# **Integrated Energy Storage Systems**

# PROCEDURE CONSULTATION PARTICIPANT RESPONSE TEMPLATE

**Participant**: Red Energy and Lumo Energy

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#### 1. Context

This template is to assist stakeholders in giving feedback about the options detailed in the issues paper associated with the Integrated Energy Storage Systems consultation.

The changes being proposed are because of NER rule changes which have occurred requiring changes to AEMO's Retail Electricity Market Procedures.

# 2. Consultation questions

#### **NMI Classification Code amendments**

Q	uestion	Participant Comments
1.	Do you agree that the proposed new NCCs address the requirements for compliance with the IESS Rule outlined by AEMO? If not, please specify your reasoning and any alternative options relevant to the IESS rule.	Yes
2.	Are there any gaps or issues with the proposed NCC definitions as they relate to the IESS Rule, noting that issues beyond the scope of the IESS Rule will be dealt with through separate processes?	No
3.	What is the likely impact of the proposed changes for participant systems and processes? Do participants require any further information from AEMO to understand the impact of the proposed changes?	To be assessed. Red and Lumo will require clear details of the outcome of this consultation, including any changes to the proposed amendments resulting from this consultation before being able to provide a more complete view of its likely impact.

Aside: Red and Lumo are grateful that the IESS team chose to share the settlements-stakeholder-information-session slide pack with the NEM2025 Implementation Forum (IF) as this provides effective insight into the impacts of the changes. We would like to have seen the information session or the slide pack mentioned earlier in the ERCF and the NEM2025-IF for the benefit of those responding to this consultation.

#### Amendments to terminology

Q	uestion	Participant Comments	
4.	Are there any gaps or issues with AEMO's assessment of the impacts of terminology changes for procedures?	None identified.	
5.	Can participants provide comments on the need for a formal readiness program to be put in place for the implementation of IESS changes?	A formal readiness program would give market participants confidence that all aspects have been considered and all testing requirements are satisfied ahead of commencement. It would also allow for the reassessment of the commencement date in the event of unforeseen developments or conflicts with more pressing market requirements.	

### Other matters - ICF\_070 Increase 'Building Name' Field Length in MSATS

Question		Participant Comments
6.	Do you agree with the proposed change to	Yes
	increase the 'Building Name' field length in	
	MSATS to align to the aseXML schema and the	

Standing Data for MSATS document? If not, please specify your reasoning.

# Other matters - ICF\_059 CATS clarifications plus NMI Classification Review

Question	Participant Comments		
Do you agree that Option 1 would most effectively and efficiently resolve the issue of NEM Participants not being able to easily and	Red and Lumo do not agree that the proposed NMI Classification Codes (NCC) effectively or efficiently address the issue of identifying non-registered or non-classified generation capabilities.		
accurately identify a customer's non-registered or non-classified generation capabilities? If no, please specify your reasoning.	MSATS Standing Data already allows participants to identify the presence of import\export through the Datastream Suffix, and the Average Daily Load associated with this datastream indicates the average 'sent out' energy of an export data stream.		
	Consequently, the need for development to manage these values would create significant costs across all market participants, the vast majority of whom would not receive any value from this additional data.		
	Alternatively the creation of one or more additional MSATS fields would create similar costs across many market participants, while providing greater flexibility and long-term efficiency than the proposed NCC.		
	Red and Lumo are concerned that there is not enough evidence to support the proposal to create GSMALL and GLARGE NCC with the prefix 'G' to indicate generation (currently proposed with an arbitrary level of generation). This approach will inevitably carry risk that these will be obsolete or conflict with new obligations as the market develops for flexible and non-flexible loads.		
8. Do you believe a different, or alternative, Option may better achieve this objective? If yes, please	In addition to aiding participants to identify a customer's non-registered or non-classified generation capabilities, additional MSATS fields could support identification of EV		

	provide your preferred solution and your reasoning.	charging capability, maximum capacity of generating units and inverter standards and thereby support Dynamic Operating Envelopes and DNSP planning.
9.	Do you agree that the creation of a new NCC to identify Standalone EV Charging Stations would add value to the market? If no, please specify your reasoning.	Red and Lumo do not agree that the creation of an EVCHARGE NCC will add value to the market. EVCHARGE as a descriptor does not consider other sites with significant demand or generation profiles which are not specific to electric vehicles, making this description unnecessarily limited and potentially ineffective. The proposal fails to consider the potential for growth of sites or devices with similar consumption, demand or 'sent out' (generation) capability and the potential for ambiguity about which NCC a site should be considered under, NREG, SMALL or LARGE, depending upon the size and use of the site. The use of this term for a standalone station will also segregate them and fail to address visibility of similar sites which may have adjacent load or generation.
10	. Do you agree with the proposed minor editorial changes to ensure clarity of the Customer Threshold Limits in CATS? If not, please specify your reasoning.	Red and Lumo support the reversion of the NCC Description to remove reference to Business or Residential customer, as introduced in MSATS PROCEDURES CATS PROCEDURE PRINCIPLES AND OBLIGATIONS v5.4  However, Red and Lumo strongly oppose the inclusion of the thresholds in the table of Customer Threshold Codes. The current definitions of Customer Consumption Thresholds as published are used as the basis of both regulatory obligations as well as numerous Government policy approaches. Most recently when the Federal Government has examined support for small business customers these have been defined as per the existing procedures and State regulations which align as appropriate. The proposed inclusion of the thresholds introduces a risk of conflict and confusion between regulatory instruments and the procedures. Further Red and Lumo are unconvinced of the benefit these changes to Threshold Limits will provide to justify this change.
11	What do you believe AEMO should consider in determining the proposed effective date/implementation date of the proposed changes? Please specify your reasoning.	

# **3. Procedure Drafting Changes**

# Retail electricity market procedures – Glossary and Framework

Section	Description	Participant Comments
Figure 1	Modify diagram to represent bi-directional flows of energy instead of uni-directional flows	
2.6.2	Include integrated resource systems as a term that is included in the WIGS Procedures	
4.1.2	Remove market loads and replace with market connection points	
Glossary	Remove the following terms:  • First Tier NMI • First Tier Load • Second Tier NMI • Second Tier Load • Tier 1 Site • Tier 2 Site  Include the following term:	
	<ul> <li>Financially Responsible</li> <li>Add Integrated Resource Provider to the definition of FRMP</li> </ul>	

## **MSATS CATS**

Section	Description	Participant Comments
2.2 Financially responsible market participant	Part (d)  Delete 'Ensure that only small generating unit connection points are assigned to the relevant MSGA' and replace with 'Ensure that only small resource connection points are assigned to the relevant Small Resource Aggregator'  Delete sections (i) and (j) and replace with:  'Ensure that only small resource connection points are assigned to the relevant Small Resource Aggregator'	
2.9 Demand Response Service Provider	Include NREG as an NMI Classification that a DRSP can be assigned to.	
Table 4-A-Change Reason Codes	Include TIRS and DGENERATR as part of Note (1)	
4.5 NMI Classification	Include the new classification codes for DGENRATR, TIRS and DIRS and modify the descriptions of GENERATR and NREG	

Section	Description	Participant Comments
Table 4-H-Datastre am Status Codes	Remove reference to second tier retailer  Part (d) If a retailer transfer CR is Completed the Datastream Status Code must be 'A' when the NMI is energised.	
6.2 Error Corrections	Footnote 8. Include DIRS, TIRS and DGENRATR in reference to "not SMALL"	
15.2.3 Requesting Participant Requirement s	Remove the following field as a selection option from the BCT:  The Tier Status (not required if both the LR and FRMP are provided as selection criteria)	

#### **MSATS WIGS**

New NCCs are proposed to be included in the Condition Precedent component of the Wholesale, Interconnector, Generator and Sample (WIGS) procedure. The existing system constraints are unchanged for each participant requirement, timeframe and objection for each change request submitted.

Change Request type	Sectio n	Conditions Precedent	Participant Comment
Change Retailer	2.1.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG or DWHOLSAL	

Change Request type	Sectio n	Conditions Precedent	Participant Comment
Error Applications	2.2.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG or DWHOLSAL	
Provide Data – Change Request	3.1.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, DWHOLSAL, BULK or XBOUNDARY	
Create NMI – Change Requests	4.1.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
N – New Role, C – Current Role. Create Child NMI	4.2.2	The NMI Classification Code is TIRS, DIRS, DGENRATR, GENERATR, DWHOLSAL OR WHOLESAL	
Create NMI, Metering Installation Details and NMI Datastream	4.3.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDARY, DWHOLSAL or SAMPLE	
Create Metering Installation Details	5.2.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDARY, DWHOLSAL or SAMPLE	
Exchange of Metering Information	5.3.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
Change Metering Installation Details	5.4.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, DWHOLSAL or SAMPLE	
Change Network Tariff Code	5.5.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
Create and Maintain Datastream – Change Requests	6.1.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
Exchange of Datastream Information	6.2.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
Change NMI Datastream	6.3.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
Maintain NMI – Change Requests	7.1.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	

Change Request type	Sectio n	Conditions Precedent	Participant Comment
Change a NMI	7.2.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
Change NMI Embedded Network (child)	7.3.2	The NMI Classification Code is WHOLESAL, NREG, DWHOLSAL, TIRS, DIRS, DGENRATR or GENERATR	
Change Parent Name	7.4.2	The NMI Classification Code is TIRS, DIRS, DGENRATR, GENERATR, NREG, DWHOLSAL or WHOLESAL	
Change LNSP	8.1.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
Change MDP	8.2.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
Change MC	8.3.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, DWHOLSAL or SAMPLE	
Change ENLR – Child NMI	8.4.2	The NMI Classification Code is DIRS, DGENRATR, GENERATR, NREG, DWHOLSAL or WHOLESAL	
Change ROLR	8.5.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
Change MPB or MPC or Both	8.6.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	
AEMO Only Change Requests	9.1.2	The NMI Classification Code is WHOLESAL, INTERCON, TIRS, DIRS, DGENRATR, GENERATR, NREG, BULK, XBOUNDRY, DWHOLSAL or SAMPLE	

Section	Description	Participant Comments
9.2.3	Remove the following field as a selection option from the BCT:	
	The Tier Status (not required if both the LR and FRMP are provided as selection criteria)	

# Metrology Procedure Part A

Section	Description	Participant Comments
3.4	Remove reference to 'first tier load'	
3.5	Remove reference to 'first tier load'	
3.6	Remove reference to 'second-tier' and 'first-tier loads' from 3.6 (a)	
12.8.2	Remove reference to 'first tier controlled load' and 'second tier controlled load' and include market customer. In 12.8.2 Load Profiling (a) and remove first tier from 12.8.2 Load Profiling (b) and include market customer.	

# Metrology Procedure Part B

Section	Description	Participant Comments
10.3	Bi-directional units may have multiple sources of generation and load behind the connection point. For sites that are scheduled units, AEMO provides SCADA data for generating units. Validation of metering data for connection points where SCADA is made available includes NCCs of DGENRATR and Small Resource Aggregator. New clause to reference bi-directional units where validation should occur for SCADA data suffixes of E and B channel data.	
12.3	Include Integrated Resource Provider and Small Resource Aggregator in 12.3(a) and remove reference to MSGA.	
13.1	Change all references in section 13.1 from Market Load to Market Connection Point	
13.5	Change reference from 'market load' to market connection point	

# Standing Data for MSATS

Section	Description	Participant Comments
3.2	Include new NCCs and remove reference to 'Small Generation Aggregator'.	

#### **MSATS MDM Procedures**

Section	Description	Participant Comments
3.2.3	Replace 'Embedded Generator' in 3.2.3 (a) with distribution connected unit.	

# **Exemption Procedure Data Storage Requirements**

Section	Description	Participant Comments
2.1	Remove reference to transmission connection point and distribution connection point where the FRMP is a Market Generator or Market Small Generation Aggregator to reflect the Rule Change 7.8.2(b1).	

## **Guide to the Role of the Metering Coordinator**

Section	Description	Participant Comments
4.1	Remove small generating units and market generating units and include non-market bidirectional units and small resource connection point.	

# Service Level Procedure: Embedded Network Manager

Section	Description	Participant Comments
4.2.4	Include the new NMI classification of DGENERATR	

#### Service Level Procedure: MDP Services

Section	Description	Participant Comments
3.13	Include new NCCs of XBOUNDRY, BULK, DGENRATR, DIRS and TIRS for connection points required to provide 90% of complete actual metering data by 8am for the day(s) specified for prudential purposes.	

# MSATS Procedures: National Metering Identifier

Section	Description	Participant Comments
Appendix E	Removal of current illustrations and tables of Appendix E	Meh

## **Metering Data Provision Procedures**

Section	Description	Participant Comments
4.3	Include a new energy flow type that reflects the purpose of the rule change to include bidirectional energy flows for generation connection points.	
	vii. Energy Flow Types:  A. General Supply usage – means energy flow from the grid to the connection point. (Note: Where the measurement of the retail customer's generation is combined with the measurement of general supply usage, the general supply usage information is the net of usage and generation, i.e. usage values are positive for excess usage and negative for excess generation).	

Section	Description	Participant Comments
	B. Controlled Load (only if applicable, i.e. if separately measured) – means energy flow from the grid to the connection point.	
	C. Generation (only if applicable, i.e. if separately measured) – means energy flow to the grid from the connection point.	
	D.?	