

5MS/GS Transition Focus Group #4: *Transition planning for metering and metering data*

Wednesday 6th November, 2019

AEMO Offices:

Level 9, 99 Gawler Place, Adelaide

Level 10, 10 Eagle St, Brisbane

Level 22, 530 Collins St, Melbourne

Level 2, 20 Bond St, Sydney

WEBEX details in calendar invitation

This slide pack was developed for the Transition Focus Group meeting. This version of the slides has been annotated with notes from the meeting. These additional notes are on new slides that have a yellow background.

Attendees Noted

Name	Organisation	Name	Organisation
Blaine Miner	AEMO	David Woods	SAPN
Emily Brodie	AEMO	Justin Stute	Mondo/Select
Linda Brackenbury	PlusES	Jon Ham	Energy Australia
Con Michailides	Ausnet	Mark Reid	Lumo
Dino Ou	Endeavour Energy	Nick Gustafason	Red Energy
Ingrid Farah	EEQ	Tim Lloyd	Essential Energy
Nicole Bright	Energy Qld	Aakash Sembey	Simply Energy
Paul Greenwood	Vector	Greg Szot	Powercor/Citipower
Marian Vasjuta	Origin	Jonathon Briggs	Metering Dynamics
Christoph Bechia	Red/Lumo	Paul Willacy	Aurora Energy
Pieter Wijtzes	AGL	Warren van Wyk	Intellihub
Steve Smith	Metering Dynamics	Steph Lommi	Alinta Energy
Mario Iogha	Origin	Owen Self	Stanwell
Jeff Roberts	Evo Energy		

Consolidated Actions

Section	Action	Responsibility	Due date
Meter installation and reconfiguration	Participants to send through any metering/NMI list requests via the 5MS mailbox	Participants	Ongoing
Meter installation and reconfiguration	AEMO to consider cross-boundary requirements in the GS final rule	AEMO	Wed 20 Nov
Meter installation and reconfiguration	Make cross-boundary details more explicit in the MTP e.g. definition of new vs existing	Participants & AEMO	Wed 20 Nov
Metering Data Delivery	AEMO to consider meaning of transition end date in relation to metering data delivery agreements	AEMO	Wed 20 Nov
MSATS standing data creation and maintenance	TFG to consider most appropriate start and end dates for transition windows for NMI Classification codes updates. Participants to consider implications of 1 step and 2 step process	Participants	Wed 20 Nov
MSATS standing data creation and maintenance	AEMO to confirm impact on its systems if NMI NCCs are not updated by 1 July 2021	AEMO	Wed 20 Nov
MSATS standing data creation and maintenance	Participants to confirm impact on their systems if NMI NCCs are not updated by 1 July 2021	Participants	Wed 20 Nov
Accreditation updates	AEMO to confirm accreditation expectations for 1 Dec 2022 MPs	AEMO	Fri 29 Nov

Agenda

NO	TIME	AGENDA ITEM	RESPONSIBLE
Preliminary Matters			
1	11:00am - 11:10am	Welcome, introduction and general housekeeping	Blaine Miner
Matters for discussion			
2	11:10am – 11:30am	Responses to actions from previous meeting	Blaine Miner
3	11:30am – 11:35am	Session objectives	Blaine Miner
4	11:35am – 12:30pm	Workshop	Blaine Miner
BREAK (12:30pm – 12:45pm)			
6	12:45pm – 1:45pm	Workshop continued	Blaine Miner
Other business			
7	1:45pm – 2:00pm	General questions	Blaine Miner

Reponses to actions

Blaine Miner

TFG feedback since meeting #3

- Energy QLD sought clarification on which NMI classification codes may apply to CR1xxx transfer transactions.
- AEMO Response:
 - Based on the applicable CATS and WIGS procedures, the following NMI classification codes may be applicable to a CR1xxx transfer transaction:
 - LARGE
 - SMALL
 - WHOLESAL
 - INTERCON
 - GENERATR
 - NREG
 - DWHOLSAL

Responses to AEMO's actions

Section	Action	Responsibility	Response
Responses to actions	AEMO to follow up on stakeholder responses where necessary	AEMO	Ongoing
Responses to actions	Retailers who would like reports please request via 5ms@aemo.com.au	Retailers	Ongoing
Summary of proposed metering and metering data transition approach	AEMO to consider clarifications to metering/metering data transition chart	AEMO	To be updated as part of Transition Strategy work. Will take on board TFG and individual company feedback/responses.
Meter data delivery	AEMO to provide information around its assumption that MDPs are obligated to deliver 30-min granularity data prior to 1 July 2021 and 5-min granularity metering data thereafter.	AEMO	AEMO's position is that that MDPs need to deliver 30-min granularity data prior to 1 July 2021 and 5-min granularity metering data thereafter. This is unless there is agreement between the retailer, LNSP, MDP and AEMO [NER 7.10.5(a)].
	AEMO to include bulk supply point meters as an additional category in the MTP	AEMO	Complete
	AEMO to provide information to TFG on whether the LR should LR get data at different granularity than what required for settlement.	AEMO	If the retailer, LNSP, MDP and AEMO agreed to the delivery of 5min metering data, for a particular NMI pre-1 July 2021, the LR would by default receive 5-min metering data as well, even though the market was still settling on a 30-min basis.
MSATS standing data creation and maintenance	AEMO to clarify what NMI classification codes would apply to CR1000 transfer transactions	AEMO	UPDATED: Based on the applicable CATS and WIGS procedures, the following NMI classification codes may be applicable to a CR1xxx transfer transaction: LARGE, SMALL, WHOLESAL, INTERCON, GENERATR, NREG and DWHOLSAL

Notes

- AEMO clarified that:
 - Based on the applicable CATS and WIGS procedures, the following NMI classification codes may be applicable to a CR1xxx transfer transaction from 2021:
 - LARGE
 - SMALL
 - WHOLESAL
 - INTERCON
 - GENERATR
 - NREG
 - DWHOLSAL

Session objectives

Blaine Miner

Session objectives

- Finalise any outstanding items (dates / dependencies) on the MTP
- Confirm next steps

Approach to workshop

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Approach to workshop

Work through the MTP section by section:

1. Meter installation and reconfiguration

- Largely agreed at the last TFG
- Emphasis will be on agreeing critical start and end dates

2. Meter data delivery

- Discussion regarding potential pre-1 July 2021 5min delivery agreements and agreeing critical start and end dates

3. MSATS standing data creation and maintenance

- Discussion regarding NMI Classification Code transition windows and sequencing

4. MSP accreditation updates

- Agreement of accreditation key start and end dates
 - Taking into consideration MP/MDP scale of change, AEMO queuing processes and Participant/AEMO resourcing requirements

1. Meter installation and reconfiguration

- Have added a new sub-category of “BULK/Wholesale Meters” based on feedback from TFG members and for purposes of Readiness Reporting
 - Underlying activities, dates and content consistent with Type 1-3 meters
- That all required meters for market commencement have been installed/reconfigured **by 30 April 2021**
- Updated dependencies to refer to sub-category IDs
 - Dependencies in the MTP will only reference sub-categories contained within the MTP
 - All other dependencies not explicitly mentioned in the MTP are assumed to be the responsibility of the "Responsible" party for each activity

2. Meter data delivery

- Have added a new sub-category of “BULK/Wholesale Meters” to be consistent with Meter Installation and Reconfiguration
- Underlying activities, dates and content consistent with Type 1-3 meters
- Agreements to delivery of 5min metering data pre 1 July 2021 between T/DNSP, FRMP, MDP and AEMO have been finalised **by 28 Feb 2021**
 - Relating to:
 - BULK/Wholesale meters
 - Type 1-3 and subset of type 4
 - Cross boundary
 - Type 7
 - NCULs
 - Other interval meters, if agreed
- Where agreements exist, 5min metering data will be delivered via B2B and B2M **by 31 May 2021**
- 5min metering data for New and Replacement Type 4, 4A, Sample, VICAMI, etc meters will be delivered via B2B and B2M by 30 Nov 2022
 - Indicative Workplan to be delivered by 1 July 2020
- Tier 1 basic metering data will be delivered **from 1 Apr 2021 at the latest**

3. MSATS standing data creation and maintenance

- Standing data creation/updates, regarding the following items, need to be completed **by 31 May 2021**
 - Existing cross boundary supplies
 - NCULs
 - New NMI Classification Codes
- Tier 1 Basic meter datastreams activated by **31 Mar 2021**

4. MSP accreditation updates

- Assess level of change required for people, process and systems to facilitate 5MS/GS implementation **by 30 June 2020**
- Confirm scope/scale of change with AEMO **by 30 June 2020**
- Receive all Accreditation Applications **by 31 Mar 2021**
 - Accreditation Updates will be processed in accordance with AEMO's queuing processes
 - AEMO and Participant resource planning to be guided by the initial Accreditation assessments
- Finalise Accreditation Approvals **by 30 Apr 2021 for MPs and 31 May 2021 for MDPs**

Notes

- Meter installation and reconfiguration
 - Nothing noted
- Meter data delivery
 - Agreements between the retailer, LNSP, MDP and AEMO [NER 7.10.5(a)] can be entered into at any time to change the interval length of metering data being delivered
 - For transition – LR will be included as a relevant/interested party
 - By default, the LR would receive the trading interval length specified in the Rules or based on the agreement by the FRMP, NSP, MDP and AEMO
 - Requirement of any agreement should be that the agreement only covers 5-min capable physical meters
 - B2B and B2M activities will be explicitly separated for MTP purposes
- MSATS standing data creation and maintenance
 - Proposed dates trying to balance Rule commencement risk and the implementation of participant programs
- MSP accreditation updates
 - Nothing noted

Metering transition plan: Workshop

Blaine Miner

1. Meter installation and reconfiguration

- Dates regarding the identification of meters, initial data storage assessments and provision of workplans to AEMO changed to a transition end date of 31 Mar 2020
- Participant asked if AEMO could provide lists of various metering installation types
 - AEMO agreed and asked participants to send requests to the 5MS mailbox 5ms@aemo.com.au
- General discussion about the benefits of including activities in the MTP to ensure that reported UFE is as accurate as possible from 1 July 2021
- Discussion about cross-boundary scenarios and associated physical metering requirements
- **Action:**
 - Participants to send through any metering/NMI list requests via the 5MS mailbox
 - AEMO to consider cross-boundary requirements in the GS final rule
 - Make cross-boundary details more explicit in the MTP e.g. definition of new vs existing

2. Metering data delivery

- Conversation about the importance of keeping the LR aware of any agreements that would change metering data interval length prior to 1/7/21
- Member asked what would happen under the proposed Customer Switching Rule if an MDP was selected to perform a service for a 5-min capable NMI when the MDP is not 5-min ready (MDP has no opportunity to object)
 - All MDPs need to deliver metering data to the market in accordance with the Rules.
 - If the MDP is unable to interrogate the meter, then MDP would provide 30-min estimates until issue resolved
- Discussion regarding the commonly used transition end date of 31 May 2021
 - AEMO response was that the date is attempting to balance Rule commencement risk and the delivery of participant programs
- General discussion regarding the finer details of potential 'alternative' interval length agreements
- B2M metering data delivery agreements can be entered into bilaterally between MDPs and AEMO at any time
- General discussion regarding type 7 and NCULs
- **Action:**
 - AEMO to consider meaning of transition end date in relation to metering data delivery agreements

3. MSATS standing data creation and maintenance

- Cross-boundary
 - Define differences between existing and new cross boundary supplies
 - Consider timing of NMI creations due to dependency on new NMI Classification Code (NCC)
 - Need to consider the effect on LNSP BAU NMI create processes if required to wait until new NCC available is available
- NCULs
 - Participant proposed to create NCUL NMIs as greenfield sites and then activate them when new NCC available, 2 step process
 - Participant requested that all NSPs agree one process to assist with potential automation options for other market participants
 - Participants to consider implications of 1 step and 2 step process
- NCC
 - Participant proposed 1 May 2021 as the transition start date for new NCCs and an end date of 31 May 2021
 - Avoids staggered transition requirements and creates consistent approach
 - Discussion regarding risks of new NCCs not being applied by 1 July 2021
 - Expected to be UFE related, not financial settlement
- Other
 - Discussion regarding 1st tier basic meter standing data requirements
 - Discussion regarding VIC TUoS standing data requirements
- **Action:**
 - TFG to consider most appropriate start and end dates for transition windows for NMI Classification codes updates.
 - Participants to consider implications of 1 step and 2 step process
 - AEMO to confirm impact on its systems if NMI NCCs are not updated by 1 July 2021
 - Participants to confirm impact on their systems if NMI NCCs are not updated by 1 July 2021

4. Accreditation updates

- General discussion regarding accreditation timings and application queue/resource management
- Participant mentioned that the MTP must consider 1 July 2021 and 1 Dec 2022 requirements
- **Action:**
 - AEMO to confirm accreditation expectations for 1 Dec 2022 MPs

General questions

Blaine Miner

Reflection on session objectives

- Finalise any outstanding items (dates / dependencies) on the MTP
- Confirm next steps

General business and next steps

- Workshop outcomes and actions to be circulated to TFG and RWG
- Finalised MTP to be presented to the RWG for their consideration and approval

APPENDIX:

Refresher on 5MS and GS metering and metering data obligations

5MS Metering installation requirements

Metering Type	Requirement	Date
Types 1, 2, 3 and 7	<ul style="list-style-type: none"> Must be capable of recording and providing, and configured to record and provide, five-minute trading interval energy data. 	By 1 July 2021
Subset of Type 4*	<ul style="list-style-type: none"> Must be capable of recording and providing, and configured to record and provide, five-minute trading interval energy data. 	By 1 July 2021
Types 4, 4A and 5	<ul style="list-style-type: none"> All new or replacement metering installations (other than type 4A metering installations) installed from 1 December 2018 must be capable of recording and providing, and configured to record and provide, five-minute trading interval energy data. All new or replacement type 4A metering installations installed from 1 December 2019 must be capable of recording and providing, and configured to record and provide, five-minute trading interval energy data. 	By 1 Dec 2022

Note:

AEMO may grant an exemption where 1 type 1, 2, 3 or subset of type 4 meter is not quite capable of storing 35 days of metering data (i.e. 30-34 days) if it is reasonably satisfied that the Metering Provider will be able to otherwise satisfy the requirements of Chapter 7.

* Subset type 4 meters definition:

- Type 4 metering installations at a:
 - Transmission network connection point; or
 - Distribution network connection point where the relevant financially responsible Market Participant is a Market Generator or Small Generation Aggregator

5MS/GS metering data delivery to AEMO

Topic	Requirement	Date
File Format	<ul style="list-style-type: none">• MDFF NEM12 files to be the required file format<ul style="list-style-type: none">• For all interval metering data being delivered to AEMO• MDFF NEM13 files to be supported by AEMO• MDMF files for basic meter reads will continue to be supported and accepted	From 1 July 2021
Granularity	<ul style="list-style-type: none">• NEM12 interval metering data to be:<ul style="list-style-type: none">• Delivered at the register level (E, B, Q and K)<ul style="list-style-type: none">• NEM12 200 records must be accurate• As per the meter's trading interval configuration i.e. 5, 15 or 30-minute intervals	From 1 July 2021
Energy	<ul style="list-style-type: none">• Metering data which must be sent to AEMO:<ul style="list-style-type: none">• Import and Export Active energy (kWh) (E and B)• Import and Export Reactive energy (kVarh) (Q and K), where applicable• All other forms of measurement (such as volts and amps) are not required to be delivered to AEMO but will be processed if they are provided.	From 1 July 2021

5MS/GS: MSATS datastream standing data

Metering Type	Requirement	Date
Types 1, 2, 3 and 7	<ul style="list-style-type: none"> Net datastreams (N1) must be converted to Register level datastreams (E1, B1, etc.) 	By 1 July 2021
Subset of Type 4*	<ul style="list-style-type: none"> Net datastreams (N1) must be converted to Register level datastreams (E1, B1, etc.) 	By 1 July 2021
Types 4, 4A and 5	<ul style="list-style-type: none"> All new records relating to interval meters must be created at the register level e.g. E and B. Existing net datastream records can remain active post 1 July 2021, until an update to the datastream record is required e.g. meter replacement. Where an update is required to a CNDS record, the net datastream record is to be inactivated and any new active datastreams records are to be created at the register level. Datastreams associated with import and export reactive energy e.g. Q and K must be created in the CNDS table if they exist in the CRI table. <ul style="list-style-type: none"> Datastreams must be established in a manner that ensures they are not included in market settlements. 	From 1 July 2021
Basic Meters	<ul style="list-style-type: none"> All 1st tier datastreams must be activated and meter reads delivered to AEMO, for UFE purposes 	By 1 July 2021

5MS/GS: MSATS standing data - general

By 1 July 2021

- Non-contestable unmetered load (NCONUML) NMIs and associated standing data created in MSATS
- NMI Classification Code updates, for affected existing NMIs, to reflect the new code requirements

NMI Classification Code	Description
BULK	<i>Connection point where a transmission network connects to a distribution network - also termed 'Bulk Supply Point'</i>
DWHOLSAL	<i>Distribution network connection point where energy is directly purchased from the spot market by a Market Customer</i>
NCONUML	<i>Non-contestable unmetered load</i>
NREG	<i>Connection point associated with a non-registered embedded generator, i.e. a generating unit that is not classified by a Market Generator, but may be classified by a Small Generation Aggregator as a market generating unit.</i>
WHOLESALE	<i>Transmission network connection point where energy is directly purchased from the spot market by a Market Customer</i>
XBOUNDRY	<i>Connection point where a distribution network connects to another to distribution network</i>

Thank you for your
attendance and participation!