

5MS/GS Transition Focus Group #7:

- *Updating the MTP for current changes*
- *MTP potential 12-month deferral scenario*

Wednesday 6th May, 2020

WebEx only [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 either in blue text or are on new slides that have a yellow background.

Attendees (1/2)

Organisation	Attendee	Organisation	Attendee	Organisation	Attendee
AGL	Pieter Wijtzes	Energy Queensland	Nicole Bright	Jemena	Marina Bakh
Alinta Energy	Shaun Cupitt	EnergyAustralia	Jon Ham	Jemena	Matthew Mullen
Arrow Energy	Shane Murry	Ergon Retail	Ingrid Farah	Jemena	Rajiv Balasubramanian
Aurora	Kevin Boutchard	ERM	Sharleen Flanagan	Jemena	Tejas Vadera
Aurora	Paul Willacy	ERM Power	Emily Lewis	Metering Dynamics	Cindy Matthews
Ausnet	Con Michailides	Essential Energy	Helen Rickards	Metering Dynamics	Stephen Kluck
Citipower/Powercor	Mark Pilkington	Essential Energy	Tim Lloyd	Metering Dynamics	Steve Smith
Clean Co	Gavin Douglas	Evoenergy	Matt Porter	Mondo	Kam Vessali
Electanet	Danny Chu	Evoenergy	Jeff Roberts	Origin Energy	Fergus Stewart
Endeavour Energy	Dino Ou	Intellihub	Warren van Wyk	Origin Energy	Mario Iogha

Attendees (2/2)

Organisation	Attendee	Organisation	Attendee
Plus ES	Linda Brackenbury	AEMO	Anne-Marie McCague
Powercor	Greg Szot	AEMO	Austin Tan
Red Energy	Christophe Bechia	AEMO	Blaine Miner
Red Energy	Nick Gustafsson	AEMO	Craig Shelley
SAPN	David Woods	AEMO	David Ripper
Simply Energy	Aaskash Sembey	AEMO	Emily Brodie
Snowy Hydro	Sandra Ho	AEMO	Greg Minney
Stanwell	Angela Sheehy	AEMO	Paul Lyttle
TasNetworks	Adrian Honey	AEMO	Simon Tu
Vector	Paul Greenwood	AEMO	Tui Grant

Consolidated meeting actions (1/2)

#	Topic	Action	Responsibility	Due date
1	Actions from TFG #6	TFG to provide feedback on whether there were MP activities associated with the conversion of new/replacement type 4/4A/VIC AMI meters.	TFG	Wed 20 May
2		AEMO to add any identified MP activities for new/replacement type 4/4A/VIC AMI meters to the MTP.	AEMO	Fri 22 May
3		AEMO to provide template for new/replacement type 4/4A/VIC AMI meters rollout plans	AEMO	Fri 22 May
4		TFG to provide feedback on template for new/replacement type 4/4A/VIC AMI meters rollout plans	TFG	Fri 29 May
5		AEMO to finalise template for new/replacement type 4/4A/VIC AMI meters rollout plans	AEMO	Wed 4 Jun
6		TFG to provide feedback on existing NCONUML template	TFG	Wed 20 May
7		AEMO to send out updated template once feedback received. • Expected to include indicative NMI volumes vs specific NMI lists	AEMO	Fri 22 May
8		AEMO to update MTP to include specific activities relating to participants providing AEMO with detailed NMIs lists at a future date i.e. algorithm approval process activities to be treated separately to provision of NMI lists.	AEMO	Fri 22 May

Consolidated meeting actions (2/2)

#	Topic	Action	Responsibility	Due date
9	CNDS clarification document	AEMO to issue an updated version of the document to reflect the changes in the MDM go-live dates	AEMO	Fri 22 May
10	MDM reschedule impact on MTP	TFG to provide feedback on MTP activity date changes resulting from the MDM implementation date change	TFG	Fri 22 May
11		AEMO to ensure "RegisterID to Suffix alignment" activity is added for Type 7 and NCONUML installations	AEMO	Fri 22 May
12	MTP "12-month delay" scenario	<p>TFG to provide feedback on MTP proposed 12-month 5MS/GS delay scenario, including the minor edits proposed by TFG members during the meeting:</p> <ul style="list-style-type: none"> A52, A58, A64 and A70 for the Forward Plan to AEMO be moved back until after the date of FINAL determination from AEMC (say Sept-Oct 2020) should A98a "Provide AEMO with NCONUML NMI list" - be pushed back to closer to the MDM Go-live date given that previously it was to be provided only 1 week before the MDM Go Live date? 	TFG	Fri 22 May

AEMO Competition Law Meeting Protocol

AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO regarding proposed reforms or other initiatives, all participants agree to adhere to the CCA at all times and to comply with this Protocol. Participants must arrange for their representatives to be briefed on competition law risks and obligations.

Participants in AEMO discussions **must**:

1. Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
2. Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
3. Immediately and clearly raise an objection with AEMO or the Chair of the meeting if a matter is discussed that the participant is concerned may give rise to competition law risks or a breach of this Protocol

Participants in AEMO meetings **must not** discuss or agree on the following topics:

1. Which customers they will supply or market to
2. The price or other terms at which Participants will supply
3. Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid
4. Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)
5. Refusing to supply a person or company access to any products, services or inputs they require

Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer terms and conditions, supply terms and conditions, sales, marketing or procurement strategies, product development, margins, costs, capacity or production planning.

Agenda

****Please disconnect from your workplace VPN for the WebEx call****

NO	TIME	AGENDA ITEM	RESPONSIBLE
Preliminary Matters			
1	10:00 - 10:15	Welcome and introduction	Greg Minney and Emily Brodie
2	10:15 – 10:20	Notes/actions from previous meeting	Greg Minney
For noting			
3	10:20 – 10:25	CNDS & Meter Data Delivery Clarifications Document	Blaine Miner
For discussion			
4	10:25 – 10:45	5MS Readiness reporting relating to MTP: Round #2	Austin Tan
5	10:45 – 11:45	Impact of MDM Reschedule on the MTP	Greg Minney and Blaine Miner
BREAK 11:45 – 11:55			
6	11:55 – 12:55	MTP “12-month delay” scenario	Greg Minney and Blaine Miner
General business			
7	12:55 – 13:00	Next steps and general questions	Greg Minney
	APPENDIX	Refresher on 5MS and GS metering and metering data obligations	

Introduction

Greg Minney and Emily Brodie

Session objectives

1. Update the MTP to accommodate the change to AEMO's MDM implementation while still delivering to the existing 5MS and GS Rule commencement dates.
 - This MTP will become the latest version for industry and AEMO to plan against.
 - Provide a basis for participants to evaluate impact to their project plans
2. Discuss an MTP scenario that reflects the proposed 12-month 5MS/GS delay. The MTP deferral scenario will:
 - Provide an understanding of the impacts and risks of the proposed delay as the basis for advice to the PCF
 - Support participants and AEMO in developing their own submissions to the AEMC rule change process based on a common scenario

Out of scope

- This session will not consider the rationale for the proposed rule change.
- The timing and consultation approach to the rule change has not been finalised by the AEMC (see next slide)

Refresher: “5MS deferral” change processes

	Rule change process	Procedure change process	Electricity contract market changes
What?	AEMO submitted a rule change request to defer 5MS and GS by 12 months. See: https://www.aemc.gov.au/sites/default/files/documents/erc0298_rule_change_request_pending.pdf	The rule change request seeks that: <i>As a transitional matter, AEMO proposes that any changes that are required to already-determined procedures for the sole purpose of deferring the effective date of 5MS or GS should not require consultation.</i>	A delay to 5MS would affect the contracts market. Contracts would need to be assessed for any impacts.
Who?	AEMC runs NER changes See: www.aemc.gov.au	AEMO runs NEM procedure changes under s8.9 of the National Electricity Rules Different forums are used for doing initial consultation with industry (see examples on next slide).	Retailers, generators and other specialised market participants agree bilateral contracts for electricity (OTC, futures etc). AFMA could potentially assist by facilitating a working group that considers standard templates for these agreements
How long?	It depends on whether AEMC runs the process as: <ul style="list-style-type: none"> an ‘expedited’ rule change: 8 weeks with one round of consultation, or a standard rule change: several months with two rounds of consultation See: https://www.aemc.gov.au/our-work/changing-energy-rules	It depends: <ul style="list-style-type: none"> Standard procedure changes have two rounds of consultation: several months Minor and administrative procedure changes are sometimes permitted without consultation or with modified consultation requirements The AEMC may determine how procedures impacted by the 5MS deferral rule change are consulted.	Industry led. May have dependencies on the rule change process.
How to have your say	<ul style="list-style-type: none"> Make a submission to the rule change process Participate in any stakeholder workshops or hearings 	<ul style="list-style-type: none"> Make a submission to any procedure change process Participate in any stakeholder forums 	Industry led.
Key stakeholders	Whole of industry including retailers, generators, metering service providers, network service providers, consumer representatives and large industrial customers	5MS program stakeholders are mainly: retailers, generators, metering service providers, network service providers.	Those participants who enter into contracts to buy/sell electricity.

BAU channels for AEMO procedures issues

Area	Channel
Metering / metering data / standing data	<p>B2M Electricity Retail Consultative Forum (ERCF)</p> <ul style="list-style-type: none">Follow change process <p>B2B Information Exchange Committee</p> <ul style="list-style-type: none">Follow change process
Settlements	email: settlements@aemo.com.au
Prudentials	email: prudentials@aemo.com.au
Dispatch	<p>NEM Wholesale Consultative Forum</p> <ul style="list-style-type: none">email: nemwcf@aemo.com.au

NOTES: Introduction (1/2)

- TFG confirmed the agenda and session objectives
- Discussion held around process and timing for 12-month deferral rule change proposal. AEMO confirmed:
 - Members should engage with their regulatory teams:
 - For more information on the origin of the rule change proposal
 - To provide information into any submission to the AEMC from their organisation.
 - The work the TFG does on the MTP 12-month delay scenario can be used for members' own submissions to the rule change proposal.
 - It is important to provide supporting evidence in submissions to the AEMC. Less weight will likely be given to arguments that do not have supporting evidence.

NOTES: Introduction (2/2)

- AEMC has recently indicated an expedited process. Clock starts from day the consultation paper is published. Objections can be made to expedited process and AEMC would assess any objection on merit. If an objection upheld, standard rule change process would be used.
- The AEMC must assess the proposal against the National Electricity Objective (NEO) i.e. whether the rule would be in the **“long term interests of consumers”**. This is the test for whether or not the rule is made, or whether a different rule is made (e.g. for a delay of a different duration). For more information on the NEO see: <https://www.aemc.gov.au/regulation/regulation>
- **Until a different rule is made, the existing rule applies i.e. the commencement date for 5MS is still 1 July 2021 and the GS commencement date is still 6 February 2022.**

Notes and actions from previous meeting

Greg Minney

Actions from TFG #6: 6 April 2020

(1/2)

Section	Action	Responsibility	Response
Changes to AEMO's Meter Data Validation Framework	TFG to propose valid use cases for the 3 rejection scenarios	TFG	<p>3 responses:</p> <ul style="list-style-type: none"> • One noting the FRMP perspective • One comfortable with AEMO's approach with caveats • One raised several questions <p>Next steps:</p> <p>AEMO to consider comments and provide response back to TFG</p>
MTP activities: Clarifications and approaches	AEMO to circulate a draft template relating to the conversion of Dec 2022 meters to the TFG.	AEMO	<p>This action was raised in respect of MPs' activities (MDP template discussed in in next slide).</p> <p>AEMO needs more information with respect to a template for MPs.</p> <p>Are there MP activities associated with the conversion of new/replacement type 4/4A and VIC AMI meters to enable 5-min data delivery by 1 Dec 22?</p>

Actions from TFG #6: 6 April 2020

(2/2)

	Action	Responsibility	Response															
MTP activities: Clarifications and approaches	TFG to provide indicative timing as to when participants intend to send or receive 5-min metering data (assuming 5MS commencement of 1 July 2021)	TFG	Four new respondents, meaning total of 10 respondents so far.															
			<table><tr><th>Type</th><th>Total</th><th>Capability before or on 1 Jul 21?</th></tr><tr><td>MDP</td><td>1</td><td>Before, but would only send if agreement</td></tr><tr><td>Retailer</td><td>2</td><td>On</td></tr><tr><td>Gentailer</td><td>4</td><td>3 On, 1 Before</td></tr><tr><td>DNSP</td><td>3</td><td>2 On, 1 Before</td></tr></table>	Type	Total	Capability before or on 1 Jul 21?	MDP	1	Before, but would only send if agreement	Retailer	2	On	Gentailer	4	3 On, 1 Before	DNSP	3	2 On, 1 Before
			Type	Total	Capability before or on 1 Jul 21?													
			MDP	1	Before, but would only send if agreement													
			Retailer	2	On													
	Gentailer	4	3 On, 1 Before															
DNSP	3	2 On, 1 Before																
AEMO to provide a template to the TFG to support MDPs providing their conversion plans to AEMO	AEMO	To be provided by mid-May																
AEMO to provide confirmation to TFG on the NCONUML algorithm approval process, taking into consideration how to apply, lead time required for approval and whether there is a template for profiles and algorithms	AEMO	Complete. Template provided with this slide pack. The process has two steps. 1. MC/MDP provide calculation methodology information to AEMO by completing the template. 2. AEMO provides approval in five business days.																

NOTES: Actions from previous meeting

- AEMO queried whether there were MP activities associated with the conversion of new/replacement type 4/4A/VIC AMI meters to enable 5-min data delivery by 1 Dec 22.
- **ACTION:** TFG to provide feedback on whether there were MP activities associated with the conversion of new/replacement type 4/4A/VIC AMI meters.
- **ACTION:** AEMO to add any identified MP activities for new/replacement type 4/4A/VIC AMI meters to the MTP.
- **ACTION:** AEMO to provide template for new/replacement type 4/4A/VIC AMI meters rollout plans
- **ACTION:** TFG to provide feedback on template for new/replacement type 4/4A/VIC AMI meters rollout plans
- Discussion on the NCONUML template provided to participants by AEMO.
 - AEMO noted that it requires consistency of NCONUML calculation methodology information and its presentation. AEMO also noted that NMIs related to each NCONUML calculation methodology are necessary to prioritise which methodologies should be the focus of UFE reviews.
 - TFG members explained that it is not possible to provide NMI lists as this will take time. Ausnet explained this is particularly where legacy sites need to be validated in the field and reconciled with franchise customers. NMI lists will change up to go-live. Endeavour identified that NCONUML NMIs cannot be created until after the new MDM go-live.
 - TFG considered that the algorithm approval process could be separated from the NMI list so long as an indicative number of NMIs was provided for each algorithm. NMI lists would still need to be provided on a regular basis in time for AEMO to include them in its analysis for the annual UFE report.
- **ACTION:** TFG to provide feedback on existing template
- **ACTION:** AEMO sends out updated template once feedback has been received
 - Expected to include indicative NMI volumes vs specific NMI lists
- **ACTION:** AEMO to update MTP to include specific activities relating to participants providing AEMO with detailed NMIs lists at a future date i.e. algorithm approval process activities to be treated separately to provision of NMI lists.

CNDS & Meter Data Delivery Clarifications Document

Blaine Miner

Context & Purpose

Context

- With the introduction of the 5MS & GS Rule requirements, a more granular and global source of reference data is required.
- To support this requirement, Net CNDS records will be gradually replaced by Register Level CNDS records.
- AEMO has published a clarification document to provide specific guidance on how this transition will occur.

Purpose

- To provide additional context and clarification on the maintenance and population of the CATS NMI Datastream ('CNDS') table. These clarifications should support appropriate completion of the required transitional and operational activities leading up to the 5MS Rule commencement.
- To clarify MDP B2M data delivery concepts relating to the implementation of AEMO's new Meter Data Management (MDM) platform.

Audience

- Primarily intended for MDPs affected by the 5MS and GS market reforms.
- It assumes the reader has a good level of knowledge about NEM metering data systems and processes.

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 - CNDS Procedural references
 - Potential Procedural Updates
- CNDS Records
- CNDS DataStreamType Codes
- ADL in CNDS
- CNDS & Meter Data Delivery
- Feedback
- Appendix A: Scenarios - Net & Register level CNDS records

Examples of some of the clarifications

- Active Net CNDS records will still exist in some instances post 5MS commencement
 - AEMO will be consulting with industry at some point in the future on the introduction of a 'Net' CNDS record 'sunset' clause
- When creating Register Level Interval CNDS records, all of the Net CNDS records must have a deactivation date of the day before the effective date of the associated Register Level CNDS records
- Net CNDS records must reflect a DatastreamType of 'I' (only).
- An MDP must send AEMO Meter data where a NET CNDS record is active (regardless of the NMI status)
- Net CNDS records must not be created from the 5MS commencement with an effective date equal to or greater than the 5MS commencement date
- A Register Level Interval CNDS record must not be replaced by a Net CNDS record
- Register Level Interval CNDS records must reflect a DatastreamType code of 'I', 'P' or 'N'
- Once an Register Level Interval CNDS record has been created, an MDP must send AEMO meter data in MDFF from its effective date
- AEMO's preference is for MDPs to transition Net records to Interval Register level CNDS records as soon as possible from the date AEMO introduces its MDFF capability

Examples of some of the content – cont.

- The tables below provide the valid 'combinations' between DataStreamType codes and the first character of the 'ElectricityDataStream/Suffix' value.
- With consideration to the physical configuration of an individual meter and/or Metering Installation, DataStreamSuffixes highlighted in **GREEN** reflect AEMO's allowable combinations from the AEMO MDFF Go-Live and not prior to this date.

Net & Register Interval CNDS Records

	First character								2 nd character
	Ave	<i>DataStreamType</i>	Master	<i>DataStreamType</i>	Check	<i>DataStreamType</i>	Net	<i>DataStream Type</i>	Meter numbers or measuring elements are to be 1-9 then A-H, J-N, P-Z
IMPORT kWh	A	<i>I or N for Virtual NMI's</i>	B	<i>I or N for Virtual NMI's</i>	C	<i>N</i>	N	<i>I or P</i>	
EXPORT kWh	D	<i>I or N for Virtual NMI</i>	E	<i>I, P or N for Virtual NMI's</i>	F	<i>N</i>			
IMPORT kvarh	J	<i>N</i>	K	<i>N</i>	L	<i>N</i>	X	<i>N</i>	
EXPORT kvarh	P	<i>N</i>	Q	<i>N</i>	R	<i>N</i>			
KVAh	S	<i>N</i>	T	<i>N</i>	U	<i>N</i>			
Power Factor pF			G	<i>N</i>					
Q Metering Qh			H	<i>N</i>	Y	<i>N</i>			
Par Metering parh			M	<i>N</i>	W	<i>N</i>			
VOLTS (or V ² h) or Amps (A ² h)			V	<i>N</i>	Z	<i>N</i>			

Accumulation Register Level CNDS Records

First Character		Second Character	DataStream Type
1	First Datastream	Meter numbers are to be 1-9 then A-H, J-N, P-Z.	C
2	Second Datastream		
3	Third Datastream		
4	First controlled load Datastream		
5	Second controlled load Datastream		
6	Third controlled load Datastream		
7	First LNSP/ENM defined Datastream		
8	Second LNSP/ENM defined Datastream		
9	Third LNSP/ENM defined Datastream		

Examples of some of the content – cont.

#	Scenario Description	Allowable CNDS Record Type	AEMO Meter Data delivery: File Type	Example - CNDS Record: Created On date	Example - CNDS Record: Effective Start date
1	Change request created before AEMO <u>MDM</u> Go-Live with an effective date before AEMO <u>MDM</u> Go-Live	Net (Interval meter) Register (Basic meter)	MDMF (Interval and Accumulation)	11 Nov 2020	10 Nov 2020
2	Change request created after AEMO <u>MDM</u> Go-Live, effective dated before AEMO <u>MDM</u> Go-Live	Net (Interval meter) Register (Basic meter)	MDMF (Interval and Accumulation)	12 Jan 2021	3 Nov 2020
3	Change request created after AEMO <u>MDM</u> Go-Live, effective dated after AEMO <u>MDM</u> Go-Live but before AEMO MDFF Go-Live	Net (Interval meter) Register (Basic meter)	MDMF (Interval and Accumulation)	12 Jan 2021	25 Jan 2021
4	Change request created after AEMO MDFF Go-live, effective dated before AEMO <u>MDM</u> Go-Live	Net or Register (Interval meter) Register (Basic meter)	MDMF (Interval (up until 5MS commencement) and Accumulation) or MDFF (NEM12 or NEM13)	10 Feb 2021	5 Nov 2020
5	Change request created after AEMO MDFF Go-Live, effective dated after AEMO <u>MDM</u> Go-Live but before 5MS Go-Live	Net or Register (Interval meter) Register (Basic meter)	MDMF (Interval (up until 5MS commencement) and Accumulation) or MDFF (NEM12 or NEM13)	12 Mar 2021	31 Mar 2021
6	Change request created after AEMO MDFF Go-Live, effective dated after AEMO MDFF Go-Live but before 5MS Go-Live	Net or Register (Interval meter) Register (Basic meter)	MDMF (Interval (up until 5MS commencement) and Accumulation) or MDFF (NEM12 or NEM13)	14 Apr 2021	15 May 2021
7	Change request created after 5MS Go-Live, effective dated before 5MS Go-Live	Register (Interval meter) Register (Basic meter)	MDMF (Interval (up until 5MS commencement) and Accumulation) or MDFF (NEM12 or NEM13)	6 July 2021	4 Mar 2021
8	Change request created after 5MS Go-Live, effective dated after 5MS Go-Live	Register (Interval meter) Register (Basic meter)	MDFF (NEM12 or NEM13)	10 Oct 2021	9 Sept 2021

NOTES: CNDS & Meter Data Delivery Clarifications Document

- ACTION: AEMO to issue an updated version of the document to reflect the changes in the MDM go-live dates

5MS Readiness reporting relating to MTP: Round #2

Austin Tan

Metering transition plan past and upcoming activities: Meter installation and reconfiguration

Sub-Category	Activities	Responsible	Transition end date	Results
<p>S01 Bulk/Wholesale meters</p> <p>S02 Type 1-3</p> <p>S03 Subset of type 4</p> <p>S04 Cross boundary (known)</p>	<ul style="list-style-type: none"> Identify which meters need replacing or reconfiguring Initial assessment of whether data storage exemptions may be required 	MP	31 Mar 2020	<p>This date has now passed, implying that MP that are 'On track (started)' have completed these activities and are progressing the other activities in the sub-category.</p> <p>A number of MPs are yet to commence activities in S02 and S03, and should be reporting a 'Late' status. One MP reported a late status and noted that they will complete their initial assessment by May 2020.</p> <p>Next steps</p> <ul style="list-style-type: none"> RWG/TFG to ensure appropriate reporting in round 3 AEMO to follow up with participants that have not completed this activity

Metering transition plan past and upcoming activities: Meter installation and reconfiguration

Sub-Category	Activities	Responsible	Transition end date	Results
S01 Bulk/Wholesale meters S02 Type 1-3 S03 Subset of type 4 S04 Cross boundary (known)	<ul style="list-style-type: none"> Provide visibility of approach / timeframe for required meter replacement or reconfiguration [to AEMO] 	MC	31 Mar 2020	<p>This date has now passed, however only one MC responded that they have completed all activities in these sub-categories. Another MC reported late, noting that they have the information and will submit to AEMO at a later date.</p> <p>Next steps</p> <ul style="list-style-type: none"> AEMO requests that the information is provided in the distributed template for the activity to be considered complete. AEMO to follow up with participants that have not completed this activity

Metering transition plan past and upcoming activities: Meter installation and reconfiguration

Sub-Category	Activities	Responsible	Transition end date	Results
S05 Cross boundary (unknown)	<ul style="list-style-type: none"> Identify which meters need to be installed, replaced or reconfigured 	MP	1 Jul 2020	<p>Majority of MPs and MCs (75%) reporting on track and have commenced activities. MPs should be responding that activities are either On track (started) or Late in the next round of reporting.</p> <p>Next steps</p> <ul style="list-style-type: none"> RWG/TFG to ensure appropriate reporting in round 3
	<ul style="list-style-type: none"> Provide visibility of approach / timeframe for required meter replacement or reconfiguration [to AEMO] 	MC	31 Dec 2020	

Metering transition plan past and upcoming activities: Metering data delivery

Sub-Category	Activities	Responsible	Transition end date	Results
<p>S17 New and replacement type 4</p> <p>S18 New and replacement type 4A</p> <p>S19 New and replacement VIC AMI meters</p> <p>S20 New and replacement SAMPLE meters</p>	<ul style="list-style-type: none"> Provide forward plan to AEMO and industry 	MDP	1 Jul 2020	<p>Almost all MDPs are reporting they are on track, however approximately 50% of MDPs are still yet to start this activity. One MP reported a late status on S18 because they are awaiting a decision to become type 4a accredited.</p> <p>Next steps</p> <ul style="list-style-type: none"> TFG to consider if there are MP activities associated with the conversion of meters in S17 - S20 AEMO to provide template to RWG/TFG

Metering transition plan past and upcoming activities: MSATS Standing Data Creation and Maintenance

Sub-Category	Activities	Responsible	Transition end date	Results
S39 Meter installation type code in MSATS	<ul style="list-style-type: none">Complete data cleanse of meter installation type code in MSATS	MP	30 Nov 2019	<p>Half of MPs reporting that they are late or have not started the activity.</p> <p>Next steps</p> <ul style="list-style-type: none">TFG to clarify intent of activity and update descriptionRWG/TFG to ensure appropriate reporting in round 3AEMO to follow up with participants that have not started this activity.

Metering transition plan past and upcoming activities: Metering accreditation updates

Sub-Category	Activities	Responsible	Transition end date	Results
S41/S43 - MP/MDP accreditation (for 1 July 2021)	<ul style="list-style-type: none"> Assess level of change required for people, process and systems to facilitate 5MS/GS implementation 	MP/MDP	28 Feb 2020	A number of MPs and MDPs are reporting that they have not started these activities, and should be responding with a late status instead of on track.
S41/S43 - MP/MDP accreditation (for 1 Dec 2022)			31 Mar 2020	<p>Next steps</p> <ul style="list-style-type: none"> RWG/TFG to ensure appropriate reporting in round 3 AEMO to follow up with participants that have not started this activity.

NOTES: 5MS Readiness reporting relating to MTP: Round #2

- AEMO noted the importance of accurate reporting and requested that the TFG members work with their RWG reps to ensure accurate reporting in future reporting rounds.

Impact of MDM reschedule on the MTP

Greg Minney

Context

Background

- AEMO now plans to implement its new MDM platform on **9 Mar 2021**
 - Previous implementation date was 7 Dec 2020
- Consequently, replanning needed for any MTP activities reliant on MDM capability being available

Session objectives

- Discuss MTP activity date changes resulting from the MDM implementation date change
- Discuss the impact of these MTP activity date changes on participants' programs

Assumptions

- Replanning assumes the existing rule commencement dates
 - MTP scenario for proposed 12-month deferral is discussed in the next session
- No changes are necessary to the nature of MTP activities, focus is on timing of activities

Note

- The following slides summarise AEMO's current view of MTP date changes required as result of MDM date change. Where no date is shown, AEMO expects no change to the existing MTP dates.

Proposed Changes to the MTP

(Previous MTP version 1.2 - Proposed MTP version 1.3)

Category	Act #	Activity Description	Previous Start Date	Previous End Date	Proposed Start Date	Proposed End Date
Meter Installation & Reconfiguration	A30	Creation of 5 minute metering data based on SCADA data		6-Dec-20 (previous MDM go-live date)		1-Apr-21
Meter Data Delivery	A35, A41, A46, A50, A56, A62, A68, A74, A86, A92	5min metering data delivered to AEMO (MDFF)	1-Feb-21		9-Mar-21 (new MDM go-live date)	
	A36, A40, A45, A51, A57, A63, A69, A75	Create/activate export and import (active (kWh) and reactive (kVARh)) energy datastreams in CNDS table	1-Feb-21		9-Mar-21 (new MDM go-live date)	
	A36a, A40a, A45a	Complete data cleanse to ensure, the RegisterID matches the content of the 'Suffix'		Procedure Timing – By 1 July 2021		Procedure Timing – By 6 Feb 2022
	A94	Delivery of 5-min, 15-min and 30-min meter reads in NEM12 MDFF	1-Feb-21		9-Mar-21 (new MDM go-live date)	
MSATS Standing Data Creation & Maintenance	A95-A97 A99-A101	Create Cross Boundary and NCONUML NMIs, including associated datastreams and registers	6-Dec-20 (previous MDM go-live date)		9-Mar-21 (new MDM go-live date)	

Proposed Changes to the MTP

(Previous MTP version 1.2 - Proposed MTP version 1.3)

Category	Act #	Activity Description	Previous Start Date	Previous End Date	Proposed Start Date	Proposed End Date
MSATS Standing Data Creation & Maintenance	A104	Ensure capability to receive and process new NCONUML NMI classification code		6-Dec-20 (previous MDM go-live date)		9-Mar-21 (new MDM go-live date)
	A105	Update NCONUML NMI Class Codes for existing NMIs as required	6-Dec-20 (previous MDM go-live date)		9-Mar-21 (new MDM go-live date)	
	A119	Update Interval Datastream type codes from 'P' to 'I' or 'N' as required	6-Dec-20 (previous MDM go-live date)		9-Mar-21 (new MDM go-live date)	
	A120	Update VIC TUoS Datastream type codes from 1-4 to 'I' or 'N' as required	6-Dec-20 (previous MDM go-live date)		9-Mar-21 (new MDM go-live date)	

NOTES: Impact of MDM reschedule on MTP

- AEMO provided the TFG background and context regarding the changes to AEMO's MDM Solution go-live dates
- AEMO confirmed that:
 - The working assumption for the MTP is that AEMO will be able to receive 5, 15 and 30-min interval metering data via MDFF from AEMO's MDM Solution go-live date (9-Mar-2021)
 - Metering data delivered from the 9-Mar-2021 can relate to prior periods
 - Participants do not need to switch to the new aseXML version (r39) to deliver MDFF for B2M purposes
- ACTION: AEMO to ensure "RegisterID to Suffix alignment" activity is added to the MTP for Type 7 and NCONUML installations
- ACTION: TFG to provide feedback on MTP activity date changes resulting from the MDM implementation date change

MTP “12-month delay” scenario

Greg Minney and Blaine Miner

Context (1/2)

Background

- AEMO has submitted a rule change request to AEMC proposing:
 - 5MS commencement date for 5MS moves to 1 Jul 2022
 - GS “soft” start date moves to 1 Jul 2022
 - GS “hard” start date moves to 5 Feb 2023
 - No change to the 5-min data delivery date of 1 Dec 2022 for new and replacement type 4/4A meters
 - A transitional rule to allow AEMO to change the effective date of already-determined procedures (updated for 5MS and GS) without further consultation.

Context (2/2)

Session objectives

- Discuss, and where appropriate amend, the MTP scenario that reflects the proposed 12-month 5MS/GS delay. The MTP deferral scenario will:
 - Provide an understanding of the impacts and risks of the proposed delay as the basis for advice to the RWG and PCF
 - Support participants and AEMO in developing their own submissions to the AEMC rule change process based on a common scenario
- Discuss any capability limitations that may be required to manage extended transition periods.

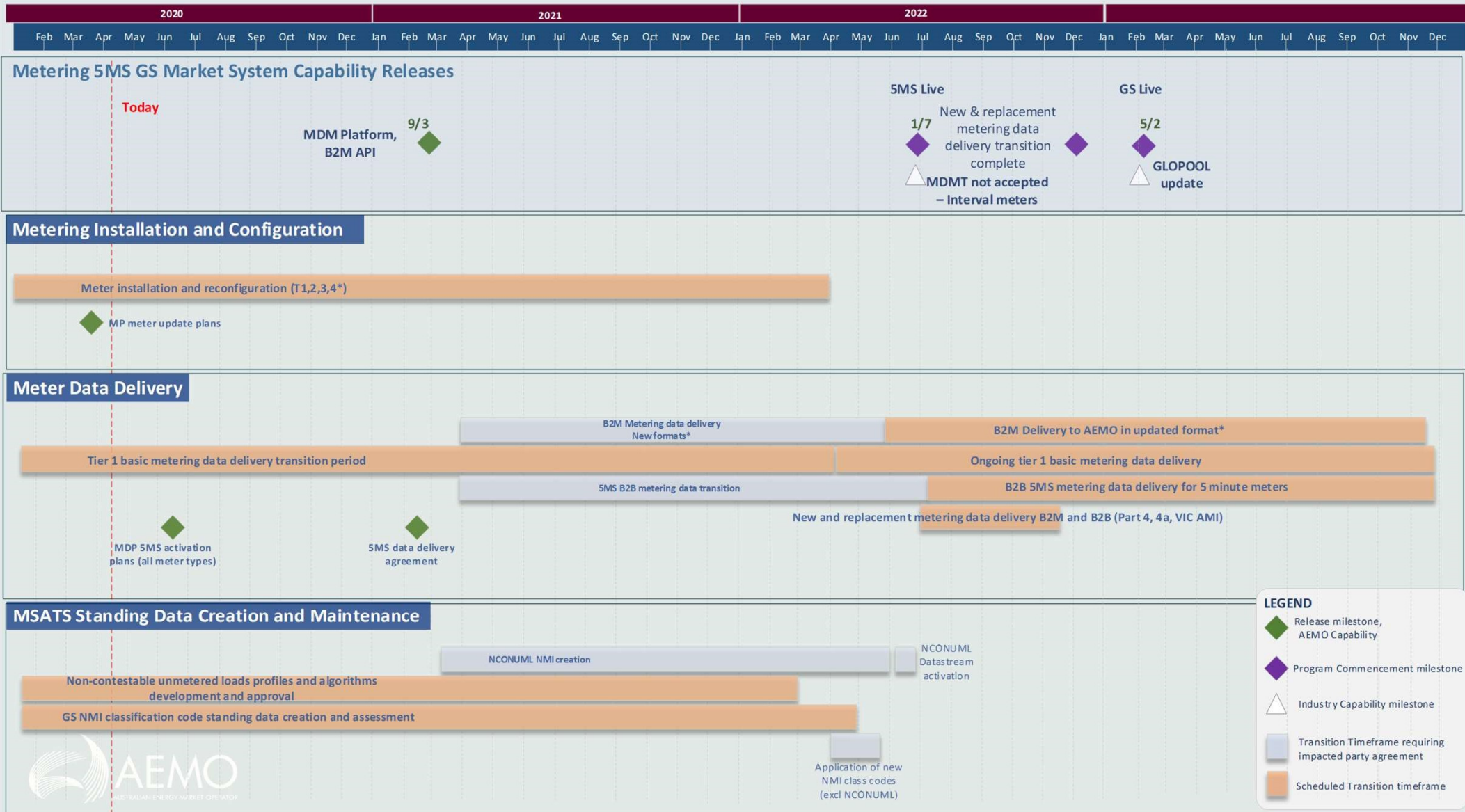
Assumptions

- Scenario to reflect the deferral timeframes proposed in the rule change request
 - as set out in previous slide and requested by the PCF
- AEMO internal program continues to its current milestones i.e. staged platform deployments to support current 5MS timeframes, including new MDM deployment date.
- Participants should be provided with implementation flexibility where possible (*5MS/GS Transition and go-live strategy* principle) i.e. MTP should support participants' abilities to implement their programs with or without a deferral.

Note

- Activity "Start Dates" in the slides below are the same as the current MTP unless otherwise noted.

Indicative MTP



Proposed Changes to the MTP

(Previous MTP version 1.3 – Proposed MTP version “12mth Delay Scenario”)

Category	Act #	Activity Description	Current Start Date	Current End Date	Proposed Start Date	Proposed End Date
Meter Installation & Reconfiguration	A4, A9, A14, A20, A24	Install or reconfigure meters as required		30-Apr-21		30-Apr-22
	A5, A10, A15, A21	Apply for data storage exemptions as required		30-Apr-21		30-Apr-22
	A30	Creation of 5 minute metering data based on SCADA data		1-Apr-21		1-Apr-22
	A31	For any registered ‘Special Site’		31-May-21		31-May-22
Meter Data Delivery	A32, A37, A42, A47, A53, A59, A65, A71, A84, A88	Agreement to allow the delivery of 5min metering data pre 1 July 2022 between NSP, Retailer, MDP and AEMO		28-Feb-21		28-Feb-22
	A33, A38, A43, A48, A54, A60, A66, A90	5min metering data delivered to Participants (B2B)		31-May-21		31-May-22
	A34, A39, A44, A49, A55, A61, A67, A73, A85, A91	Agreement to allow the delivery of 5min metering data pre 1 July 2022 for B2M purposes		28-Feb-21		28-Feb-22
	A35, A41, A46, A50, A56, A62, A68, A74, A86, A92	5min metering data delivered to AEMO (MDFF)		31-May-21		31-May-22

Proposed Changes to the MTP

(Previous MTP version 1.3 – Proposed MTP version “12mth Delay Scenario”)

Category	Act #	Activity Description	Current Start Date	Current End Date	Proposed Start Date	Proposed End Date
Meter Data Delivery	A36, A40, A45, A51	Create/activate export and import (active (kWh) and reactive (kVARh)) energy datastreams in CNDIS table		31-May-21		31-May-22
	A36a, A40a, A45a	Complete data cleanse to ensure, the RegisterID matches the content of the 'Suffix'		31-May-21		15-Jan-22
	A83	Updating Type 7 Datastreams in MSATS		31-May-21		31-May-22
	A93	Delivery of tier 1 basic meter metering data (Actuals, Subs and Forward Estimates) to AEMO		31-Mar-21		31-Mar-22
MSATS Standing Data Creation & Maintenance	A95-A97 A99-A101	Create Cross Boundary and NCONUML NMIs, including associated datastreams and registers		31-May-21		31-May-22
	A101a-A101c	Convert 'SASCALE NMI' - Create individual controlled load NMIs in MSATS		31-Mar-21		31-Mar-22
	A102, A104, A106, A108, A110, A112, A114	Ensure capability to receive and process new NMI classification codes		30-Apr-21		30-Apr-22
	A103, A105, A107, A109, A111, A113, A115	Update NMI Class Codes for existing NMIs as required	1-May-21	31-May-21	1-May-22	31-May-22

Proposed Changes to the MTP

(Previous MTP version 1.3 – Proposed MTP version “12mth Delay Scenario”)

Category	Act #	Activity Description	Current Start Date	Current End Date	Proposed Start Date	Proposed End Date
MSATS Standing Data Creation & Maintenance	A116	Update LR and FRMP to GLOPOOL for existing NMI as required	6-Feb-22	6-Feb-22	5-Feb-23	5-Feb-23
	A117, A118	Create/activate tier 1 basic meter datastreams as required		31-Mar-21		31-Mar-22
	A119	Update Datastream type codes from 'P' to 'I' or 'N' as required		31-May-21		31-May-22
	A120	Update VIC TUoS Datastream type codes from 1-4 to 'I' or 'N' as required		31-May-21		31-May-22
Metering Accreditation Updates	A125, A126, A133, A134	Apply and gain accreditation update approval as required		In accordance with Roadmap agreed with AEMO		In accordance with Roadmap agreed with AEMO

NOTES: MTP “12-month delay” scenario

- TFG raised concerns that the 1 Dec 2022 date was maintained in the rule change proposal
 - AEMO asked TFG members to raise this matter in submissions to the AEMC consultation. This issue will be raised at the RWG for their consideration.
- TFG member asked whether MPs/MDPs would start the conversions early if the 1 Dec 2022 date remains
 - TFG members indicated that it was too early to make that judgement
- TFG member mentioned that if agreements were put in place to receive 5-min data prior to the Rule Commencement date that it might result in rejections being raised by LRs
 - AEMO suggested that there would be no grounds for the LR to raise these rejections, according to the NER and AEMO's Procedures
- AEMO stated that under the Rules, MDPs are required to deliver the required Trading Interval length i.e. 30-min up until 5MS commencement date and then 5-min from then on.
 - 5min and 15min metering data delivered prior to 5MS commencement would need to be conducted by agreement
- Minor edits suggested by TFG members to be considered:
 - A52, A58, A64 and A70 for the Forward Plan to AEMO be moved back until after the date of FINAL determination from AEMC (say Sept-Oct 2020)
 - should A98a "Provide AEMO with NCONUML NMI list" - be pushed back to closer to the MDM Go-live date given that previously it was to be provided only 1 week before the MDM Go Live date?
- ACTION: TFG to provide feedback on MTP proposed 12-month 5MS/GS delay scenario, including the minor edits proposed during meeting

Next steps and general questions

Greg Minney

Reflection on session objectives

- Highlighted findings from the current round of readiness reporting.
- Updated MTP to reflect the changes required by the shift of the MDM go-live.
- Provided a view of the MTP to reflect the proposed 12-month deferral as a basis for participants' own impact assessments.

Next steps

- Continued implementation of MTP
- TFG to provide feedback on MTP update and MTP deferral scenario to:
 - AEMO (5ms@aemo.com.au) **by Wed, 13 May 2020**
 - their RWG reps in time for consideration at RWG #11 (Thu 14 May)
- Participant evaluation as preparation for input to AEMC rule consultation process
- Other?

General questions

Thank you for your
attendance and participation!

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 AEMOMDFF NEM13 files to be supported by AEMOMDMF 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 accurateAs 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 applicableAll 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>
WHOLSAL	<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>

