to provide details on the appointment of the MC, etc.

CR 2000 series (CR25xx for Create NMI, Meter, and Datastream)

AEMO does not agree to delete CR25xx which allows the LNSP to create NMI and provide Metering Installation details and Datastream details at the same time, if LNSP has the information through agreements with MPs and MDPs then they can provide this information. As a result, AEMO agrees to revoke the proposed deletion of CR2520 and CR2521 as the ENM should also be able to provide Metering Installation details and Datastream details at the time of NMI creation if they have been provided with this information through their agreements with the MPs and MDPs.

CR 3000 series

AEMO has repurposed CR308x and CR309x. to make the initiating Role the MC instead of the RP (who is the LNSP). The MC should be able to maintain metering installation details if they have been provided with this information from the MP by agreement. Also, for metering installation types 5 and 6 the initial metering coordinator will be the LNSP who should still be able to maintain metering installation details in MSATS.

CR 5000 series

The ENM obligation under CR509x is not inconsistent with the NMI status “N”. AEMO proposes the new NMI status of “N” to confirm that the status of NMI is not on a market contract as this cannot be determined through the relationship between the parent and child NMI. AEMO does not agree to automatically update the NMI status to “N” as determining this status is at the discretion of the retailer.

AEMO does not agree that a NMI moving from an LNSP network to an embedded network should be made extinct and hence AEMO will not delete CR5090/5091.

AEMO will remove AEMO from the initiating roles of CR509x as it is no longer relevant.

CR 6000 series (Nominating Roles)

CRs should facilitate various business models and arrangements between parties where it is reasonable to do so, rather than seeking to restrict the market to one method of operation or another. For example, if a FRMP and an MC have agreed that, for efficiency, the FRMP will nominate a new MP in a CR, MSATS can facilitate that arrangement; the requirement to ensure that the CR is compliant with the NER resides with the party raising the CR.

A new MC cannot be an initiating role for CR68xx, as the it cannot appoint service providers until it is the current MC.

The LR for a child NMI is always going to be the FRMP of the parent NMI, so it does not make sense to allow the ENM to nominate the LR for child NMIs using CR6421.

CR 6000 series (Relationship with CR1500)

CR1500 is irrelevant in the context of the CR6000 series.

CR 6000 series (Replacing all CRs with 68xx)

AEMO has considered replacing CR62xx, CR63xx, CR65xx, CR67xx with CR68xx, however, it does not see any problem with retaining those CRs to provide additional flexibility for parties who wish to use them.

4.6.4 AEMO's conclusion

Tier 1 only CRs

AEMO will delete the tier 1 only change requests, which are: CR2003, CR3003, CR3053, CR4003, CR4053 and CR5053,

CR 1000 series (Nomination of Roles by FRMP)

AEMO will not change or remove the ability for the FRMP to nominate the service provider roles in the CR1000 series, or add any new objection codes.

CR 1000 series (Metering Coordinator Obligations)

AEMO will delete the Metering Coordinator Obligation for the CR6000 series from the CR1000.

CR 2000 series (Creating NMI without roles)

AEMO will not change Create NMI CRs to allow an LNSP to create NMIs without adding all Roles.

CR 2000 series (CR25xx for Create NMI, Meter, and Datastream)

AEMO proposes to retain on CR25xx which allows the LNSP and the ENM to create the NMI with the metering installation details and the datastream details at the same time.

CR 3000 series

AEMO will not delete CR308x and CR309x, AEMO has repurposed the CR to be used by the Metering Coordinator or amend the current CR3000 series to include the final reading from the new MPB as it is not accredited to collect, process or deliver metering data.

CR 5000 series

AEMO will not delete CR5090 and CR5091, but it will remove AEMO from the initiating Roles for those CRs.

CR 6000 series (Nominating Roles)

AEMO will not restrict the ability of the FRMP and MC to nominate roles in the CR6000 series..

AEMO will not allow the new MC to be an initiating role for CR68xx or the ENM to nominate the LR through CR6421.

CR 6000 series (Relationship with CR1500)

AEMO will not link CR1500 to CR62xx as suggested.

CR 6000 series (Replacing all CRs with 68xx)

AEMO will not replace CR62xx, CR63xx, CR65xx, CR67xx with CR68xx.

4.7 MSATS Procedures - Objection Codes

4.7.1 Issue summary

AEMO has proposed to:

- Reduce the objection logging periods to one business day where they are currently 5 business days
- Disable the following objection code:
    - BADMETER
- Update the following objection codes:
    - BADDATA
    - BADPARTY
    - DATEBAD
    - DEBT
    - DECLINED

- NOACC
- CONTRACT

4.7.2 Summary of submissions

Removal of BADMETER Objection code

Ausgrid does not support the removal of the BADMETER Objection Code. Ausgrid uses the Objection Code of BADMETER in the scenario below:

- CR1000 or CR1080
- Read Type Code is NS, RR, SP, PR, ER
- Our Systems are the MDP
- COMMS Meters exist

Ausgrid systems have over 250 objections using this code since the start of the year. They expect this number to grow as the number of interval meters increase. The MDP is entitled to object using 'BADMETER' in this instance. If the Objection Code is removed then Ausgrid will be forced to use 'DECLINED' which is not a suitable objection code and 'BADMETER' is more suitable in that case.

Ausgrid noted that BADMETER is also relevant in the future where CR1000 is raised with a NEW MDP and Read Type Code of NI. A FRMP cannot initiate meter churn, this is not compliant with the Meter Churn rules. BADMETER is also relevant in the future where MRAM metering exists and a participant uses a Read Type Code of EI. The removal of this code is to the detriment of the industry.

Energex & Ergon request AEMO to provide more details as to why the "BADMETER" objection code has been removed, as it is not clear to them the reason for removal.

United Energy believes BADMETER is still a valid objection type.

Reducing Objection Logging Period

TransGrid prefers the Objection Logging Period for large NMI's to remain at 5 days for CR2000, CR2020, CR2021, CR2500, CR2501, CR6100, CR6110, CR6200, CR6210, CR6800, CR6801. TransGrid does not have automated B2B software that flags objections, all CATS generated xml files are manually read. One day to respond is considered too short.

EnergyAustralia questions the reduction of the objection logging period for large NMI is CR 2000 series from 5 to 1 business days, as this does not allow time batch processing and will cause automated objections. This will increase the number of objections.

AGL & **Pacific Hydro** note that 1 business day to object for CR1000, CR2000, CR5000, and CR6000 series is inadequate and will lead to higher level of errors.

AusNet Services believes the objection period of 1 day for change requests is not long enough. It does not allow for non NEM public holidays and suggests that it should be 2 business days.

Red Lumo notes that reducing the number of days for a participant to log an objection from 5 to 1 is an insufficient timeframe for investigation. The proposed change is not supported and should remain at 5 business days.

Powershop prefers to keep the objection logging period for the change requests to 5 business days, or to whatever it currently is and not be reduced to 1 business day.

4.7.3 AEMO's assessment

Removal of BADMETER Objection code

AEMO considers that the rationale provided by Ausgrid for the retention of the BADMETER objection code are valid. On further analysis, AEMO has considered one additional potential scenario that warrants the retention of this objection code; where a Greenfield NMI exists (NMI Status = G, no metering installation), and the LNSP raises a 5051 to update the NMI Status to A before the MP has created the metering installation. The MDP has the obligation to set up the datastream in MSATS but has not received the metering details (via MSATS notification of the CR300x create metering initiated by the MPB), and therefore should still be able to object in this scenario using BADMETER. The description for the use of the BADMETER objection code has been updated accordingly.

Reducing Objection Logging Period

AEMO could not find a compelling argument to keep the objection logging period to 5 business days. While Participant concerns are noted, a study of objections accepted between January 2015 and March 2016 indicate that around 92% of objections were submitted within 1 business day. Hence, current market practice indicates that an objection logging period of 1 business day is reasonable.

AEMO also notes that regional public holidays are not a sufficient reason to change the objection logging period for a national market that uses national business days.

Finally, AEMO notes that participants can only object when their objections are valid, and cannot automate objections without good reason to object.

4.7.4 AEMO's conclusion

Removal of BADMETER Objection code

AEMO will be reinstating the "BADMETER" objection code.

Reducing Objection Logging Period

AEMO will reduce the objection logging period from 5 to 1 business day.

4.8 MSATS Procedures - Network Tariff Code

4.8.1 Issue summary

AEMO has proposed that the MP will be required to update the Network Tariff Code field in MSATS and AEMO will review the requirements of certain MSATS reports (e.g. C4, C7) so as to ensure that the MP and MDP have access to the information they require to undertake their roles.

4.8.2 Summary of submissions

Ausgrid (LNSP) is against the mandatory population of Network Tariffs in CR30xx transactions as MPB's will not know the correct tariffs to apply.

Ausgrid requests that Network Tariff population which applies to all CR30xx transactions, is

a) Mandatory for BASIC, MRIM Metering.

b) Excluded for COMMS or MRAM metering. i.e. must not be populated.

Ausgrid supports the addition of a 'Service Type' against each RegisterID for the population by the MPB. Service Types would include: i) General Supply; ii) Controlled Load; iii) Generation.

Ausgrid (Metering) is against the mandatory population of Network Tariffs in the CR30xx transaction as their business may work in NSW and VIC and have no interest in keeping reference information for all Network Tariffs across all Networks. Mandatory population of the Network Tariff on COMMS metering will result in higher volumes of Network Billing exceptions.

EnergyAustralia notes that currently LNSPs (i.e. Ausgrid and AusNet) do not provide the network tariff code information to Metering Data Provider to enable them to input this information in MSATS.

AGL believes that it should be optional for the MPB to update the network tariff code.

Acumen does not agree with the change to Network Tariff Code as a mandatory field for the Metering Providers as this information may not always be available to the MPB and the MPB is not responsible for the data maintained in the field.

Active Stream note that making MP update of Network Tariff Code mandatory has not yet been agreed. Active Stream believes this should be optional for MPs, not mandatory. If LNSPs or FRMP wish for the MP to perform this service, then MPs should be able to charge for it. Furthermore, in order to be effective MPs would need to be provided with a mapping table of basic to interval NTC's, e.g. NTC B1 =I1.

AusNet Services does not agree with the making of the Network Tariff Code field mandatory for the MPB. The MPB does not have the understanding of Network tariffs that the LNSP does and cannot be held responsible for a Network tariff. There isn't any obligations on the LNSP to provide the Network tariff to the MPB. AusNet Services believe that

updating of information should sit with the participant that has the obligation. AusNet also believe that the Network tariff should sit at NMI level and not metering level.

Momentum questions the reason for making Network Tariff Code mandatory for Metering Providers in CR3000 series.

Metropolis notes that there should be a timing requirement for updating network tariff code by the LNSP. This is required after every meter exchange, and the timing is important for Retailer invoice set up and verification of NTCs.

Lendlease questions the obligation of the ENM to store Network Tariff Codes for each NMI in its area (what is essential to be able to effectively shadow price the LNSP should a customer wish to leave the EN). Lendlease were not sure which CR will the ENM use for that and It is not clear to them if it is possible to set the tariff code to one replicating the LNSP (so as to be able to shadow price as permitted within the rules). They note that the following CRs has no options for the ENM to provide the network tariff code (CR202x. CR5021, CR506x) (possibly update some CRs which has the LNSP to include ENM for child NMIs)

4.8.3 AEMO's assessment

AEMO believes that making the Network Tariff Code field mandatory for MPs is necessary because the current status of the field is optional and it creates inefficiencies in the market. AEMO notes concerns about MPs not having access to the Network Tariff Code information, and that LNSPs are not required by the NER to provide it to MPs. AEMO considers that the MP and MC would need to ensure that they are in receipt of sufficient information through their agreements with retailers to enable them to update the field.

AEMO does not agree to specify a timing requirement for updating the Network Tariff Code by the LNSP, as the requirement is for the MP to update the Network Tariff Code following a meter change.

AEMO agrees that it is not clear in the MSATS procedure currently how the ENM will be maintaining the Network Tariff Code, hence AEMO will update CR3100 to include that the ENM using the Role ID of the LNSP can initiate the CR to maintain the Network Tariff Code for Child NMIs.

4.8.4 AEMO's conclusion

AEMO will make the Network Tariff Code field mandatory for Metering Providers.

AEMO is not proposing to specify any timeframes for the LNSP to update the Network Tariff Code.

AEMO will update CR3100 to allow the ENM using the Role ID of the LNSP to maintain the Network Tariff Code for Child NMIs.

4.9 MSATS Procedures: AEMO Administered Fields

4.9.1 Issue summary

Endeavour Energy suggests that new fields called Controlled Load and Time Of Day should be added to the list of fields which AEMO maintain and administer a list of codes and rules for in MSATS.

4.9.2 Summary of submissions

These fields are currently mandatory but there is no list of allowed values which means that various values with different structure and meaning are populated. These two data fields are important to distinguish the type of service provided to the customer. Currently this is not an issue because the MP and LNSP for domestic customers is generally the same organisation. Therefore mapping of metering, services and tariffs are managed together at the same time. With the introduction of metering competition there is a need for better communication from the MP about the metering, services and tariffs. Endeavour Energy suggests that the data fields called Controlled Load and Time Of Day have a list of industry defined allowable values that MSATS can store and validate against and notes that consultation on the allowable values is required and suggests that the allowable values for Controlled Load should include 'Yes' or 'No', and the allowable values for Time Of Day should include 'AllDay', 'Peak', 'Shoulder', 'OffPeak', 'CL1', 'CL2'

4.9.3 AEMO's assessment

AEMO agrees to create a list of allowable values for the existing fields "Controlled Load" and "Time Of Day", which will be maintained and administered by AEMO. AEMO will propose this change in the second round of this consultation to gather stakeholders' feedback.

4.9.4 AEMO's conclusion

AEMO will make the fields "Controlled Load" and "Time Of Day" maintained and administered fields by AEMO. The technical workstream will provide a list of allowed values for those fields based on the values currently exists in MSATS.

4.10 MSATS Procedures: Read Type Codes

4.10.1 Issue summary

Participants raised issues with the Read Type Codes. Some believe that some of the Read Type Codes should apply to a wider list of meter types. Participants also believe that some Read Type Codes are no longer valid and should be deleted.

4.10.2 Summary of submissions

Ausgrid believes that read type code NI must be removed from the table, as it will not be allowed under the Meter Churn Rules. The FRMP must transfer with the existing metering.

Endeavour Energy note that the read type code "NI" is no longer valid because of the Meter Replacement Process Rule. They suggest that this code be removed.

AGL note the following about the read type codes:

- SR - Special read type applies to type 4A meters as well as 5 &6 – all manually read meters
- EI – Applies to VICAMI (likely type 5) and any other type 5 remote installations
- NI – inconsistent with meter churn rules
- NB – not allowed in new framework

Active Stream note the following about the read type codes:

- SP should apply to manually read meters which includes type 4a, but MR is the key distinction
- NI – is this still relevant? MP cannot be changed during transfer process, breach of churn rules, this should be removed
- NB – remove, no new basic meters

ActewAGL questions whether read type code NB still be allowed as no one can install an accumulation meter.

AusNet Services believes that the read type code of NI cannot be used and should be removed as it does not align with the MRP rule change.

Red Lumo questions whether read type code NI is still valid, as the New FRMP cannot churn a meter prior to becoming the FRMP.

4.10.3 AEMO's assessment

AEMO agrees to make the following changes to the Read Type Codes:

- Delete the "NI" read type code as it is inconsistent with the Meter Churn Rules.
- Delete the "NB" read type code as it will no longer be applicable, as there will be no new accumulation meters installed.
- Apply the read type codes (NS, RR, SP, ER, PR) to type MRAM "4A" Metering Installation Type Code.

4.10.4 AEMO's conclusion

AEMO will amend the Read Type Codes by deleting NI & NB and applying NS, RR, SP, ER & PR to Metering Installation Type Code MRAM 4A.

4.11 Meter Data File Format Specification - Inclusion of NMI Suffixes

4.11.1 Issue summary

The MDP's ability to use reasonable endeavours with respect to NMI suffixes in a MDFF file.

4.11.2 Summary of submissions

Ausgrid suggests that the MDP should be able to use reasonable endeavours to ensure that all NMI suffixes associated with a NMI for a single read event/date are included in the same 100-900 event block.

In contrast, Momentum supports the proposed provision which states that the MDP must ensure that all NMI suffixes associated with a NMI for a single read event/date are included in the same 100-900 event block.

4.11.3 AEMO's assessment

AEMO believes that it is an obligation on the MDP to ensure that all NMI suffixes associated with a NMI for a single read/event are included in the same 100-900 event block. Submissions did not detail any situations in which an MDP could not meet this obligation due to factors outside of their control.

4.11.4 AEMO's conclusion

No change.

GLOSSARY

Term	Meaning
Amending Rules	National Electricity Amendment (Expanding competition in metering and related services) Rule 2015 No. 12, National Electricity Amendment (Embedded Networks) Rule 2015 No. 15 & National Electricity Amendment (Meter Replacement Processes) Rule 2016 No. 2
Jurisdiction	A 'participating jurisdiction', as that term is defined in the NER.
NER	National Electricity Rules
NERR	National Energy Retail Rules

Appendix A - Consolidated Summary Responses

A consolidated summary of all issues raised by Consulted Persons in submissions, together with AEMO's responses, is publishes on AEMO's website at:
http://www.aemo.com.au/Consultations/National-Electricity-Market/Power-of-Choice-AEMO-Procedure-Changes-Package-1

The feedback for each procedure is detailed in the following tables:

- Table 1 – Metrology Procedure: Part A
- Table 2 – Metrology Procedures: Part B
- Table 3 – Service Level Procedure: Metering Provider Services
- Table 4 – Service Level Procedure: Metering Data Provider Services
- Table 5 – Meter Data File Format Specification
- Table 6 – MSATS Procedures: CATS
- Table 7 – MSATS Procedures: WIGS
- Table 8 – MSATS Procedures: MDM
- Table 9A – Glossary and Framework (introduction and framework chapters 1 and 2)
- Table 9B – Glossary and Framework (definitions in chapter 3)
- Table 10 – NMI Standing Data Schedule
- Table 11 – NEM RoLR Processes: Part A
- Table 12 – Other Issues related to Consultation Subject Matter