5MS/GS Transition Focus Group #5:
Implementing the Metering transition plan

Friday 28th February, 2020

AEMO OFFICES:

Adelaide: Level 9, 99 Gawler Place

Brisbane: Level 10, 10 Eagle St

Melbourne: Level 22, 530 Collins St

Sydney: Level 2, 20 Bond St

PLEASE NOTE THIS MEETING WILL BE RECORDED FOR THE PURPOSE OF PREPARING MINUTES

Agenda

NO	TIME	AGENDA ITEM	RESPONSIBLE
Preliminary Matters			
1	10:00 - 10:10	Welcome and introduction	Greg Minney
2	10:10 – 11:20	Metering data delivery	Blaine Miner/ Greg Minney
		11:20 – 11:35 BREAK	
3	11:35 – 12:35	MSATS standing data	Blaine Miner/ Greg Minney
4	12:35 - 12:50	Updates to the MTP	Blaine Miner/ Greg Minney
5	12:50pm – 1:00pm	Next steps and general questions	Greg Minney
	APPENDIX	Refresher on 5MS and GS metering and metering data obligations	

Introduction

Greg Minney

AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

Background

- 5MS/GS Metering transition plan (MTP) was developed by AEMO and industry over past 6 months (Sep 2019 – Feb 2020).
- The MTP:
  - Outlines expected responsibilities, activities, dependencies and timeframes for the metering transition
  - Provides the framework for the metering component of participant progress and readiness reporting for 5MS/GS
- 'Final' plan published 7 Feb 2020. Includes minimum 5MS/GS Readiness Working Group (RWG) review points:
  - June 2020
  - October 2020
  - April 2021
- At February meeting, RWG requested the TFG convene soon to discuss the implementation of aspects of the MTP.

Session objectives and expectations

- Focus on ‘how’ to implement MTP, mainly the topics raised by participants
  - ‘who’, ‘what’ and ‘when’ have been consulted
- Focus on key topics
  - May not resolve all issues in meeting
  - Develop a roadmap for resolving outstanding issues
- Confirm next steps

Metering data delivery

Blaine Miner

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Agreements to allow 5-min data delivery prior to 1 July 2021

Context

- NER 7.10.5 Periodic energy metering

  (a) The Metering Data Provider must, for type 1, 2, 3, 4, 4A and 5 metering installations, collate metering data relating to:

  (1) the amount of active energy; and

  (2) reactive energy (where relevant) passing through a connection point,

  in trading intervals within a metering data services database unless it has been agreed between AEMO, the Local Network Service Provider, Embedded Network Manager in relation to child connection points and the financially responsible Market Participant that metering data may be recorded in sub-multiples of a trading interval.

- MTP activities
  - B2B - A32, A37, A42, A47, A53, A59, A65, A71 and A84
  - B2M - A34, A39, A44, A49, A55, A61, A67, A73 and A85

Considerations

- How and when will these agreements get established?
- Who will likely be the initiating party?
- What will be the likely structure/approach of the agreements? e.g. individual NMI basis or based on jurisdictional/groups of NMIs?

Transition to 5-min metering data delivery for Type 4/4A and VIC AMI

Context

- 5MS rule
  - All new and replacement metering installations, other than type 4A, installed from 1 December 2018 to provide five-minute data from 1 December 2022 at the latest.
  - All new and replacement type 4A metering installations installed from 1 December 2019 to provide five-minute data from 1 December 2022 at the latest.
  - This will likely result in 100s of thousands of meters having to deliver 5-min metering data from 1 December 2022 at the latest
- MTP activities
  - B2B - A54, A60 and A66
  - B2M - A56, A62 and A68

Considerations

- MDP Rollout plans
  - Current MTP: MDPs to provide AEMO the rollout plan for these meters by 30 Jun 2020
- MDP approaches
- Potential support activities from AEMO or other participants?
- Specific CATS CR and Notification management requirements?

MSATS standing data

Greg Minney

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Non-contestable unmetered loads: standing data creation

Context

- **GS rule**: Requires AEMO to include in its metrology procedures guidance for the inclusion of non-contestable unmetered loads in settlement, including the creation of NMIs for non-contestable unmetered loads
- **MTP activities**:
    - A99/100/101, A104/105

Considerations

- Preferred NMI Classification Code transition windows
    - 1 May 2021 or from the implementation of AEMO's MDM solution (Dec 2020)
- Impacts on the networks BAU NMI creation processes
    - One step vs two step process NMI creation process
- Specific CATS CR and Notification management requirements?

Tier 1 basic meters: datastream creation and data delivery

Context

- **GS rule**: Tier 1 basic meter data will be used in settlement process to calculate UFE
- **MTP**: delivery of Tier 1 basic metering data by 1/4/21 to ensure availability of all metering data by 1/7/21
- Activation of the relevant Tier 1 metering datastreams is a pre-requisite for delivery of associated metering data
- **MTP activities**:
  - A117 – Consider process for activating Datastreams
  - A118 – Create/ Activate tier 1 basic datastreams as required
  - A93 – Delivery of tier 1 basic meter data

Considerations

- MDP process for creation and activation of datastreams
- MDP migration approach and timing
- Support activities?
- Specific CATS CR and Notification management requirements?

Alignment of meter RegisterIDs and Suffixes for interval meters

Context

- Standing Data for MSATS procedure v5.0:
  - For Interval Meters, the RegisterID must match the content of the 'Suffix' within the CATS_REGISTER_IDENTIFIER table. E.g. 'E1', 'B1', 'Q1', 'K1', etc.
- MTP activities
  - A122

Considerations

- Data alignment approach including timings
  - MDP and MP communication
- Potential support activities?
- Specific CATS CR and Notification management requirements?

Updating LR and FRMP fields to GLOPOOL for existing NMIs (1/2)

Context and proposed approach

- To support GS, all Distribution Network Connection Points* will have their Local Retailer (LR) participant ID updated to "GLOPOOL".
- Since the LR will not be responsible for all energy entering or leaving the Local Area the Financial Responsible Market Participant (FRMP) will be updated on the following connection points:
  - TNI Connection Points
  - Cross Boundary Connection Points
- AEMO intends to perform a bulk update (TBC) on the LR Participant ID on all Distribution connection points in MSATS Production to support the GS cutover.
- Due to the number of changes, NO notifications* will be provided to market participants for the bulk LR role changes
  - FRMP to be provided a reconciliation file
- It will be the Participants' responsibility to update their systems to reflect the LR participant ID change
- MTP activities:
  - A116- Update LR and FRMP

** Transmission Network Connection Points (including Bulk Supply Points) will retain the 'POOL%' ID in the LR role*

** Embedded Network Child Connection Points will retain the Embedded Network Parent FRMP ID in the LR role*

Updating LR and FRMP fields to GLOPOOL for existing NMIs (2/2)

Considerations

- Specifics of bulk change approach to be determined but will operate in accordance with the approach outlined
- Further approach scoping to involve SWG input
- Approach to communication of updates
- Alignment of participant and AEMO updates and transaction processing implications
- Support activities
- CR and Notification management
  - Note approach proposed does not envisage CR generation.

Updates to the MTP

Greg Minney

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Updates to the MTP

Registered special sites

- Additional MTP activity for 5MS
  - How special sites are *not* types 1-3 and subset of 4?

VIC TUoS

- Additional MTP activity for MDPs to clarify VIC TUoS metering data delivery
- Current processes will continue through transition, noting that VIC TUoS is already delivered in MDFF

Other…??

Next steps and general questions

Greg Minney

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Reflection on session objectives

- Focus on ‘how’ to implement MTP, mainly the topics raised by participants
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Next steps

- Meeting outcomes and actions to be circulated to TFG and RWG
- Any MTP changes to be presented to the RWG for their consideration

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	• 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*	• 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	• 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	• MDFF NEM12 files to be the required file format • 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	• NEM12 interval metering data to be:
	  • Delivered at the register level (E, B, Q and K)
	  • 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	• Metering data which must be sent to AEMO:
	  • 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	• Net datastreams (N1) must be converted to Register level datastreams (E1, B1, etc.)	By 1 July 2021
Subset of Type 4*	• Net datastreams (N1) must be converted to Register level datastreams (E1, B1, etc.)	By 1 July 2021
Types 4, 4A and 5	• 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. • Datastreams must be established in a manner that ensures they are not included in market settlements.	From 1 July 2021
Basic Meters	• All 1st tier datastreams must be activated and meter reads delivered to AEMO, for UFE purposes	By 1 July 2021

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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	*Connection point* where a *transmission network* connects to a *distribution network* - also termed 'Bulk Supply Point'
DWHOLSAL	*Distribution network connection point* where energy is directly purchased from the *spot market* by a *Market Customer*
NCONUML	*Non-contestable unmetered load*
NREG	*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*.
WHOLESAL	*Transmission network connection point* where energy is directly purchased from the *spot market* by a *Market Customer*
XBOUNDRY	*Connection point* where a *distribution network* connects to another to *distribution network*


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