



# Integrating Energy Storage Systems into the NEM – Retail Electricity Market Procedures consultation

Final Report

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New South Wales | Queensland | South Australia | Victoria | Australian Capital Territory | Tasmania | Western Australia  
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## Executive summary

The publication of this Final Report and Determination concludes the standard consultation conducted by AEMO (**Consultation**) on the proposals (**Proposals**) to carry out the relevant changes (**Changes**) to the Retail Electricity Market Procedures and related documents (**Procedures**) which are necessary to implement the National Electricity Amendment (Integrating energy storage systems into the National Electricity Market (**NEM**)) Rule 2021 (**IESS Rule**) under the National Electricity Rules (**NER**).

This Consultation is undertaken as required by NER 7.16.7 in accordance with the consultation requirements in NER 8.9.2.

### Issues Paper

In the issues paper published on 6 March 2023 (**Issues Paper**), AEMO sought feedback on the following Changes:

1. **National Metering Identifier (NMI) Classification Codes (NCCs)** - which include the introduction of three new codes (TIRS, DIRS and DGENRATR) and amendments to two further codes (NREG and GENERATR), which AEMO considers necessary to:
  - identify integrated resource systems (**IRS**) and remove the current use of two NMIs for grid-scale storage facilities;
  - appropriately apply market fees and unaccounted-for-energy (**UFE**);
  - incorporate changes relating to the new Small Resource Aggregator category; and
  - enable appropriate compliance monitoring to protect the integrity of market settlements.
2. **Terminology** introduced by the IESS Rule - which needs to be reflected across the Procedures, mostly through minor or administrative amendments.
3. **Other matters** - including an overview of changes to the location and order of embedded network processing, which will not result in changes to the Procedures.

The Issues Paper also included the following two Issue Change Forms (**ICFs**) which were raised through the Electricity Retail Consultative Forum (**ERCF**):

1. **ICF\_059** - Clarifications to Consumer Administration and Transfer Solution (**CATS**), plus NCC Review.
2. **ICF\_070** - Change the BuildingorProperty Name field length in Market Settlement and Transfer Solutions (**MSATS**), to 60 characters.

In response to the Issues Paper, AEMO received 15 written submissions, which raised the following material issues:

- Visibility of the size of the load associated with proposed NCCs of TIRS and DIRS.
- Justification for the proposed NCC of DGENRATR.
- Various issues with proposed amendments to the NREG definition.

Further, AEMO received:

- Extensive feedback on ICF\_059 on the NCC subgroup's recommended option to progress an NCC-based solution to the issues identified by the subgroup.
- Broad support for ICF\_070.

### Draft Report

AEMO's draft report published on 9 June 2023 (**Draft Report**) proposed to implement the Changes to the Procedures in respect of:

1. The new NCCs of TIRS and DIRS to identify registered IRs, as proposed in the Issues Paper.
2. The new NCC of DGENRATR and amendment to GENERATR, as proposed in the Issues Paper, with minor amendments.
3. A revised definition of NREG, which was amended in response to the submissions.
4. A new appendix in the NMI Procedure, which provides examples of NCC application for different connection configurations. The existing Appendix E is removed, given its purpose was to describe changes to NCCs and participant ID application pre- and post- global settlement.
5. The amendments to terminology throughout the Procedures as required by the IESS Rule.
6. Other minor changes to the Procedures as required by the IESS Rule.
7. ICF\_059:
  - Establish a separate consultation process for the main components of ICF\_059, to properly understand participant impacts. This relates to visibility of customer generation capability and identification of stand-alone electric vehicle (**EV**) charging stations.
  - Amend the Customer Threshold Codes table in the CATS Procedure to footnote the relevant regulatory instruments.
  - Retain references to 'Residential' and 'Business' in the CATS NCC table in accordance with the National Energy Retail Law (**NERL**).
8. ICF\_070: Change the MSATS Building Name Field Length to 60 characters.

### Final Report

This Final Report reflects the 14 stakeholder submissions in respect of the Draft Report, which include:

- The transition and implementation of new NCCs.
- The option of creating sub-types of NCCs.
- The editorial validity of some procedural changes.
- The potential impacts on B2B.

- The support for the Draft Report Proposals in respect of ICF\_059.
- The Proposal in respect of ICF\_070 to create an additional 30-character MSATS Building Name Field to align to the aseXML schema. This Proposal avoids the need to modify the schema to implement the 60-character solution in the Draft Report.

Accordingly, AEMO's final determination is to implement the Changes to the Procedures for IESS as described in the Draft Report, including:

1. The new NCCs of TIRS and DIRS to identify registered IRSs.
2. The new NCC of DGENRATR and amendment to GENERATR.
3. The revised definition of NREG as proposed in the draft determination.
4. The inclusion of the new appendix in the NMI Procedure which provides examples of NCC application for different connection configurations, to replace the existing Appendix E, which is removed.
5. The amendments to terminology throughout the Procedures as required by the IESS Rule.

### Effective Dates

The effective dates are:

- 2 June 2024 in respect of the IESS Changes to the Procedures. On 4 May 2023, the Australian Energy Market Commission (**AEMC**) made its rule determination to align the commencement of non-energy cost recovery (**NECR**) changes of the IESS Rule with the start of the billing week.
- 1 November 2023 for the ICF\_059 related Change to the Customer Threshold Codes table in the CATS Procedure, footnoting the applicable Jurisdictional limits of the Customer Threshold Limits.
- 1 November 2024 for ICF\_070 to align MSATS with the schema for the second BuildingorProperty Name field.

### Procedures and supporting documents requiring amendment

The following Procedures are subject to the Changes:

- Retail Electricity Market Procedures – Glossary and Framework (**Glossary and Framework**)
- MSATS Procedures: CATS Procedure Principles and Obligations (**CATS Procedure**)
- MSATS Procedures: Procedure for the Management of Wholesale, Interconnector, Generator and Sample (WIGS) NMIs (**WIGS Procedures**)
- Metrology Procedure: Part A National Electricity Market (**Metrology Procedure Part A**)
- Metrology Procedure: Part B Metering Data Validation, Substitution and Estimation (**Metrology Procedure Part B**)
- Standing Data for MSATS document (**Standing Data for MSATS document**)
- MSATS Procedures: MDM Procedures (**MDM Procedures**)

- Exemption Procedure: Metering Installation Data Storage Requirements (**Exemption Procedure**)
- Guide to the Role of Metering Coordinator (**MC Guide**)
- Service Level Procedure: Metering Data Provider Services (**MDP SLP**)
- MSATS Procedures: National Metering Identifier (**NMI Procedure**)

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## 1. Stakeholder consultation process

AEMO has consulted on the Proposals in accordance with the standard rules consultation procedure in NER 8.9.2. This Final Report uses terms defined in the NER, which are intended to have the same meanings.

AEMO's process and timeline for this consultation are outlined in Table 1.

**Table 1 Consultation process and timeline**

Consultation steps	Dates
Issue Paper published	6 March 2023
Submissions due on Issues Paper	3 April 2023
Draft Report published	9 June 2023
Submissions due of Draft Report	10 July 2023
Final Report published	18 September 2023

AEMO's webpage for the Consultation is at <https://aemo.com.au/consultations/current-and-closed-consultations/integrating-energy-storage-systems-into-the-nem-retail-electricity-market-procedures-consultation>. The website contains all previous published papers and reports, written submissions, and other consultation documents or reference material.

AEMO thanks all stakeholders for their feedback throughout this Consultation, which has been considered in preparing this Final Report.



## 2. Background

### 2.1. NER requirements

AEMO is responsible for the establishment and maintenance of metering procedures specified in Chapter 7 except for procedures established and maintained under NER 7.17.

The procedures authorised by AEMO under NER Chapter 7 must be established and amended by AEMO in accordance with the Rules consultation procedures.

### 2.2. Context for this consultation

The IESS Rule:

- Seeks to better integrate storage and aggregate systems into the NEM.
- Takes a significant step toward a two-way market model for the NEM.
- Delivers extensive changes to registration and classification, dispatch arrangements, NECR, and participation of aggregated portfolios of small resources.<sup>1</sup>

The key changes in the IESS Rule which are relevant to this Final Report include:

- Introduction of the new Integrated Resource Provider (**IRP**) participant registration category, which will be mandatory for all participants with resources that have both generation and load (above auxiliary load) at a single connection point. In addition to accommodating participation by energy storage facilities, the IRP is a near-universal participant that may also classify end user connection points and scheduled load, generating units, small resource connection points and ancillary services units.
- Introduction of the new bidirectional unit (**BDU**) classification which will be used by IRPs to classify resources that both generate and consume electricity (beyond auxiliary load). A new system category, the IRS, has also been defined in the NER, covering systems that both consume and generate electricity.
- Transition of the existing Market Small Generation Aggregator participant category to the IRP, as a Small Resource Aggregator. A Small Resource Aggregator:
  - May classify small resource connection points (i.e., small generating units and small BDUs).
  - As part of initial release 31 March 2023, is able to participate in Frequency Control Ancillary Services (**FCAS**) markets, where it satisfies the technical requirements to do so.
- Changes to NECR, which no longer depend on the category in which a Market Participant is registered. NECR will be based on two data streams, adjusted sent out energy (**ASOE**) and adjusted consumed energy (**ACE**), removing the ability of a participant to net energy flows at a connection point or among its connection points (as currently occurs for units other than grid-scale storage). An example of the changes to arrangements to NECR is provided in AEMO's IESS high-level design. The changes include a new defined term, Cost

<sup>1</sup> <https://aemo.com.au/initiatives/submissions/integrating-energy-storage-systems-iess-into-the-nem>

Recovery Market Participant, which covers all Market Participants other than Market Network Service Providers and Demand Response Service Providers (**DRSPs**). UFE for a local area is to be allocated to all market connection points in the local area, not just those classified as market load. The Issues Paper outlined the implications of the NECR changes for the location and order of embedded network processing.

- Extensive changes to terminology to reflect the changes to the NER and to improve consistency.

An IRP will be financially responsible Market Participant (**FRMP**) for connection points which it has classified. The IESS Rule provides that:

- An IRP has the same obligations as a Generator. The IRP is taken to be a Generator in respect of registered generating units which the IRP has classified as scheduled, semi-scheduled or non-scheduled generating units (taken to be a Scheduled Generator, Semi-Scheduled Generator or Non-Scheduled Generator respectively).
- An IRP has the same obligations as a Customer. The IRP is taken to be a Market Customer in respect of end user connection points which it has classified as its market connection points, or connected plant which it has classified as scheduled load. The IRP may become authorised as a retailer, with access to the same functions in retail systems as other retailers.
- An IRP, in its capacity as a Small Resource Aggregator, may classify the connection points of small generating units and small BDUs (collectively, small resource connection points), with similar obligations to existing Market Small Generation Aggregators (e.g., operating as wholesale market only participants, with the small generating unit or small BDU required to be on its own connection point, with no retail customer load).
- An IRP may classify registered BDUs as scheduled or non-scheduled BDU. The IRP is taken to be a Scheduled IRP or Non-Scheduled IRP in relation to these units respectively.

An IRP in the FRMP role for a connection point will be entitled to access and perform all the same functions in MSATS as another FRMP, including:

- Classification of market connection points (including small resource connection points).
- Access to NMI standing data and visibility of roles associated with a NMI (e.g., Metering Data Provider (**MDP**)).
- Access to NMI discovery (where authorised).
- Use of metering and customer switching processes.
- Appointment of Metering Coordinator.

Further, the IESS Rule makes a number of amendments to NER Chapter 7, which AEMO considers will not require updates to the Procedures (these are listed in the Issues Paper).

### 2.2.1. Implementation Timing

The IESS Rule is being implemented over three releases:

- The first release on 31 March 2023 provides for Small Generation Aggregators to provide FCAS.

- The second release on 9 August 2023 introduces (opt-in) aggregate dispatch conformance for participants with two or more technologies behind the connection point.
- The final release commences on 2 June 2024 for NECR changes and 3 June 2024 for full implementation of the IESS Rule. This split commencement is the result of the recent AEMC final determination to align the implementation of the NECR changes with the start of the billing week.

The final release only is relevant to this Consultation.

### **2.3. The national electricity objective**

Within the specific requirements of the NER applicable to this proposal, AEMO has sought to make a determination that is consistent with the national electricity objective (NEO) and, where relevant, to select the option best aligned with the NEO.

The NEO is expressed in section 7 of the National Electricity Law as:

to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:

- (a) price, quality, safety, reliability and security of supply of electricity; and
- (b) the reliability, safety and security of the national electricity system.

### 3. List of material issues

The key material issues raised in the submissions to the Draft Report are listed in Table 2. This Final Report only discusses those issues. The Draft Report sets out AEMO’s consideration of the issues which arose at the earlier stages of the Consultation.

**Table 2 List of material issues**

No.	Issue	Raised by
1.	Transition of NCC	Multiple Stakeholders
2.	Creation of a new sub-type of NCC	PlusES
3.	Clarification of Procedure updates	Red Energy and Lumo Energy
4.	Maintaining Appendix E in NMI Procedures	Citipower/Powercor and United Energy
5.	ICF_070 – Increase ‘Building Name’ Field Length in MSATS	Multiple Stakeholders
6.	ICF_059 – CATS clarifications and NMI Classification Code Review	Multiple Stakeholders

A detailed table of issues raised by stakeholders in written submissions to the Draft Report, together with AEMO’s responses, is contained in Appendix B.

The material issues in Table 2 are discussed in Section 4.

## 4. Discussion of material issues

### 4.1. Transition of NCC

#### 4.1.1. Issue summary and submissions

The introduction of three new NCCs and modification of two NCCs reflects the requirement to:

- Create new NCC of DIRS and TIRS to identify a connection point which is an IRS.
- Create a new NCC of DGENRATR to distinguish distribution connected generating systems for the correct application of UFE.
- Modify the NCC of GENERATR to distinguish a transmission connected generating systems for the purposes of UFE.

AEMO proposes that the Changes to introduce the three new NCCs and modify the existing NCCs will commence 2 June 2024.

In their responses:

- SA Power Networks requested transition information on the process for changing or updating NMIs for the new classifications.
- CitiPower/Powercor and United Energy queried how the transition will occur for the NMIs which will transition from GENERATR to DGENRATR.

#### 4.1.2. AEMO's assessment

Regarding SA Power Networks' request, the Issues Paper proposed that AEMO would manage the transition and implementation of new NCCs where a new code needs to be applied. A Network Service Provider (**NSP**) will not have an obligation to transition NCCs. However the NSP should ensure that the NCC applied in its system aligns with MSATS.

- Following the IESS Rule commencement, the Proposal is that:
- The NSP will apply the non-registered NCC (LARGE, SMALL and NREG) to create the NMI, as currently is the case; and
- Subsequently, AEMO will apply the new NCC (GENERATR, DGENRATR, TIRS or DIRS) as part of the formal registration process, once the installation is registered.

The transition for GENERATR to DGENRATR is to be assigned based on whether the relevant Local Network Service Provider (**LNSP**) is registered as a Distribution Network Service Provider (**DNSP**) (for DGENRATR) or Transmission Network Service Provider (**TNSP**) (for GENERATR).

#### 4.1.3. AEMO's conclusion

AEMO concludes that the transition approach discussed in the Issues Paper is to remain unchanged. AEMO will manage the transition of new NCCs for those existing NMIs where a code needs to be applied.

Following the IESS Rule commencement:

- The NSP will apply the non-registered NCC (LARGE, SMALL and NREG) to create the NMI, as currently is the case; and
- Subsequently, AEMO will apply the new NCC (GENERATR, DGENRATR, TIRS or DIRS) as part of the formal registration process, once the installation is registered.
- The date of transition is 2 June 2024 for those impacted NMIs as part of the new NCC and modification of NCC.

## 4.2. Other IESS Matters

### 4.2.1. Issue summary and submissions

This section 4.2 discusses three matters which were raised in the submissions to the Draft Report; and the modification of the description of the RM16 and RM21 reports.

In their submissions to the Draft Report:

- PlusES requested the modification of the NCC table to create a new NCC subtype field, to limit the NCC enumerations.
- Red Energy/Lumo Energy noted a number of issues in respect of procedural updates.
- CitiPower/Powercor and United Energy requested that Appendix E be maintained in the NMI Procedure.

### 4.2.2. AEMO's assessment and conclusion

#### NCC Sub Type table modifications

The modification of the NCC table and the application of subtype fields is beyond the scope of this Consultation, as well as the related industry engagement.

Currently, AEMO does not support the creation of new NCC subtype fields.

#### Procedures updates

Red Energy/Lumo Energy queried a number of drafting matters in the marked up Procedures which accompanied the Draft Report.

In response:

- Glossary and Framework section 2.7.2 – The formatting error is to be removed as part of the October 2023 consolidation.
- CATS Procedure:
  - Tier 2 is removed from section 2.10(a).
  - DIRS are included in reference to 'not Small'.
- Metering Data Provision Procedures – The current wording of section 4.3 remains unchanged as the proposed changes were not contemplated in the Draft Report.

### **NMI procedure Appendix E**

CitiPower/Powercor and United Energy have requested that Appendix E remains in the NMI Procedure. AEMO considers that the diagrams in Appendix E became redundant at the conclusion of the 5 minute settlement program. Accordingly, these diagrams are removed, effective 2 June 2024.

### **MDM Procedure: RM16 and RM21 reports**

The Issues Paper described the reconciliation impacts for a participant who is in the role of FRMP at a parent connection point for an embedded network where:

- there are active child connection points; and
- the NECR is to be calculated on the share of consumed and sent-out energy for all participant categories.

Accordingly:

- The MDM Procedure has been reworded to identify and clarify the information which is to be included in the RM16 and RM21 reports.
- The RM16 and RM21 reports themselves have not changed.

## 5. Other matters

### 5.1. ICF\_070 Increase 'Building Name' Field Length in MSATS

#### 5.1.1. Issue summary and submissions

ICF\_070 is a proposal from Ausgrid to increase the 'Building Name' field length in MSATS to 60 characters, thereby improving customer outcomes and industry efficiency. The Draft Report considered modifying the schema to 60 characters to allow for a 60 character field length name in the MSATS database.

However, multiple stakeholders did not support a schema change to extend the length to 60 characters, citing conflict with the Australian Standard (AS) 4590, as well as system upgrade implications. As the existing r43 aseXML schema complies with AS 4590 by its inclusion of two instances of the element BuildingorProperty Name each 30 characters in length, Intellihub proposed to create a new field in MSATS that would align to the schema, resulting in two in MSATS, of 30 characters each.

#### 5.1.2. AEMO's assessment

AEMO agrees that modifying the schema to extend the length to 60 characters is not optimal and conflicts with the AS 4590. However, AEMO considers that the industry would benefit from the additional locational information which would be available to participants.

AEMO agrees with the proposal from Intellihub to create a new field in MSATS that would align to the schema. However, AEMO's further analysis has identified that the BuildingorProperty Name2 has been defectively implemented in the current schema, which prevents it from supporting all B2M interactions with the market (e.g while CATS Change Requests are schema valid, Report Responses are not).

#### 5.1.3. AEMO's conclusion

AEMO will introduce a schema change to correct the defect in the BuildingorProperty Name2 field. This change will ensure support for all B2M interactions. This change will coincide with the new schema for Metering Exemptions. Participants will be able to specify or retrieve two distinct Building/Property names, for a combined total of 60 characters, using separate instances of this element.

The implementation date of the defect to the schema is March 2024.

The implementation date into MSATS is 1 November 2024.



## 5.2. ICF\_059 – CATS clarifications and NMI Classification Code Review

### 5.2.1. Issue summary and submissions

ICF\_059 considered:

- Changing the NCC to easily and accurately identify a customer non-registered or non-classified generation capabilities by including a GSMALL and GLARGE to NCC.
- Creating a new NC to identify EV charging stations.
- Excluding sites from SMALL and LARGE NCC with generation  $\geq 10\text{kVA}$ .
- Changing the allocation of Residential sites to the SMALL NCC as the Customer Classification Code field already differentiates between Residential and Business customers.
- Editorial changes to the Customer Threshold Limits in CATS to include the applicable Jurisdictional limits.

The Draft Determination proposed:

- Shifting the substantive components of ICF\_059 to a separate consultation process.
- Footnoting the applicable Jurisdictional limits of the Customer Threshold Limits.
- Maintaining the Residential and Business references in the NCC table.

Generally, the respondents supported:

- Shifting the substantive components of ICF\_059 to a separate consultation.
- Providing Jurisdictional limits in a footnote to the Customer Threshold Codes table.
- Amending the Customer Threshold Code table in the CATS Procedure to reflect the relevant regulatory instruments in a footnote.

However:

- AGL disagreed with the Draft Report position that the specification of jurisdictional thresholds in the Customer Threshold Code table in the CATS Procedure, problematically, may require AEMO to undertake a consultation process to update the table when the thresholds change. AGL does not consider these possible consultation requirements to be a valid reason to reject the proposal.
- Red Energy and Lumo Energy disagreed with the Draft Report position to retain references to 'Residential' and 'Business' in the CATS NCC table. Instead, they recommended that the relevant regulatory instruments be referenced for guidance as to whether a NMI is Business or Residential.

### 5.2.2. AEMO's assessment

#### **Customer Threshold Code**

AEMO maintains the position in the Draft Report that the inclusion of new threshold values in the CATS Procedure may cause additional consultations to be required, if the threshold value of Low, Medium or High change. The use of an expanded footnote reference provides:

- Flexibility, without such a consultation requirement, if the threshold changes.
- Guidance to participants when searching for the relevant jurisdictional Customer Threshold Code.

#### **CATS NCC table**

AEMO maintains the position in the Draft Report, to retain references to 'Residential' and 'Business' in the CATS NCC table, consistent with the NERL.

### 5.2.3. AEMO's conclusion

AEMO will maintain the approach of the Draft Determination to:

- Proceed with the substantive matter of identifying the visibility of a customers load or generation through a separate consultation.
- Footnote the Jurisdiction limits in respect of the Customer Threshold Codes.
- Maintain the Residential and Business references in the NCC table.

## 6. Final determination on proposal

Having considered the matters raised in submissions to the Draft Determination, AEMO's final determination is to amend the Procedures in the form published with this Final Report in accordance with NER 8.9.2.

The final amendments to the CATS Procedure, MDM Procedure and Glossary and Framework differ from the Draft Report, as discussed in section 4.2 and section 5.1 of this Final Report.

AEMO acknowledges that changes will occur to the Procedures prior to the proposed effective date of the published Procedures of this Final Report, as part of the ongoing procedure consolidation process.

### Effective dates

#### ICF\_059 – 1 November 2023

- CATS Procedure, version 5.61

#### IESS Rule – 2 June 2024

- Glossary and Framework
- CATS Procedure
- WIGS Procedures
- Metrology Procedure Part A
- Metrology Procedure Part B
- Standing Data for MSATS document
- MDM Procedures
- Exemption Procedures
- MC Guide
- MDP SLP
- NMI Procedure

#### ICF\_070 – 1 November 2024

- Standing Data for MSATS document, version 5.71

## Appendix A. Glossary

Term or acronym	Meaning
ACE	Adjusted Consumed Energy
ASOE	Adjusted Sent Out Energy
BDU	Bidirectional Unit
CATS	Consumer Administration and Transfer Solution
DER	Distributed Energy Resource
DNSP	Distribution Network Service Provider
DRSP	Demand Response Service Provider
ENM	Embedded Network Manager
ERCF	Electricity Retail Consultative Forum
ESB	Energy Security Board
EV	Electric vehicle
FRMP	Financially responsible Market Participant
ICF	Issue / Change Form
IESS	Integrating Energy Storage Systems
IRS	Integrated Resource System
LNSP	Local Network Service Provider
LR	Local Retailer
MC	Metering Coordinator
MDM	Metering Data Management
MDP	Metering Data Provider
MP	Metering Provider
MPB	Metering Provider Category B
MSATS	Market Settlements and Transfer Solution
NCC	NMI Classification Code
NECR	Non-energy cost recovery
NEM	National Electricity Market
NEO	National Electricity Objective
NER	The National Electricity Rules made under Part 7 of the National Electricity Law
NERL	National Energy Retail Law
NMI	National Metering Identifier
NSP	Network Service Provider
SLP	Service Level Procedure
TNSP	Transmission Network Service Provider
UFE	Unaccounted-for-energy
WDRU	Wholesale Demand Response Unit
WIGS	Wholesale, Interconnector, Generator and Sample

## Appendix B. List of Submissions and AEMO Responses

No.	Heading	Stakeholder	Issue	AEMO response
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	SA Power Networks	SA Power Network does not have any feedback on the proposed changes. We request transition information from AEMO with regards to the method/process to be used where NMI Classification changes/updates are required to impact NMI's for the newly introduced NMI Classifications.	Transition information is provided in section 4.1 of this Final Determination.
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	CitiPower/Powercor	No comment	-
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	United Energy	No comment	-
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	Vector	Yes	AEMO notes the respondent's support for the proposed change.

No.	Heading	Stakeholder	Issue	AEMO response
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	AGL	AGL notes the improved definition of NREG and believes that this is more appropriate and supports the change.	AEMO notes the respondent's support for the proposed change.
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	Intellihub	No comment	-
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	EQL	Energy Queensland supports AEMO's proposed changes to the Procedures to reflect the requirements of the IESS Rule	AEMO notes the respondent's support for the proposed change.
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	PlusES	<p>PLUS ES currently supports the proposed changes to the Procedures to reflect the requirements of the IESS Rule.</p> <p>We also note a point of concern with respect to the number of enumerations which have been included or may become necessary to include in the NMI Classification Code (NCC) field.</p> <p>We recommend potentially another solution to cater for the increasing enumerations and a way to identify the NMI size, for your consideration. The NCC field (limiting this to a few enumerations) and a new NCC subtype field to identify the various nuances (which are currently solved as additional NCC enumerations), recognising that it is an</p>	AEMO has responded to this recommendation in section 4.2.2 of this Final Determination.

No.	Heading	Stakeholder	Issue	AEMO response
			additional field and hence requiring additional system builds.	
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	Red Lumo	Red Energy and Lumo Energy (Red and Lumo) agree with the proposed changes and support the refined definition of NREG.  We offer questions below requesting clarification of some additional references to Tier 1 and Tier 2 which may have been overlooked and some additional text which appears to have been errantly added to the procedures.	AEMO has responded to this question in section 4.2.2 of this Final Determination.
1	Do you agree with the proposed changes to the Procedures to reflect the requirements of the IESS Rule? If not, please explain the specific draft decision you do not agree with and any proposed alternative solution.	TasNetworks	Yes.	AEMO notes the respondent's support for the proposed change.
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	SA Power Networks	No comment.	-
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	CitiPower/Powercor	CitiPower Powercor queries how the transition of GENERATR to DGENERATR is going to be undertaken for existing sites as per MSATS Procedure – CATS 5.7? Suggest AEMO to do this transition with notifications via CR of changes made.  CitiPower Powercor recommends keeping Table 6 from Appendix E in the MSATS Procedures: National Metering Identifier Procedure as it provides a clear representation of how the different NMI Classification Codes/CATS Participant IDs are required to be set up.	AEMO has responded to this question in section 4.1 of this Final Determination.
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	United Energy	United Energy queries how the transition of GENERATR to DGENERATR is going to be undertaken for existing sites as per MSATS Procedure – CATS 5.7? Suggest AEMO to do this transition with notifications via CR of changes made.	AEMO has responded to this question in section 4.1 of this Final Determination.

No.	Heading	Stakeholder	Issue	AEMO response
			United Energy recommends keeping Table 6 from Appendix E in the MSATS Procedures: National Metering Identifier Procedure as it provides a clear representation of how the different NMI Classification Codes/CATS Participant IDs are required to be set up.	
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	Vector	-	-
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	AGL	AGL believes that the AEMO B2B Accreditation procedure may require updating as it does not recognise the IRP Participant type.	AEMO notes this comment but has not considered this question as it is deemed out of scope as part of this Final Determination.
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	Intellihub	No comment	-
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	EQL	No comment	-
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	PlusES	No comment.	-
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	Red Lumo	Red and Lumo do have any additional suggestions.	AEMO notes the respondent's comment.
2	Are there any gaps in AEMO's Procedure changes for the IESS Rule?	TasNetworks	Not to TasNetworks knowledge.	AEMO notes the respondent's comment.
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building Name' field length in MSATS)?	SA Power Networks	SA Power Networks support the proposed change but we do not believe there is any urgency to implement this change. If it is determined that an update is needed to the schema to support this change, then this change should not proceed on it's own and wait to be included with other changes where a schema change is justified.	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building	CitiPower/Powercor	CitiPower Powercor understands the proposed approach is combining 2 fields to be one which is 60 characters. Whilst we don't oppose the change, we strongly recommend this is included with wider	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.



No.	Heading	Stakeholder	Issue	AEMO response
	Name' field length in MSATS)?		schema changes rather than just a change for this field.	
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building Name' field length in MSATS)?	United Energy	United Energy understands the proposed approach is combining 2 fields to be one which is 60 characters. Whilst we don't oppose the change, we strongly recommend this is included with wider schema changes rather than just a change for this field.	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building Name' field length in MSATS)?	Vector	Yes	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building Name' field length in MSATS)?	AGL	AGL supports this proposal being implemented. However, if this proposal requires a Schema change for implementation, then AGL would support this change being bundled with other changes (eg B2B Field Length changes) to make the schema change worthwhile. AGL would not support this being the only reason for a schema change.	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building Name' field length in MSATS)?	Intellihub	<p>We are supportive of the outcome ICF_070 is trying to achieve.</p> <p>We note that the draft determination proposes to achieve this outcome by updating the Standing Data for MSATS document so that the BuildingOrPropertyName field changes from two 30-character fields to a single 60-character field. We believe this proposed approach is sub-optimal because it will require a schema change and will introduce a misalignment with the B2B schema and Standards Australia AS4590.</p> <p>We suggest an alternative option is to update MSATS so that it has two 30-character fields. This alternative option will align MSATS with the existing Standing Data for MSATS document and the existing B2M schema therefore will have a lesser impact to participants than the proposal in the draft determination. This alternative option also ensures alignment with the B2B schema and Standards Australia AS4590 thus ensuring a consistent approach with B2B and better compatibility with</p>	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.

No.	Heading	Stakeholder	Issue	AEMO response
			<p>other industries/organisations that comply with AS4590.</p> <p>For context, currently the building name field is defined to be two 30-character fields in the Standing Data for MSATS document, B2B Procedure Technical Delivery Specification, NEM ROLR Process Part A and Part B, aseXML for B2M and B2B and Standards Australia AS4590.</p> <p>Should AEMO decide on an approach that requires a schema change then we suggest that this change be bundled with other changes that requires a schema change to maximise the cost/benefit of the schema change.</p>	
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building Name' field length in MSATS)?	EQL	<p>Energy Queensland supports AEMO's suggested increase of the Building/Property Name field from 30 characters to 60 characters on the proviso that no change is required to the XML schema. This is due to the IT costs involved in making schema related changes.</p> <p>Additionally, we support the proposed amendment to the Building/Property Name field on the proviso that its utilisation remains in accordance with the Australian Standard AS4590-1999 and its application remains aligned with the Technical Delivery Specification.</p> <p>Our preference is for metering location information to make use of the meter location field of the MSATS Meter Register record, as the designated source for this data, rather than the Building/Property Name field being adapted to this purpose.</p>	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building Name' field length in MSATS)?	PlusES	<p>PLUS ES supports the proposed approach to ICF_070. Alignment must exist between communication tools to ensure information is not lost.</p>	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building Name' field length in MSATS)?	Red Lumo	<p>Red and Lumo do not agree with progressing ICF_070 if it requires a schema change.</p> <p>Our initial support of the proposal was contingent upon this not requiring a schema change.</p>	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.

No.	Heading	Stakeholder	Issue	AEMO response
3	Do you agree with the proposed approach to ICF_070 (Increase 'Building Name' field length in MSATS)?	TasNetworks	<p>No. TasNetworks believes this change is not required and may be in contradiction to AS4590.</p> <p>AS4590 notes that Building/Property Name comprises two separate 30 character fields.</p> <p>As an LNSP, who authors/maintains the data in this field, our system currently only caters for a single 30 character 'Building Name' field, hence aligning with current MSATS.</p> <p>If MSATS can currently only store 30 characters, then recipients of this data would only have ever had up to 30 characters of information provided via a CATS Notification.</p> <p>Would a more preferable solution be to update the 'Standing Data for MSATS' to indicate only a single field for use, acknowledging the aseXML schema allows for two 30 character fields. Should justification warrant it, a second 'Building Name' field could be added to MSATS at a later time when other MSATS changes were undertaken that required participants to make related system changes.</p> <p>AEMO's assessment in the draft report indicates that the greater detail would assist with metering installation and malfunction works, however other fields such as 'Location Descriptor' and/or 'Location' could be utilised for this purpose.</p>	AEMO notes the respondent's comment and refers to section 5.1 of this Final Report.
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process separate from the IESS consultation?	SA Power Networks	SA Power Networks support this change in direction.	AEMO notes the respondent's support for the proposed change.
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process separate from the IESS consultation?	CitiPower/Powercor	CitiPower Powercor strongly supports separating ICF_059 to its own consultation.	AEMO notes the respondent's support for the proposed change.

No.	Heading	Stakeholder	Issue	AEMO response
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process separate from the IESS consultation?	United Energy	United Energy strongly supports separating ICF_059 to its own consultation.	AEMO notes the respondent's support for the proposed change.
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process separate from the IESS consultation?	Vector	Yes	AEMO notes the respondent's support for the proposed change.
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process separate from the IESS consultation?	AGL	AGL supports the proposal to move the substantive aspects of ICF_059 to another consultation and is strongly supportive of the proposals which AEMO presented in this regard.	AEMO notes the respondent's support for the proposed change.
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process separate from the IESS consultation?	Intellihub	No Comment	-
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process separate from the IESS consultation?	EQL	Energy Queensland supports AEMO's draft decision to separate components of ICF_059 out of IESS consultation and for a more in-depth review of EV charging stations NCC	AEMO notes the respondent's support for the proposed change.
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process	PlusES	PLUS ES supports AEMO's determination to shift the substantive components to a separate consultation.	AEMO notes the respondent's support for the proposed change.

No.	Heading	Stakeholder	Issue	AEMO response
	separate from the IESS consultation?			
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process separate from the IESS consultation?	Red Lumo	Red and Lumo support moving ICF_059 to a separate consultation which contemplates an effective method of identifying generation, storage and demand thresholds.	AEMO notes the respondent's support for the proposed change.
4	Do you agree with AEMO's decision to shift the substantive components of ICF_059 to a separate consultation process separate from the IESS consultation?	TasNetworks	Yes.	AEMO notes the respondent's support for the proposed change.
5	Do you agree with AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the relevant regulatory instruments in a footnote?	SA Power Networks	SA Power Networks support this decision.	AEMO notes the respondent's support for the proposed change.
5	Do you agree with AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the relevant regulatory instruments in a footnote?	CitiPower/Powercor	CitiPower Powercor supports this change.	AEMO notes the respondent's support for the proposed change.
5	Do you agree with AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the relevant regulatory instruments in a footnote?	United Energy	United Energy supports this change.	AEMO notes the respondent's support for the proposed change.
5	Do you agree with AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the relevant regulatory instruments in a footnote?	AGL	AGL supports the inclusion of the reference to the relevant regulatory instruments and suggests the relevant references should also be included with Table 4-D for the NMI Classifications of SMALL and LARGE.  AGL proposed the editorial amendments to ensure clarity to all participants on the threshold values.	AEMO notes the respondent's comment and refers to section 5.2 of this Final Report.

No.	Heading	Stakeholder	Issue	AEMO response
			<p>This proposed change is no different to the information contained within Table 4-D NMI Classifications which also contains the Jurisdictional thresholds for determining SMALL and LARGE NMIs.</p> <p>AGL, as the proponent, notes the feedback from participants, but does not understand how there can be cost implications or regulatory impacts by including the values against the definitions.</p> <p>These threshold limits should already be applied by Participants according to the relevant NERR or jurisdictional requirements, and the only change is therefore to publish the specific values in the MSATS CATS Procedure. That is, there should be no process or system change associated with this proposal (which was to improve clarity) and which was supported by the majority of participants.</p> <p>AGL notes AEMOs concern about undertaking a consultation if the Jurisdictional values change, but considers that if this is AEMOs prime concern, then other Jurisdictional information within CATS (eg Table 4-D NMI Classification SMALL / LARGE thresholds) should also be removed for the same reason.</p> <p>Changes to these instruments will continue indefinitely due to the ongoing evolution of the NEM, as such, consultations will be an ongoing feature of this procedures.</p> <p>AGL does not consider the possible requirement to consult on changes to the CATS procedure as a result of a possible Jurisdictional change to be a sufficiently valid reason to reject this proposal (which had strong support) compared to making improvements to the CATS Procedures which add greater clarity for participants, especially as there is other Jurisdictional information published within the CATS procedure, which if changed could also trigger a consultation.</p>	
5	Do you agree with AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the	Intellihub	No comment	-

No.	Heading	Stakeholder	Issue	AEMO response
	relevant regulatory instruments in a footnote?			
5	Do you agree with AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the relevant regulatory instruments in a footnote?	EQL	Energy Queensland supports AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the relevant regulatory instruments in a footnote	AEMO notes the respondent's support for the proposed change.
5	Do you agree with AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the relevant regulatory instruments in a footnote?	PlusES	This decision drives future efficiencies such as not requiring opening procedures for consultation when the values change.	AEMO notes the respondent's support for the proposed change.
5	Do you agree with AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the relevant regulatory instruments in a footnote?	Red Lumo	Red and Lumo support the proposal to refer to the relevant regulatory instruments in a footnote.	AEMO notes the respondent's support for the proposed change.
5	Do you agree with AEMO's draft decision to amend the Customer Threshold Codes table in CATS to reflect the relevant regulatory instruments in a footnote?	TasNetworks	Yes.	AEMO notes the respondent's support for the proposed change.
6	Do you agree with AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance with the National Energy Retail Law (NERL)?	SA Power Networks	SA Power Networks support this decision.	AEMO notes the respondent's support for the proposed change.
6	Do you agree with AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance with the National Energy Retail Law (NERL)?	CitiPower/Powercor	CitiPower Powercor supports this decision.	AEMO notes the respondent's support for the proposed change.

No.	Heading	Stakeholder	Issue	AEMO response
6	Do you agree with AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance with the National Energy Retail Law (NERL)?	United Energy	United Energy supports this decision.	AEMO notes the respondent's support for the proposed change.
6	Do you agree with AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance with the National Energy Retail Law (NERL)?	Vector	Yes	AEMO notes the respondent's support for the proposed change.
6	Do you agree with AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance	AGL	AGL notes this decision.	AEMO notes the respondent's support for the proposed change.
6	Do you agree with AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance	Intellihub	No comment	
6	Do you agree with AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance	EQL	Energy Queensland supports AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance with the National Energy Retail Law.	AEMO notes the respondent's support for the proposed change.
6	Do you agree with AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance	PlusES	PLUS ES supports AEMO's draft decision to retain references to Residential and Business in the CATS NCC:  For all the reasons provided in previous submissions, including recently made changes and It provides a point of clarity/standardisation for all market participants using the NCC field.	AEMO notes the respondent's support for the proposed change.
6	Do you agree with AEMO's draft decision to retain references to 'Residential'	Red Lumo	Red and Lumo do not agree and recommend instead that the relevant regulatory instruments are referred to for guidance on whether a NMI is Business or Residential.	AEMO notes the respondent's comment and refers to section 5.2 of this Final Report.



No.	Heading	Stakeholder	Issue	AEMO response
	and 'Business' in the CATS NCC table in accordance			
6	Do you agree with AEMO's draft decision to retain references to 'Residential' and 'Business' in the CATS NCC table in accordance	TasNetworks	Yes.	AEMO notes the respondent's support for the proposed change.

