NEM PROCEDURE CHANGE PACK - FINAL DETERMINATION AND REPORT

MSATS PROCEDURES:

CATS Procedure Principles and Obligations Version 3.4

Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs Version 3.4

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Document Version No:	*1.0*
Version Issue Date:	*21 December 2011*

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1. Background

AEMO utilises a central system called Market Settlement and Transfer Solution (MSATS) to manage consumer transfers. MSATS also administers notifications of transactions to market participants and retains the data needed to facilitate wholesale settlement.

Market Settlement and Transfer Solution (MSATS) Procedures have been in operation since 1 January 2002 to support Full Retail Competition (FRC) in Victoria and New South Wales and have been amended progressively to support FRC in South Australia from 1 January 2003, the Australian Capital Territory from 1 July 2003 and Queensland from 1 July 2007. During this time, the industry has gained experience in the application of the procedures and has revised these procedures a number of times.

The recommended process improvements that are proposed in this consultation are as follows:

1. An updated version of the MSATS Procedure that will become the '***MSATS Procedure: CATS Procedure Principles and Obligations Version 3.4***',
2. An updated version of the MSATS Procedure that will become the '***MSATS Procedure: Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs Version 3.4***'.

The proposed changes under consultation have been developed as a result of a request from industry and relate to:

- **QC 765 – Discoverability of AMI Meters**
  The Victorian AMI Program Office and Participants involved in the Victorian AMI program require the ability to determine if an AMI Meter is installed at a NMI during NMI Discovery in order to ensure that customer offers/contracts are accurate.

This document lists the proposed changes to the CATS Procedure, WIGS Procedure and associated MSATS configuration rules (if any). The change proposed has been developed, discussed and unanimously agreed through consultation with the Business Process and Data Reference Group (PDRG). The proposed changes under consultation require an MSATS system change and as a result the 'Effective Date' of these procedures is aligned with the MSATS build release cycle 46.77 and, as such, has a proposed effective date of 25 May 2011.

2. Purpose of this document

This document details changes to the MSATS Procedures. The current procedures as of June 2010 are documented in the ***MSATS Procedures: CATS Procedure Principles and Obligations Version 3.3*** and ***MSATS Procedures: Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs Version 3.3*** and are available on AEMO's website.

Updates detailed in this document that affect NMIs with classification Small and Large will be incorporated in the '***MSATS Procedures: CATS Procedure Principles and Obligations Version 3.4.*** Similarly updates that affect NMIs with classifications Wholesale, Interconnector, Generator, and Sample will be incorporated in the '***MSATS Procedures:***

***Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs Version 3.4*'.**

3. The Consultation Process

The process and date plan for the changes proposed in this document is as follows:

Action	Start Date	End Date	Notes
PDRG to review all items and recommend whether the change should be implemented	8 Sept 2010	20 Sept 2010	**Special meeting of PDRG held to confirm and assess benefits and agree a solution for consultation.* *(Complete)*
Issue Notice of Consultation	12 Oct 2010	12 Oct 2010	*(Complete)*
Participant submissions are to be provided to AEMO	13 Oct 2010	17 Nov 2010	within 25 business days after the Notice of Consultation is issued *(Complete)*
AEMO and PDRG considers all valid submissions	18 Nov 2010	15 Dec 2010	within 20 business days of the submission close date *(Complete)*
AEMO will publish a Draft Determination report. This will include the change marked MSATS Procedure version 3.4	16 Dec 2010	16 Dec 2010	Fast Tracked to complete on 29 Nov 2010 *(Complete)*
Participant submissions are to be provided to AEMO	30 Nov 2010	14 Dec 2010	within 10 business days after the Draft Determination is published (Previously 17 Dec 2010 to 13 Dec 2010) (Complete)
AEMO will publish a Final Determination report. This will include the change marked and clean versions of the MSATS Procedure version 3.4	01 Feb 2011	01 Feb 2011	within 30 business days of the submission close date *Fast Tracked to complete on 21 Dec 2010* (Complete)
Proposed Effective Date of the MSATS Procedures v3.4	25 May 2011	25 May 2011	

4. Proposed Changes

This section lists the changes proposed by participants or by AEMO since the last completed consultation [*MSATS Procedures: CATS procedure Principles and Obligations Version 3.2 (Final Determination)* and *MSATS Procedures: Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs Version 3.2 (Final Determination)*]. Table A covers the proposed changes to the CATS Procedure and Table B covers the proposed changes to the WIGS Procedure.

NOTE: All proposed additions to the MSATS Procedures are highlighted in red colour text and are underlined. All proposed deletions from the MSATS Procedures are highlighted in red strike through text. Example: ~~Reference.~~

A. Proposed Changes to the CATS Procedure

Additional Submissions Received

Written submissions have been received from the following Market Participants providing an overall agreement to the changes proposed to CATS Procedure under this consultation and thus have not been included the table below:

i. Origin Energy
ii. Citipower/Powercor/ ETSA Utilities
iii. AGL
iv. Energy Australia

Item	QC ID[1]	Description	Participant Response to Draft Determination	Final Determination
1		**PROPOSED/ REQUESTED CHANGES**		
1.1	765	**Chapter 43: ACCESS TO CATS STANDING DATA** **43.4 NMI Discovery – NMI Standing Data Access Rules (stage 2)** **Table 43-C** The Victorian AMI Program Office and Participants involved in the Victorian AMI program, including LNSPs, require the ability to determine if an AMI Meter is installed at a NMI during NMI Discovery Type 2 in order to ensure that customer offers/contracts are accurate.	Nil	AEMO note the unanimous recommendation of the Draft Determination and publish this Final Determination without any further change.

[1] The PDRG uses the "Industry" Quality Centre (QC) database as a tool to manage its enhancements.

<table>
<tr><th>Item</th><th>QC ID[1]</th><th>Description</th><th>Participant Response to Draft Determination</th><th>Final Determination</th></tr>
<tr><td></td><td></td><td>
The ‘Meter Read Type’ is stored at meter level for a NMI in MSATS and shall be available for NMI Discovery.

Table 43-C – Common NMI standing data items returned to a FRMP or LNSP in all Jurisdictions for a stage 2 search / request
<table>
<tr><th>MSATS Name</th><th>Description of data items returned on a successful data access request</th></tr>
<tr><td>NMI</td><td>a 10 digit national metering identifier.</td></tr>
<tr><td>TNI Code</td><td>a 4 character code representing the transmission node identifier.</td></tr>
<tr><td>DLF Code</td><td>a 4 character code representing the distribution loss factor.</td></tr>
<tr><td>NMI Classification Code</td><td>refer to clause 4.9.</td></tr>
<tr><td>Embedded Network Parent</td><td>a 10 character code representing the name of the parent for any associated embedded network.</td></tr>
<tr><td>Embedded Network Child</td><td>a 10 character code representing the name of the child for any associated embedded network.</td></tr>
<tr><td>Meter Serial Number</td><td>the meter serial number of the meter associated with the next scheduled read date and network tariff code details provided (see items below).</td></tr>
<tr><td>Next Scheduled Read Date</td><td>the next scheduled read date in date format.</td></tr>
<tr><td>Register ID</td><td>the register id of the register that the</td></tr>
</table>
</td><td></td><td></td></tr>
</table>

Item	QC ID[1]	Description		Participant Response to Draft Determination	Final Determination
			network tariff code and network tariff code additional information refers to.		
		Network Tariff Code	a 10 character code representing the network tariff.		
		Network Tariff Code Additional Information	Additional text to supplement the network tariff code if this is a complex network tariff code.		
		Feeder Class	A15 character long field in varchar format for logical grouping of NMIs based on the DNSPs distribution feeder.		
		LNSP	an 8 character code representing the identity of the Local Network Service Provider.		
		MDP	an 8 character code representing the identity of the Metering Data Provider.		
		MPB	an 8 character code representing the identity of the Metering Provider (Category B).		
		MPC	an 8 character code representing the identity of the Metering Provider (Category C).		
		Address	This includes all address fields, which comprise DPID, flat number, flat type, floor number, floor type, house number, house number suffix, location description, lot number, street name, street suffix, street type, unstructured address1, unstructured address2, unstructured address3, postcode,		

Item	QC ID[1]	Description		Participant Response to Draft Determination	Final Determination
			locality, and state.		
		Jurisdiction	A 3 character code that identifies the jurisdiction in which the NMI is located.		
		NMI Status Code	refer to clause 4.10		
		Suffix	a 2 character code representing the NMI datastream.		
		Profile Name	a 10 character code representing the name of the profile		
		Metering Installation Code	refer to clause 4.11		
		Average Daily Load	NUMBER (10). The electrical energy delivered through a connection point or metering point over an extended period normalised to a “per day” basis (kWh).		
		Meter Status	A single character code to denote the status of the meter within the NEM.		
		Register Status	A single character lookup code to indicate if register is active.		
		Stream Status Code	Code used to indicate the status of the suffix. This value must correspond to a valid Stream Status Code in the MSATS_Codes_Values_table.		
		Datastream Type	Indicates the type of data that the datastream will report includes interval and basic. This value must be ‘I’ (interval), ‘C’ (basic) or ‘P’ (profile).		

Item	QC ID[1]	Description		Participant Response to Draft Determination	Final Determination
		Unit of Measure	VARCHAR2(5) Code to identify the Unit of Measure (UOM) for data held in this register.		
		Time Of Day	VARCHAR2(10) Industry developed Codes to identify the time validity of register contents.		
		Multiplier	NUMBER (13,5) Multiplier required to take a register value and turn it into a value representing billable energy.		
		Dial Format	NUMBER (4,2) Describes the register display format. First number is the number of digits to the left of the decimal place, and the second number is the number of digits to the right of the decimal place.		
		Controlled Load	Indicates whether the energy recorded by this register is created under a controlled load regime. Controlled Load field will have “No” if register does not relate to a controlled load, it should contain a description of the controlled load regime.		
		ActCumind (Actual/Cumulative Indicator)	Actual/Subtractive Indicator. Actual implies volume of energy actually metered between two dates. Cumulative indicates two meter readings are required to determine the consumption between those two read dates. For an		

Item	QC ID[1]	Description	Participant Response to Draft Determination	Final Determination
		interval meter, ActCumInd is normally = A. MeterReadType: Code indicating how the meter is read, ~~examples include mechanical dial, display, local handheld, local laptop, remote dial-up, remote radio, remote mobile~~ Refer to Standing data for MSATS for further details.		
1.2	765	**Chapter 43: ACCESS TO CATS STANDING DATA** **43.5 CATS Standing Data Access Rules** **Table 43-D** The Victorian AMI Program Office and Participants involved in the Victorian AMI program, including LNSPs, require the ability to determine if an AMI Meter is installed at a NMI during NMI Discovery Type 2 in order to ensure that customer offers/contracts are accurate. The 'Meter Read Type' is stored at meter level for a NMI in MSATS and shall be available via the CATS Standing Data Access Rules. The table below specifies CATS standing data items that are accessed by each role. **Table 43-D – CATS standing data access rules for meter register** **Note: This is an extract of table 43-D from the CATS Procedures V3.3*	Nil	AEMO note the unanimous recommendation of the Draft Determination and publish this Final Determination without any further change.

Item	QC ID[1]	Description	Participant Response to Draft Determination	Final Determination

METER REGISTER

Jur'n	Data Item	Description	FRMP	LR	LNSP	MDP	MPB	MPC	RP	ROLR	NEM	NSP2
ALL	AddlSiteInfo	This field is used to provide any additional information about this site to describe site access and the relationship between the metering point and the connection point.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ALL	AssetMgmtPlan	If a site plan is used, this is a description of the plan. If a sample plan is used, this is the name of the AEMO-approved plan.	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	-
ALL	CalibrationTables	Details of any calibration factors programmed into the meter.	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	-
ALL	CommEquipType	Indicates modem or other communication device types.	Yes	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
ALL	CommProtocol	Textual description of details needed to communicate to communication devices.	Yes	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes

Item	QC ID[1]	Description													Participant Response to Draft Determination	Final Determination
			ALL	DataConv	Textual description of details needed to translate data received from a communication device.	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	-		
			ALL	DataValidations	Textual description of details needed to validate data received from a communication device.	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	-		
			ALL	EstInstruct	Textual instructions on how to estimate the meter read if an estimated read is required.	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	-		
			ALL	LastTestDate	Last date on which the meter was tested.	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	-		
			ALL	MeasurementType	Code indicating how the meter is measuring, example values include, aggregate, consumption, programmable, interval.	Yes	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes		
			ALL	MeterConstant	Multiplier applied to the meter to arrive at the consumption.	Yes	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes		

Item	QC ID[1]	Description													Participant Response to Draft Determination	Final Determination
			ALL	MeterHazard	Code or text indicating any dangerous conditions that may have been identified at the meter site.	Yes	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes		
			ALL	MeterInstallCode	The metering installation type indicates whether or not the meter has to be manually read. This affects the transfer transaction process flow because if a meter has to be manually-read, then the metering service provider must supply the actual change date before the transaction is completed. If it does not have to be manually-read, then the transaction can be completed as of the requested transfer date.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes		
			ALL	MeterLocation	Code or text indicating where the meter is physically located at the premise.	Yes	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes		

Item	QC ID[1]	Description													Participant Response to Draft Determination	Final Determination
		ALL	MeterManufacturer	The manufacturer code for the meter.	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	-		
		ALL	MeterModel	The manufacturer's model number for the meter.	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	-		
		ALL	MeterPoint	An additional metering identifier field.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes		
		ALL	MeterProgram	For programmable meters, an identifier of the program run at the meter.	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	-		
		ALL	MeterReadType	Code indicating how the meter is read. ~~examples include mechanical dial, display, local handheld, local laptop, remote dial-up, remote radio, remote mobile.~~ Refer to Standing data for MSATS for further details.	Yes	- Yes	- Yes	Yes	Yes	Yes	Yes	-	Yes	-		

Item	QC ID[1]	Description	Participant Response to Draft Determination	Final Determination
1.3	N/A	**Effective Date of the CATS Procedures** The proposed effective date of the CATS Procedures is 25 May 2011. **Procedure Cover Page:** Effective Date: ~~25 October 2010~~ Effective Date: 25 May 2011	Nil	AEMO note the unanimous recommendation of the Draft Determination and publish this Final Determination without any further change.

B. Proposed Changes to the WIGS Procedure

Item	QC ID	Description	Participant Response to Initial Consultation	Draft Determination
1		**PROPOSED/ REQUESTED CHANGES**		
1.2	N/A	**Effective Date of the WIGS Procedures** While there are no specific changes proposed for the WIGS Procedures in relation to QC765, in order to align with the CATS Procedures the proposed effective date of the WIGS Procedures is 25 May 2011. **Procedure Cover Page:** Effective Date: ~~25 October 2010~~ Effective Date: 25 May 2011	Nil	AEMO note the unanimous recommendation of the Draft Determination and publish this Final Determination without any further change.

5. General Comments

Received from Energy Australia

Energy Australia notes the outcomes of the first round of consultation. We wish to re-iterate our comments about the need to make the population of the meter read type a mandatory requirement and particularly to ensure that the values used are consistently applied across all Victorian DNSPs, or can it be assumed that where an AMI meter is installed that the values returned will be either: RTD, RWD or RPD.