AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

Customer Switching Information Session

August 2020

Agenda

1. Introduction and meeting approach
2. Functional Change
3. Next Steps

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Introduction

AEMO Competition Law Meeting Protocol

Before we start this meeting, an important notice relating to *compliance with Competition Law*

We must not discuss, or reach or give effect to any agreement or understanding which relates to:

- Pricing
- Targeting (or not targeting) customers
- Tendering processes
- Sharing competitively sensitive information
- Breaching confidentiality obligations

Each entity must make an independent and unilateral decision about its commercial positions

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We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past, present and emerging.

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Meeting approach

Meeting approach

AEMO has published the Final Report and Final Determination for the MSATS Procedures, this session will not re-litigate:

- Consultation Dates
- Consultation Process
- Solution Design etc

https://www.aemo.com.au/consultations/current-and-closed-consultations/nem-customer-switching

This is an information session on the technical design and methodology delivered.

Please feel free to ask questions throughout the session.

We ask that you utilise the Chat function for any questions or comments you may have if you are unable to use audio.

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Online forum housekeeping

1. Please mute your microphone, this helps with audio quality as background noises distract from the information being shared.
2. Please switch off your video, AEMO will be showing a presentation.
3. If you have dialled in via phone, could you please email ercf@aemo.com.au your name and organisation for our records.
4. Be respectful of all participants and the process:
    1. Speak one at a time – refrain from interrupting others.
    2. Share the oxygen – ensure that all members who wish to have an opportunity to speak are afforded a chance to do so.
    3. Maintain a respectful stance toward towards all participants.
    4. Listen to other points of view and try to understand other interests.
    5. Share information openly, promptly, and respectfully.
    6. If requested to do so, hold questions to the end of each presentation.
    7. Remain flexible and open-minded, and actively participate in meetings.

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Functional Change

Functional Change

Functional changes included in this Information Session:

- Change Request
  - Validation
- Reversals
  - History Model
- Request For Data (RDAT)
- In-Flight Change Requests
  - Configuration
- Previous Read Date & Quality Flag
  - XML
  - NMID
  - Methodology

Change Request Validation/s

Change Request Validation

- Accelerate Customer Switch – Remove Objections.
- Up front validations have been implemented to preserve data integrity.

CR Code		1000		1010	1030	1040, 102X (except 1023)	1023	All
Read Type Code	Proposed Change Date	Prospective	Retro	Retro Only	Prospective Only	Retro Only	Retro Only	
PR	Previous Read Date	X	X	Type A	X	Type A	X	X
SP	Special Read	Type A	X	X	Type A / B	X	X	X
RR	Read Required	Type A / B	Type B	X	X	X	X	X
EI	Existing Interval Meter	Type B	Type B	X	Type B	Type B	X	X
GR	Greenfield NMI	X	X	X	X	X	Type C	X
UM	Unmetered Connection Pt	X	X	X	X	X	X	Type D

Type A	Basic / MRIM not RWD / MRAM	(i.e. manually read)
Type B	Comms 1-4 / 4C & 4D / MRIM with RWD / VICAMI / Sample	(i.e. remotely read)
Type C	Not metered	(Connection/Greenfield)
Type D	Unmetered Supply	(Type 7)

Change Request Validation

- Objection Exceptions:
  - No Access objection still applies where a physical meter reading/energisation is required:
    - Where the Read Type Code is SP
    - Where the Switch is a Move-In 1030 & 1040
  - Date Bad objection still applies for a Move-In Retro because an Actual Read must be taken.
    - CR1040 with a Read Type Code of PR

Reversals

Reversals

- Process is efficient and driven by the Retailer with incentive to manage the Reversal.
  - Cooling Off – CR Code 1060 (raised by the 'winning' FRMP)
  - Debt – CR Code 1061 (raised by the 'lost' FRMP)
- These are just a CR like all others
- MSATS will undertake a number of validations:
  1. What can be reversed?

Completed CR_Code	Reversable by CR_Code
1000 – Customer Switch	1060 – Cooling Off
	1061 – Debt
1010 – Customer Switch - Retro	1060 – Cooling Off
	1061 – Debt
1030 – Move In Prospective	1060 – Cooling Off
1040 – Move In Retrospective	1060 – Cooling Off

Reversals

- The Retailer will need to provide the “Related Change Request Id”. For that CR MSATS will:
    1. Determine if the Reversal CR meets criteria for Reversal
    2. Validate that the Related CR:
        a) Was completed within defined timeframes (Initiation Window & Retrospective Period)
        b) Is the most recently completed CR.
        c) Has been initiated by the appropriate Role & Participant ID
    3. Ensure no other concurrent Transfer exists
    4. Complete the Reversal for the same date as the Related Change Request

Reversals – History Model

- What does the History Model look like post a CR Reversal?

CR1060 – COOLING OFF REVERSAL					
Create Date/Time	Start Date *16/12/2003*	End Date *1/04/2020*	Start Date *2/04/2020*	End Date *31/12/9999*	Description
3/04/2020 17:23	RETAIL1		RETAIL1		RETAIL2 submits CR 1060
2/04/2020 17:14			RETAIL2		RETAIL2 wins Customer from RETAIL1
17/12/2013 17:25	RETAIL1				Original

CR1061 – DEBT (Vic Only)					
Create Date/Time	Start Date *16/12/2003*	End Date *1/04/2020*	Start Date *2/04/2020*	End Date *31/12/9999*	Description
14/04/2020 17:23	RETAIL1		RETAIL1		RETAIL1 submits CR 1061
9/04/2020 17:14			RETAIL2		RETAIL2 wins Customer from RETAIL1
17/12/2013 17:25	RETAIL1				Original

Reversals – MSATS Browser

- What does MSATS Roles Show?

Participant Relationships - Results

Participant ID: ALNTARES
Participant Name: Alinta Energy Retail Sales Pty Ltd

Relationships: [redacted] **NMI Status Code: A**

Role	Participant Name	Participant ID	Start Date	End Date	Activity Status	Updated On	Created On	Action
FRMP	Alinta Energy Retail Sales Pty Ltd	ALNTARES	1-Aug-2020	31-Dec-9999	A	31-Dec-9999	14-Aug-2020	• NMI Master
FRMP	Alinta Energy Retail Sales Pty Ltd	ALNTARES	31-Mar-2016	31-Jul-2020	A	31-Dec-9999	14-Aug-2020	• NMI Master
LNSP	SA Power Networks - NSP	UMPLP	10-Dec-2002	31-Dec-9999	A	31-Dec-9999	26-Feb-2003	• NMI Master
LR	AGL South Australia Pty Ltd	AGLE	10-Dec-2002	31-Dec-9999	A	31-Dec-9999	26-Feb-2003	• NMI Master
MDP	SA Power Networks - MDP	ETSAMDP	12-Oct-2012	31-Dec-9999	A	31-Dec-9999	16-Feb-2013	• NMI Master
MPB	SA Power Networks - MP	ETSAPMP	5-Dec-2005	31-Dec-9999	A	31-Dec-9999	20-Jun-2006	• NMI Master
MPC	SA Power Networks - MDP	ETSAMDP	5-Dec-2005	31-Dec-9999	A	31-Dec-9999	20-Jun-2006	• NMI Master
ROLR	SA Power Networks - ROLR	ETSAUTIL	10-Dec-2002	31-Dec-9999	A	31-Dec-9999	26-Feb-2003	• NMI Master
RP	SA Power Networks - NSP	UMPLP	1-Aug-2020	31-Dec-9999	A	31-Dec-9999	14-Aug-2020	• NMI Master
RP	SA Power Networks - NSP	UMPLP	31-Mar-2016	31-Jul-2020	A	31-Dec-9999	14-Aug-2020	• NMI Master

Request for Data

Request for Data (RDAT)

- Not commonly used by MDP's as a trigger for provision of Actual Change Date (CR1500) in current processes.
- Given the proactive nature of the new validations MSATS will undertake, it is not necessary for each MDP to determine when CR1500 is required.
- MSATS will:
  - issue a Request for Data *only* when a CR1500 is required to complete a change request.
  - complete all other Change Requests as per the Proposed Change Date.
- MDP's should only provide a CR1500 where MSATS has issued an RDAT

In-Flight Change Requests

In Flight Change Requests

- POST GO-LIVE
  - MSATS will 'Reject' any new CR's received for retired Change Reason Codes upon receipt.
- OBJECTIONS
  - Will continue to be able to be raised until Objection Logging Period closes
  - Can be removed until the Objection Clearing Period closes
  - 21 days after implementation, objections for Customer Switching are obsolete.
- CHANGE REQUEST PROCESSING
  - Where an RDAT has been issued and a CR1500 is required, this will continue to be required to effect transfer completion.
  - Usual processing of PEND and COM will continue.

In Flight Change Requests

- CONFIGURATION UPDATES
  - In line with above MSATS will have configuration change updates as follows:
    - Go-Live – New Configuration per MSATS Procedures
      - Removal of ability to initiate retired CR Codes.
    - 65 Business Days / 90 Calendar Days post go-live configuration updates to remove notifications for retired CR Codes.
  - There is a single implementation of Configuration.
  - All configuration will have effective date in line with above.

Previous Read Date & Quality Flag

Previous Read Date - XML

- Schema will be R39 Implementation: 5MS Program

Implementation Options

- There are three options for participant schema configuration:
- Latest – Participant always will communicate in the latest schema version
- Current – Participant is on the current version of the schema and wants to choose when to upgrade schema version
- Superseded – Participant is already on a superseded version of the schema and will always n-1 unless they change the configuration setting.

	Schema Version as at today	Default Outcome Version post-5MS deployment	Impact
Participant A	LATEST (=r35)	LATEST (=r39)	Messages from AEMO are now in R39 instead of r35
Participant B	CURRENT (=r35)	SUPERSEDED (=r35)	Messages from AEMO continue to be delivered in r35 transformed from r39
Participant C	SUPERSEDED (=r31)	SUPERSEDED (=r35)	Messages from AEMO are now in r35 transformed from r39.

Previous Read Date – XML & 5MS

- 5MS deployment of the Schema is planned prior to Customer Switching. The following indicates the considerations participants need to make if picking up the schema independently to their full 5MS changes

Customer Switching

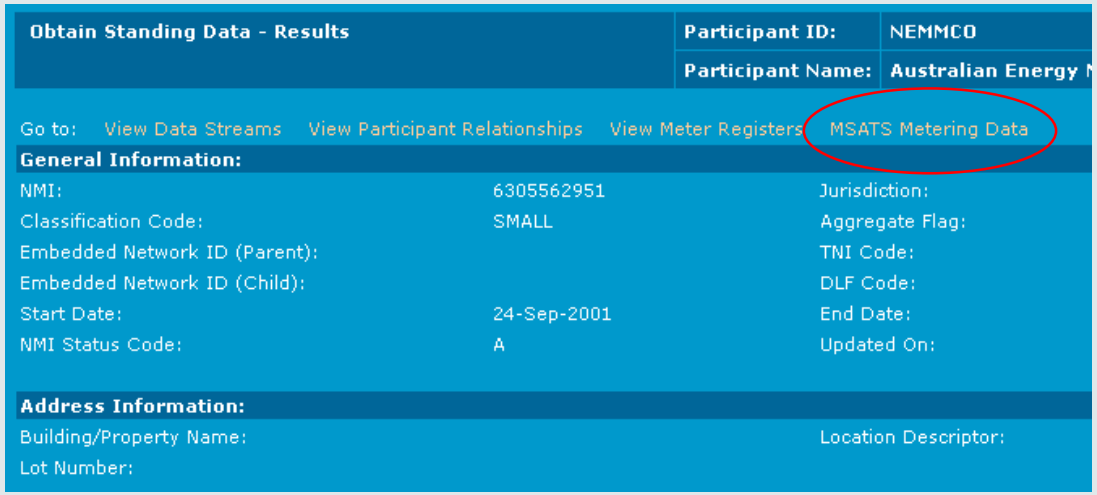
Item#	Change Description	Participant Consideration
1	Additional of Previous Read Dates to NMI Standing Data Response	LNSP & FRMP – must be able to accept new fields. All Others – No Impact

5MS

Item#	Change Description	Participant Consideration
1	Additional of new RM Reports:	Reports are "pushed" only to the MDP from deployment.
2	Update of existing 'Last Sequence Number' elements to optional	No Impact – this is an input value
3	Addition of new x of y message block	Included on all reports from deployment
4	Addition of new Second TNI number for Cross boundary NMIs	TBD

Previous Read Date - NMID

Initial NMID - 2 GUI



Obtain Standing Data - Results

Participant ID:	NEMMCO
Participant Name:	Australian Energy

Go to: View Data Streams | View Participant Relationships | View Meter Registers | MSATS Metering Data

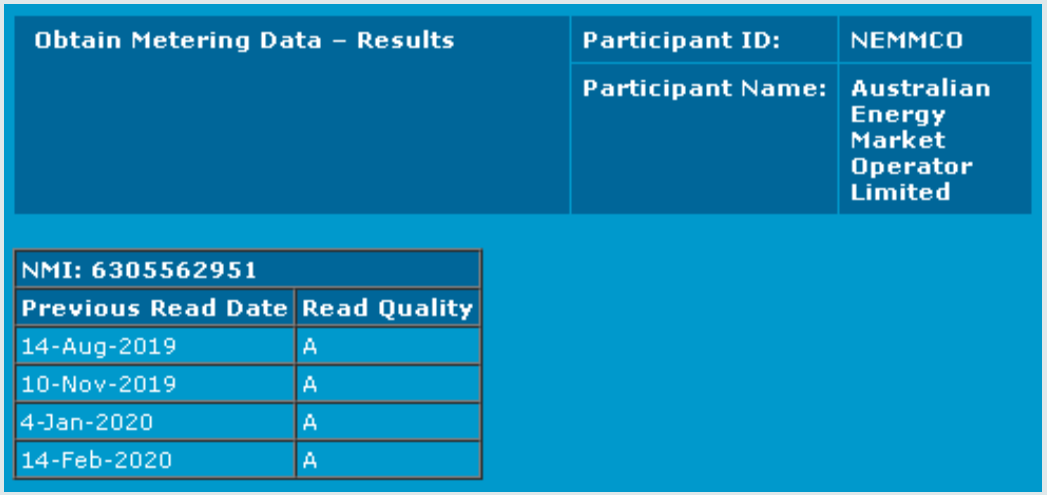
General Information:

NMI:	6305562951	Jurisdiction:	
Classification Code:	SMALL	Aggregate Flag:	
Embedded Network ID (Parent):		TNI Code:	
Embedded Network ID (Child):		DLF Code:	
Start Date:	24-Sep-2001	End Date:	
NMI Status Code:	A	Updated On:	

Address Information:

Building/Property Name:	Location Descriptor:
Lot Number:	

Obtain Metering Data – Results - Success



Obtain Metering Data – Results

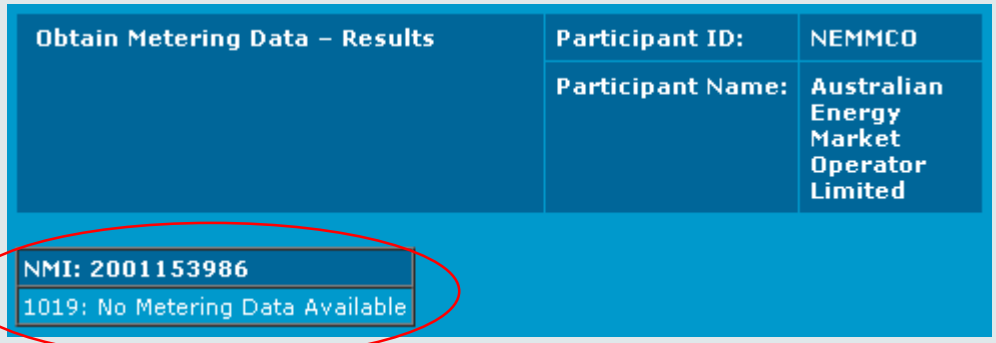
Participant ID:	NEMMCO
Participant Name:	Australian Energy Market Operator Limited

NMI: 6305562951

Previous Read Date	Read Quality
14-Aug-2019	A
10-Nov-2019	A
4-Jan-2020	A
14-Feb-2020	A

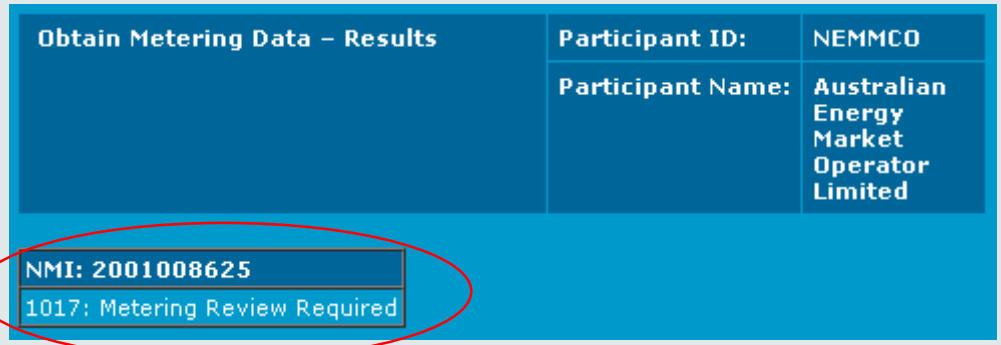
Previous Read Date - NMID

Obtain Metering Data – Results – No Data



e.g. New NMI

Obtain Metering Data – Results - Error



e.g. Mixed Metering

- Other Errors:
  - No Current Meters Installed on this NMI
  - Metering Data Available contains Null Value/s
  - Not Applicable *(NMI does not meet criteria for PRD)*
  - Unable to retrieve data at this time *(resend CR)*

Previous Read Date - NMID

- NMI Discovery – XML Examples

1. NMI Discovery - PRD Success
2. NMI Discovery - PRD Error

Previous Read Date – CR Validation

- Change Requests with a ‘PR’ Read Type Code will be validated to ensure a Previous Read Date exists for the ‘Proposed Change Date’ in the CR.

- If the PRD in MSATS does not match the ‘Proposed Change Date’ in the CR – MSATS will Reject the CR.

- If a MDP revises meter data this may impact the Change Request.

Previous Read Date - Methodology

- Previous Read Dates will be provided for data reviewed in a 12 month retrospective period.
- All dates, within the 12 month retrospective period, meeting the criteria of a Previous Read Date and Quality Flag will be returned in NMID-2.
- NMI's considered for PRD search and CR validation:
  - NMI Classification is Large or Small
  - NMI Status is 'A' or 'D';
  - NMI has at least one Meter with a Meter Register Status of 'C'
  - Metering at the NMI has a Metering Installation Type Code of: Basic, MRIM *(no RWD code)* or MRAM;
  - DataStream (at least one) has been active within a 12-month retrospective period

Previous Read Date – Methodology

- A Previous Read Date is determined based on the following hierarchy of data:
  - The MSATS Datastream/s will assist to determine the periods for which to seek data.
  - The MDPVersionDate and time will determine the series of reads to be considered and assist in the determination of the Previous Read Date.
  - The Quality Flag will be the final component to be determined where both of the above are successful

PRD – Methodology ~ Date

- Consumption Meters
  - For each active Datastream determine each of the current 'ToDate' for each Datastream, where a valid Quality Flag exists;
  - Where there are multiple Datastreams, ensure that the 'ToDate' is the same date for all Datastreams for the NMI;
  - The Previous Read Date is considered to be the date after the valid 'ToDate' determined by MSATS.
- Interval Meters
  - For each unique MDPVersionDate, determine the latest Interval Date of the reads for the MDPVersionDate for all valid datastreams for the NMI, containing only valid quality flags.
  - Ensure the 'Interval Date' determined above is the same date for all active valid Datastreams for that "Interval Date' ;
  - The Previous Read Date is considered to be the date after the last valid 'IntervalDate' in the MDPVersion Date.

Note: *The 'ToDate' refers to the 'ToDate' in the MDMF file received from the MDP for that NMI. The same is true of the IntervalDate for interval data per the MDFF specification.*

PRD – Methodology ~ Quality Flag

The following Quality Flags are considered:

- A – Actual
- S – Substitute
- F – Final

Consumption Data

The following logic is applied to determine a single Quality Flag for a PRD

QF Combination	Previous Read Date Quality Flag *(Hierarchy)*
A	A
A & F	F
A & S	S
F & S	S
A, F & S	S
E	Will not be considered for this purpose

Interval Data

Based on the QF hierarchy utilised for Consumption Data, the following also applies for each PRD:

Reading Period	Description
N	Error will be returned for that read date
1 Day	where 2 or more hours of a lower level flag exists, then the Quality Flag should reflect that level for that Previous Read Date
2 – 7 Days	where 4 or more hours of lower level flag exists, then the Quality Flag should reflect that level for that Previous Read Date
7+ Days	where 48 hours or more of a lower level flag exists, then the Quality Flag should reflect that level for that Previous Read Date

PRD – Methodology ~ Scenarios

Methodology Scenarios and Examples

1. Basic PRD Scenarios
2. Interval PRD Scenarios

Next steps

Next steps

- Per Final Determination AEMO will provide no less than 8 months notice of Go-Live.
- Technical Specification Document – Publication
  - To be issued in October, following the completion of design and any clarifications needed for points raised in the workshop
- MSATS Technical Guide
  - To be provided by December and will be incrementally built upon by subsequent initiatives.
- Pre-Prod Implementation
  - To be advised post workshop and once the Effective Date has been agreed
  - The intent is to align with a suitable testing window based around the 5MS project and to give early access to code via the Staging environment with a potentially extended window in Pre-Prod to allow participants time to develop and test their solutions.

Thank you for your participation

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