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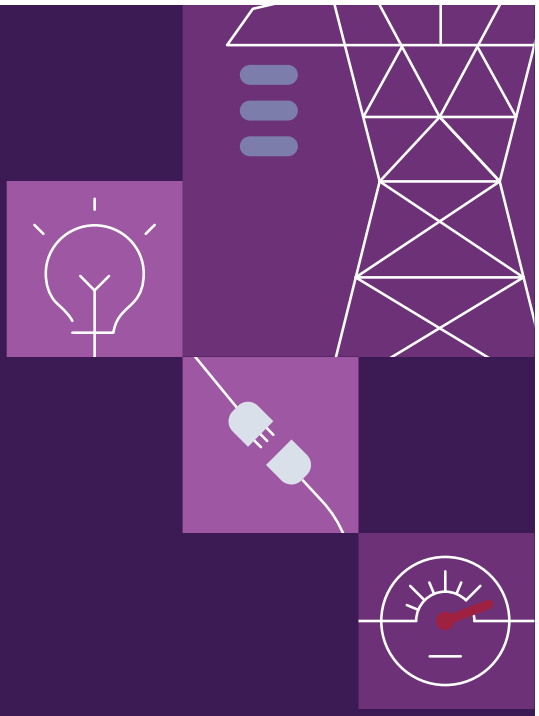

July 2023 Retail Electricity Market Procedures Consultation

Draft Report – Standard consultation for the National Electricity Market

Published: 05 October 2023

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

Australian Energy Market Operator Ltd ABN 94 072 010 327

Executive summary and consultation notice

The publication of this draft report (**Report**) commences the second stage of the standard consultation procedure conducted by AEMO (**Consultation**) to consider the changes (**Changes**) which are proposed (**Proposal**) to the Retail Electricity Market Procedures (**REMPs**) under the National Electricity Rules (**NER**), which relate to:

- the following three Issues and Change Forms (**ICFs)** raised by the Electricity Retail Consultative Forum (**ERCF**); and
- the additional amendment raised by AEMO.

In the Issues Paper, AEMO sought comment and feedback on the following matters:

- Three ERCF ICFs:
  - A preferred longer-term Net System Load Profile (**NSLP**) Methodology (ICF_072)
    - Considers situations where positive and negative NSLP trading interval values are present.
  - Substitution Types review (ICF_054)
    - Intends to provide recipients a clearer understanding of the reason and method used to support a substituted metering data value.
  - Summation Metering Changes (ICF_073)
    - Proposes to introduce three types of summation arrangements.
- Amendments to the NMI Discovery access for Metering Coordinators (**MCs**)
  - Intends to align the CATS Procedures' NMI Discovery access to NER 7.15.5.

In response to the Issues Paper, AEMO received 11 written submissions.

These submissions raised the following three material issues:

- Origin Energy raised concerns in respect of the proposal to obsolete Type 16 substitutions, suggesting that the obsolescence would result in the removal of timeframes which are required in respect of 'final substitute sites'.
- PLUS ES did not agree with the proposed definition of the summation arrangements, suggesting the proposed definition had the potential to inadvertently and incorrectly include or exclude circumstances where summation metering should or should not be applied.
- Some MCs and retailers raised concerns that the Issues Paper did not clearly identify:
  - the intended outcome regarding NMI Discovery access for MCs; or
  - the manner in which the matter would be dealt with in terms of REMP drafting.
- A number of submissions raised several use case scenarios that would be reliant on access to sets of NMI Standing Data for MCs who are not, and never have been, a nominated party at the associated NMI in MSATS.

After considering the submissions, AEMO's draft determination is to:

  - Implement 'Option 1' as the longer-term NSLP methodology, with the effective date of 29 September 2024.

- Implement numerous Substitution Type and Reason Code changes, with the effective date of 29 September 2024, including:
  - the addition of seven new substitution types;
  - the obsoletion of substitution type 16; and
  - the addition of 10 new Reason Codes.
- Implement the three types of summation arrangements, with the effective date of 13 May 2024.
- Change the current NMI Discovery access provisions for MCs, with the effective date of 15 December 2023.
- Remove the existing access of Embedded Network Managers (**ENMs**) to Parent NMI DLF and TNI Codes, with the effective date of 15 December 2023.

To enable the draft determination, AEMO proposes to amend the following REMPs:

- Metrology Procedure: Part A (effective date, 13 May 2024)
- Metrology Procedure: Part B (effective date, 29 September 2024)
- Meter Data File Format Specification NEM12 and NEM13 (effective date, 29 September 2024
- Service Level Procedure Embedded Network Manager (effective date, 15 December 2023)
- MSATS Procedures: Consumer Administration and Transfer Solution (CATS) Procedure Principles and Obligations (effective date, 15 December 2023)

Consultation notice

AEMO invites written submissions from interested persons on the Proposal and issues identified in this Report to NEM.Retailprocedureconsultations@aemo.com.au by 5:00 pm (Melbourne time) on **3 November 2023**.

Submissions may make alternative or additional proposals you consider may better meet the objectives of this consultation and the national electricity objective in section 7 of the National Electricity Law. Please include supporting reasons.

Before making a submission, please read and take note of AEMO's consultation submission guidelines, which can be found at https://aemo.com.au/consultations. Subject to those guidelines, submissions will be published on AEMO's website.

Please identify any parts of your submission that you wish to remain confidential and explain why. AEMO may still publish that information if it does not consider it to be confidential, but will consult with you before doing so. Material identified as confidential may be given less weight in the decision-making process than material that is published.

Submissions received after the closing date and time will not be valid, and AEMO is not obliged to consider them. Any late submissions should explain the reason for lateness and the detriment to you if AEMO does not consider your submission.

Interested persons can request a meeting with AEMO to discuss any particularly complex, sensitive or confidential matters relating to the proposal. Please refer to NER 8.9.1(k). Meeting requests must be received by the end of the submission period and include reasons for the request. AEMO will try to accommodate reasonable meeting requests but, where appropriate, we may hold joint meetings with other stakeholders or convene a meeting with a broader industry group. Subject to confidentiality restrictions, AEMO will publish a summary of matters discussed at stakeholder meetings.

Contents

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1. Stakeholder consultation process

AEMO is conducting the Consultation in accordance with the standard rules consultation procedure in NER 8.9.2.

This Report uses terms defined in the NER, which are intended to have the same meanings. A glossary of additional terms and abbreviations is in Appendix A.

AEMO's indicative process and timeline for the Consultation are outlined below. Future dates may be adjusted, and additional steps may be included, if necessary, during the course of the Consultation.

Table 1 Consultation process and timeline

Consultation steps	Dates
Net System Load Profile Sub-group discussion	7 March 2023
Substitution Type Review Sub-group discussion	19 May 2023 – 29 June 2023
Consultation Paper published	26 July 2023
Submissions due on Consultation Paper	24 August 2023
Substitution Type Review Sub-group discussion	18 September 2023
Draft Report published	5 October 2023
Submissions due on Draft Report	3 November 2023
Final Report published	15 December 2023

AEMO's consultation webpage in respect of the Consultation is at https://aemo.com.au/en/consultations/current-and-closed-consultations/july-2023-retail-electricity-market-procedures-consultation.The webpage contains all previous published papers and reports, written submissions, and other consultation documents or reference material (other than material identified as confidential).

AEMO thanks all stakeholders for their feedback on the Proposal to date and looks forward to further constructive engagement.

2. Background

2.1. Context for this consultation

2.1.1. Preferred longer-term Net System Load Profile (NSLP) Methodology (ICF_072)

AEMO's Meter Data Management **(MDM)** system generates the following load profiles, to support market settlement processes:

- The Five-Minute Load Profiles **(5MLP)** create a profile shape, which is used to convert 30-minute and 15-minute interval metering data into 5-minute trading intervals.
- The Net System Load Profiles **(NSLP)** create a profile shape, which is used to convert accumulation (basic meter) reads, that typically account for consumption over a 90-day period, into 5-minute trading intervals.

In recent years, NSLP volumes have substantially reduced, predominantly due to the rollout of mass interval metering across certain parts of the NEM, including Victoria.

When positive and negative NSLP trading interval values are present, significant fluctuations, or 'spikes', are observed when the NSLP is applied to accumulation metering data. These spikes are a consequence of having a small denominator value in the profiling algorithm.

The profiled energy would correctly sum to the original metering data. However, the profiled values may not be representative. Where these 'spikes' coincide with high spot/pool prices, unintended consequences may occur, including trading limit breaches.

The Load Profiling Methodology Consultation, conducted in 2022, sought to address these spike-related issues. However, the longer-term solution supporting NSLPs was ultimately decoupled from that consultation process. This decoupling was to allow additional time for industry to complete sufficient analysis and to more comprehensively understand the potential impacts of applying alternative methodologies.

The Issues Paper set out longer-term methodology options shown in Table 2 alongside an AEMO assessment for each option, with a suggested implementation date of no earlier than October 2024.

Table 2 Proposed NSLP Methodologies

Methodology	AEMO Comments
Option 1 – For NSLP values less than a minimum value, set the NSLP value to a minimum (non-zero) value ("Floor")	Only impacts the reads to be profiled that traverse the low value period. Impact on an individual read varies depending on where it overlaps the profiling period. Simple process and easy to implement and understand. Quasi-UAM approach (where the calculated NSLP is below the threshold value, the application of the revised profile results in the same energy value being calculated and applied for the 5-minute periods).
Option 2 – For NSLP values less than a minimum value, set the NSLP to be the average of the positive NSLP values for the trading day.	Only impacts the reads to be profiled that traverse the low value period. Impact on individual read varies depending on where it overlaps the profiling period.

Methodology	AEMO Comments
If all NSLP values for a day<minimum value, set NSLP = minimum (non-zero) value	Complexity of methodology and system implementation. Potentially results in a strange energy profile which is inconsistent with expected consumption profile.
Option 3 – For NSLP values less than a minimum value, set the NSLP to the minimum of the positive NSLP values for that trading day. If all NSLP values for a day<minimum value, set NSLP = minimum (non-zero) value	Only impacts the reads to be profiled that traverse the low value period. Impact on individual read varies depending on where it overlaps the profiling period. Complexity of methodology and system implementation. Potentially results in a strange energy profile which is inconsistent with expected consumption profile.

2.1.2. Substitution Types review (ICF_054)

Substitution types which are associated with small market interval metering are limited. Accordingly, in recent years, substitution approvals have risen dramatically from affected Financially Responsible Market Participants (**FRMPs)**, Embedded Network Local Retailers (**ENLRs**), and Local Network Service Providers (**LNSPs**).

These approvals are required where the Metering Data Provider (**MDP**) intends to apply the Type 16 Agreed Method. The associated approval processes:

- result in a substantial amount of administrative effort for all parties;
- may result in delays in the provision of metering data; and
- may result in compliance issues for the MDPs.

Additionally, due to the application of the Type 16 Agreed Method, the underlying cause of the substitution is not easily communicable. For example, the recipient will not be able to distinguish between a situation where the substitution is being provided due to crossed meters and to failed phase on 3 phase supply.

The ERCF agreed that the current substitution rules supporting Type 1-4 interval metering needed to be reviewed, given the increasing Type 4 Small saturation in the interval meter market.

In particular:

- When compared to Type 4 substitution rules, Type 4A and Type 6 substitution rules allow for greater flexibility and encompass more scenarios in the cases where data may be missing, or the data requires finalisation.
- Where no existing Type 1-4 substitution rule is applicable, a MDP must seek approval from affected participants to use an agreed or alternate methodology through a Type 16 and Type 18 substitution, resulting in an administrative burden on all parties.

Further:

- Given the volume of smart meters installed since Power of Choice **(POC),** the use of Type 18 substitutions has increased, particularly as Planned Interruption Notifications **(PINs)** are required and/or Meter Providers **(MPBs)** are unable to access premises to rectify communications faults in a timely manner.
- When a standard substitution rule can be applied, the period of data requiring substitution may exceed 7 days for Type 1-3 meters and 15 days for all other meters, requiring approval from affected participants to apply a Type 16 substitution method.

These restrictions have made it difficult for MDPs to automate the substitution and provision of metering data in a timely manner.

Whilst bilateral agreements are permitted between MDPs and affected participants to approve the use of Type 16 and Type 18 substitutions effectively automatically, not all participants allow this approach. Accordingly, MDPs communicate via email to wait for approvals before committing a substitution, delaying billing for customers and potentially the settlements process. NEM settlement is also impacted by the inaccuracy of substituted data, where better source data could be used in line with Type 6 metering substitution rules.

The Proposal presented in the Issues Paper sought to address these issues to ensure that recipients of the data have a clearer understanding of the exact reason and method used to support the provided meter value, thereby reducing the need for agreements amongst the relevant parties.

The Proposal sought to amend Metrology Procedure: Part B to include new substitution types presented in Table 3, as well as the following four new reasons codes:

- Incorrect Meter Multiplier.
- Device unmetered.
- Customer by-pass.
- Network by-pass.

Table 3 Proposed Substitution Types

Substitution Type	Methodology	Possible Use Cases	Changes/Comments
Type 14 – Retrospective Like Day	To perform a type 14 Substitution, the MDP must Substitute missing or erroneous *metering data* using the **nearest equivalent day** or **like day** method, as detailed in Table 1.	Metering data could not be retrieved or where metering data is erroneous.	Name change only from *Like Day* to *Retrospective Like Day*
Type 15 – Retrospective Average Like Day	To perform a type 15 Substitution, the MDP may Substitute for the missing or erroneous *metering data* using the average **like day** method, as detailed in Table 2.	Metering data could not be retrieved or where metering data is erroneous but the previous week prior to the affected period is higher or lower than normal.	Name change only from Average *Like Day* to *Retrospective Average Like Day*
Type 16 – Agreed Method	To be made obsolete.	To be made obsolete.	To be made obsolete with the intention that: • Type 16 may still be used for historical purposes. • Type 18 would be used as an alternative.
Type 20 – Prospective Like Day	To perform a type 20 Substitution, the MDP must Substitute missing or erroneous metering data using the nearest equivalent day or like day method, as detailed in Table 3, where: • the MDP applies a type 19 Substitution following a Meter Churn and the previous MDP has not provided metering data for the start of the Meter Churn Day: or • no historical data is available or applicable.	New MDP has not received churn data or churn data is not available from the old MDP. New meter installed but no metering data could be retrieved or was erroneous from installation date and where previous data is unavailable or cannot be used.	Name change only from *Previously Churn Correction* to *Prospective Like Day* to allow for other scenarios instead of just meter churn.
Type 22 – Prospective Average Like Day	To perform a type 22 Substitution, the MDP may Substitute for the missing or erroneous metering data using the average like day method, as detailed in Table 4, where: • the MDP applies a type 19 Substitution following a Meter Churn and the previous MDP has not provided metering data for the start of the Meter Churn Day: or • no historical data is available or applicable.	New MDP has not received churn data or churn data is not available from the old MDP. New meter installed but no metering data could be retrieved or was erroneous from installation date and where previous data is unavailable or cannot be used.	New rule.

Substitution Type	Methodology	Possible Use Cases	Changes/Comments
Type 23 – Previous Year	To perform a type 23 Substitution, the MDP must provide a Substitute using the metering data from the nearest equivalent day or like day from the same, or similar, Meter Reading period in the previous year. The nearest equivalent day or like day is to be determined from Table 3.	Missing or affected data on a connection point where load is seasonal (e.g. increased energy consumption in summer in warmer climates, in extreme heat or in areas where heating is used in winter; factories; agricultural sites for water pumps).	New rule.
Type 24 – Data Scaling	To perform a type 24 Substitution, the MDP must apply a multiplier value to scale any affected erroneous Actual meter reading data either up or down to reflect missing or over-estimated registration.	Where incorrect CT or VT ratios are identified on site; VT failure or meter phase failure occurs resulting in loss of registration to 1 or 2 phases; the meter is programmed with the incorrect multiplier; or the incorrect head end system meter multiplier applied.	New rule.
Type 25 – Average Daily Load (ADL)	Where no other option is available, the substituted period is calculated based on Average Daily Load which may or may not be profiled.	Where no previous interval meter data history is available, but an ADL can be provided from Retailer based on consumption/generation on Type 6 meter. Stacking may be applicable for import channel or export-controlled load.	New rule.

2.1.3. Summation Metering Changes (ICF_073)

As part of POC rule changes in 2017, summation metering was grandfathered, as the transitional arrangements were removed from chapter 9 of the NER.

Since 2017, there have been situations where summation metering could have been useful to minimise market settlement impacts, for example, under rare HV breaker scenarios.

The Issue Paper proposed to update clause 5 of the Metrology Procedure: Part A to clarify the changes which:

- are acceptable to support legacy summation metering arrangements; and
- will be acceptable in future to support new metering installation summation arrangements.

Specifically, the Proposal sought to revise clause 5, “Summation Metering”, in the Metrology Procedure: Part A to allow the following three types of summation arrangements:

- HV breaker-and-a-half schemes.
- HV single transformer fed by multiple parallel cables.
- Cross boundary supply single transformer with multiple LV Circuits.

2.1.4. Amendments to the NMI Discovery access for Metering Coordinators

NER 7.15.5 explicitly restricts access to NMI Standing Data for MCs, MPs and MDPs. Specifically, NER 7.15.5(c) only allows for access to NMI Standing Data for NMIs where the MC is currently, or previously, appointed. AEMO had previously determined to enable access to NMI Standing Data via the MSATS NMI Discovery search facility, despite the NER restriction (via consultation in relation to ICF_005). The Proposal in the Issues Paper sought to realign the CATS Procedures with the NER.

2.2. NER requirements

AEMO is responsible for the establishment and maintenance of retail electricity market procedures specified in NER 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 maintained by AEMO in accordance with the NER consultation procedures.

2.3. The national electricity objective

Within the specific requirements of the NER applicable to this proposal, AEMO will seek to make a determination that is consistent with the national electricity objective (**NEO**) and, where considering options, to select the one 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; and

(c) the achievement of targets set by a participating jurisdiction—

(i) for reducing Australia's greenhouse gas emissions; or

(ii) that are likely to contribute to reducing Australia's greenhouse gas emissions.

3. List of material issues

The key material issues arising from the proposal or raised in submissions or consultation meetings are listed in Table 4.

Table 4 List of material issues

No.	Issue	Raised by
1.	Proposed changes to the substitution types and Reason Codes	Origin Energy
2.	Summation Metering Changes	PLUS ES
3.	NMI Discovery for MCs	Multiple Participants

A detailed table of the issues raised by stakeholders in their written submissions, together with AEMO's responses, is contained in Appendix B. Questions and responses from non-confidential meetings are published on the consultation webpage.

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

4. Discussion of material issues

4.1. Proposed changes to the substitution types and Reason Codes

4.1.1. Issue summary and submissions

Most respondents agreed with the proposed new substitution types and Reason Codes.

However, Origin Energy noted that by making Type 16 substitutions obsolete, the timeframes are removed which are required to final substitute sites within 7 days for COMMS 1, 2 and 3 meter types, and 14 days for COMMS4 meter types.

Accordingly, Origin Energy recommended changes to the final substitution rules to:

- mitigate risks of ongoing temporary substitution for long term periods;
- ensure customers have accurate finalised reads within reasonable timeframes; and
- reduce rebilling frequency due to various revisions.

Further, Origin Energy noted these changes could be based on the ability to extract actual meter reads from the meters which correspond to the maximum period of 60 days for an MP to fix meter faults/issues.

- As a result, Origin Energy proposed, for COMMS 1, 2 ,3 & 4 Meters, to finalise sub meter reads by 3 months/90 days, where the faulty/replaced meter has passed its storage capacity and actual reads cannot be extracted from the meter.

Specifically, this proposal covers the scenario where:

- A meter has been replaced, and all attempts have been made to obtain actual reads from the old meter, but have failed.
- All prior attempts have failed to obtain a replaced meter (lost meter/equipment).
- All prior attempts have failed to obtain actual reads from the faulty meter.

The implementation date of:

- 4 November 2024 was supported by five participants; and
- 5 May 2025 was supported by four participants, given the volume of system changes already scheduled for 2024 and associated resourcing constraints.

4.1.2. AEMO's assessment

AEMO acknowledges that the existing requirements relating to Type 16 substitutions makes it difficult for MDPs to automate processes which support the provision of metering data in a timely manner.

In response to Origin's submission, AEMO notes that Type 16 substitutions do not place any obligations on MDPs to produce a final substitution. Accordingly, no prescribed timeframes for final substitutions would be removed by rendering Type 16 substitutions obsolete. Additionally, the Service Level Procedure: Metering Data Provision Services, section 3.12.4, sets out obligations in respect of the quality and provision of metering data.

The ERCF Substitution Type Review reconvened on 18 September 2023 to consider Origin's feedback. The subgroup agreed unanimously that the introduction of a substitution period

'cap' in the Metrology Procedure: Part B was not required and would result in significant system changes for Participants.

Finally, AEMO considers that an effective date of 4 November 2024 would result in several changes to Participant obligations in quick succession, specifically:

- Integrating Energy Storage Systems (**IESS**) changes, effective 2 June 2024;
- NSLP Methodology changes, effective 29 September 2024; and
- Substitution Type and Reason Code changes, effective 4 November 2024.

4.1.3. AEMO's conclusion

AEMO does not support Origin's proposal for a longer-term substitution period cap, as:

- The Service Level Procedure: Metering Data Provision Services, section 3.12.4, sets out obligations in respect of the quality and provision of metering data.
- The proposed changes would result in unnecessary and material costs to Participants (MDPs).

AEMO agrees with most respondents that the effective date should be 29 September 2024.

4.2. Summation Metering Changes

4.2.1. Issue summary and submissions

Most participants agreed with the proposal to update clause 5 of Metrology Procedure: Part A to support summation metering arrangements.

However, PLUS ES did not agree with the proposed definition of the summation arrangements. PLUS ES considered that the definition had the potential to inadvertently and incorrectly include or exclude circumstances where summation metering should or should not be applied.

Accordingly, PLUS ES proposed that an alternative approach would better achieve the desired objective, stating:

"In principle, summation arrangements should be described as circumstances, where:

- *The location of metering, with respect to the operation of the electrical infrastructure, has significant impact on market settlement, or*
- *A physical restriction prevents the installation of a single set of current transformers over a single metering/connection point.*

The three examples listed should be listed as examples that may fit into that description."

PLUS ES proposed that:

- the approved summation method should be described in terms of its ability to achieve the required overall error performance; and
- AEMO should develop a guideline to support the assessment.

4.2.2. AEMO's assessment

AEMO's proposal seeks to reintroduce a grandfathered clause to specify situations where:

- summation metering is useful to minimise market settlement impacts; or
- Installation of multiple meters is physically impossible.

Under the NER, a metering installation can be made up of multiple metering points for a connection point, as agreed by the customer and the LNSP. In this scenario, the NMI that identifies this connection point would have multiple data streams, which would be settled correctly in the settlements system. Accordingly, there would be no need to make them one datastream.

AEMO acknowledges that additional summation metering scenarios may emerge in the future and as these scenarios emerge, additional changes may be considered.

4.2.3. AEMO's conclusion

The scenarios described in Metrology Procedure: Part A sections 5.2(a), (b) and (c) have been identified as causing settlements issues or issues where it is physically impossible to install multiple meters.

AEMO will consider whether a guideline is required to support the assessment of the specified scenarios.

4.3. NMI Discovery for MCs

4.3.1. Issue summary and submissions

A number of MCs and retailers commented that the Consultation Paper did not clearly identify:

- The intended outcome of the Consultation regarding NMI Discovery access for MCs.
- The related drafting of the REMPs.

The respondents raised several use case scenarios which would rely on access to sets of NMI Standing Data for MCs who are not, and have never been, a nominated party at the associated NMI in MSATS. These scenarios centred on accessing data that would assist in the resolution of issues in day-to-day metering services activities (regardless of whether the NMI was identified as SMALL or LARGE in MSATS), including:

- Crossed Meter investigations to identify the current FRMP/MC/MDP for the other NMI.
- Multi-occupancy situations where all meters have to be replaced in a coordinated manner between affected market participants.
- Meter investigations related to "lost meters".
- Verification of correct meter location (e.g. accurate address information on hard-to-locate metering installations referencing neighbouring premises).

On the specific use case noted by AEMO in the Consultation Paper – that is, whether the scenario is reasonable in which very limited access to NMI Discovery can be provided to an MC, referencing the use case presented to AEMO via ICF_005:

- Respondents proposed that MCs should have access in this scenario, so that the MCs can identify the NMI Class as part of their engagement negotiations with Retailers or Large Customers. This access would ensure that the MC can verify that the NMI Class is LARGE before raising a change request to nominate itself in the role of MC for the NMI.

- Respondents noted that once identified as a LARGE NMI, the process to finalise agreements with the customer could take longer than one business day, so the proposed timeframe for enabling access (of one business day) would be inadequate. Respondents observed that prior to the AEMC changing the legacy Responsible Person (**RP**) role to the MC, as the RP could only be a party who was also either an LNSP or a retailer, historically access to the NMI Discovery search facility had not been a barrier.
- Respondents noted the discrepancy in access rights to NMI Standing Data between the NER and the MSATS Procedures, commenting that AEMO should consider obtaining approval from the AER to continue to provide access as is currently detailed in the MSATS Procedures, in lieu of a potential change to the NER.

4.3.2. AEMO's assessment

The matter being considered is the correct alignment of the MSATS Procedures with the NEL and the NER, specifically as relates to MCs accessing NMI Standing Data.

NER 7.15.5(c)(2) restricts access to NMI Standing Data to:

- Current MC – the MC who is appointed in respect of the relevant connection point; or
- Previous MC – the MC who was appointed in respect of the relevant connection point, as required in connection with a Metering Coordinator default event in accordance with procedures authorised under the NER.

Accordingly, an MC is not authorised to undertake a NMI Discovery search for a connection point where it is not, or was not, the MC. Currently, the MSATS Procedures include provisions in respect of MC access to NMI Standing Data which provide for access which is beyond that which is provided for in the NER. Accordingly, alignment would require a deletion of all provisions for MCs to access NMI Discovery in the MSATS Procedures.

Prior to the creation of the MC role, persons who acted as RP might have had access to NMI Standing Data because they were also either a retailer or an LNSP. However, on creation of the MC role in the NER, the AEMC considered the data access rights that should apply in the context of the role operating independently from both retailer and LNSP, providing explicit limitations, as referenced above.

AEMO agrees that a number of valid reasons exist to provide MCs with greater access rights to NMI Standing Data in the NER. AEMO made submissions to the AEMC on this topic in the context of the Review of the Regulatory Framework for Metering Services[1] (in alignment with some of the use cases presented in submissions to this Consultation). AEMO notes that the AEMC's Final Report includes the following commentary[2]:

> *"…Both metering coordinators and AEMO note rule 7.15 of the NER poses a barrier to allowing metering coordinators access to NMI Discovery. The Commission views this as an issue that should be considered further during the rule change process, in the context of the one-in-all-in approach and potentially other circumstances where metering coordinators require access to NMI Discovery when undertaking meter upgrades or replacements."*

[1] https://www.aemc.gov.au/market-reviews-advice/review-regulatory-framework-metering-services
[2] https://www.aemc.gov.au/sites/default/files/2023-08/emo0040_-_metering_review_-_final_report.pdf (page 108)

In the Consultation Paper, AEMO explored the very limited scenario in which an MC might reasonably use NMI Discovery in a manner consistent with the current NER, where, in a single calendar day, the following sequential actions occur in MSATS:

- An MC is appointed by a large customer by agreement at the NMI, in accordance with NER 7.6.2(a)(3)(ii).
- The newly appointed MC performs a NMI Discovery search to access the NMI Classification Code, based on the MC's financial interest in the Large Customer NMI or the energy measured by the Large Customer NMI, in accordance with NER 7.15.5(c)(1).
- The newly appointed MC initiates a Change Request 6300 or 6301 to change the MC, by appointing itself as the MC at the Large Customer NMI.

Respondents commented that this limited scenario was not practical, given the NMI Discovery validation of the customer's NMI classification would have to occur earlier in the process, as part of the negotiation with the customer (and potentially their nominated retailer) to provide MC services.

4.3.3. AEMO's conclusion

In future, the AEMC may change MC access rights to NMI Standing Data, in the context of its Review of the Regulatory Framework for Metering Services Final Report, or another rule change process.

However, currently, the only scenario in which an MC other than the Current MC or Previous MC (as outlined above) might reasonably obtain limited access to NMI Standing Data via NMI Discovery is where the MC has established a financial interest (as provided for in NER 7.15.5(c)(1)). In this regard, respondents comments that the use of NMI Discovery would be of value only where the access were provided prior to or during the negotiation process with a customer, rather than at the point at which a financial interest had been established.

AEMO considers that the argument presented for access to NMI classification (i.e. SMALL or LARGE) in this scenario via NMI Discovery might have merit. However, currently, the NER does not provide for such access. Instead, for the MC to have established a financial interest, the identification of the associated NMI(s) classification code must have been determined already (e.g. via information provided by the customer as part of the negotiation process for the direct provision of MC services).

As a result, AEMO is unable to identify any scenario in which an MC might reasonably have access to NMI Discovery. Accordingly, AEMO concludes that all provisions for MC access to NMI Discovery in the MSATS Procedures should be removed.

Further, AEMO has identified that section 4.2.1(f) the Service Level Procedure – Embedded Network Managers is similarly inconsistent with the NER. Section 4.2.1(f) provides that Embedded Network Managers (**ENMs**) can access indicative DLF Codes and TNI Codes for the parent connection point.

However, NER 7.15.5(c)(6) provides that an ENM may access NMI Standing Data at a child connection point, not a parent connection point. Accordingly, AEMO proposes to remove section 4.2.1(f).

AEMO must comply with the NEL's protected information provisions, which include the provision of access to NMI Standing Data. NMI Standing Data access via AEMO systems must comply with the NER. Accordingly, AEMO considers that a waiver or similar by the AER or another party would be unavailable.

5. Other matters

5.1. Proposed changes to Reason Codes

Several participants proposed additional changes to the existing and proposed Reason Codes. AEMO engaged the ERCF Substitution Type Review subgroup to consider these additional changes. As a result, the following details have been added or amended in the Meter Data File Format Specification NEM12 and NEM13:

Reason Code	Reason Code Description	Detailed Description
100	Incorrect Meter Multiplier	For use when correcting data when the incorrect meter multiplier was originally applied
101	Temporarily Connection Point unmetered	For use when a connection point has been temporarily unmetered (eg mains by-pass)
102	Customer By-Pass	For use when the customer has by-passed the meter
103	Network By-Pass	For use when the Network by passed the meter to get supply to the customer because they believe the meter is faulty
104	Transposed Channel	For use when meter data streams have been transposed (eg ToU with controlled load)
105	Transposed Channel - UoM Correction	For use when data channels have been transposed (eg KWH with KVARH)
106	Transposed Channel – Reverse Polarity	For use when meter has been wired in reverse from install or where reverse polarity alarm occurs effectively swapping registration between export and import registers
107	Transposed Meter	For use when correcting data as a result of crossed meters
108	Network by-pass extreme weather	For use when the network by passed the meter to get supply to the customer because an extreme weather event has affected the meter
109	Defined load method	For use where Retailer/LNSP profile data based on off-market meter or other measured data that best represents the connection point load

5.2. Minor changes to CATS Procedure

AEMO has made the following minor grammatical and administrative changes to the CATS Procedure as a part of this Consultation:

- The removal of a number of MSDR fields that should have previously been removed.
- The updating of unpopulated table references.
- The inclusion of Bulk and Xboundary in section 2.10(g) and the removal Wholesale, Interconnector, Generator, and Sample.

6. Draft determination on proposal

Having considered the matters raised in the submissions to the Consultation Paper, AEMO's draft determination is to**:**

- Implement 'Option 1' as the longer-term NSLP methodology, with the effective date of 29 September 2024.
- Implement the Substitution Type and Reason Code changes, with the effective date of 29 September 2024.
- Implement the summation metering changes, with the effective date of 13 May 2024.
- Remove the relevant MC NMI Discovery access, with the effective date of 15 December 2023.
- Remove the ENM access to DLF Codes and TNI Codes for parent connection points, with the effective date of 15 December 2023.

The following REMPs are to be amended in the form published with this Draft Report, in accordance with the NER:

- Metrology Procedure: Part A
- Metrology Procedure: Part B
- Meter Data File Format Specification NEM12 and NEM13
- Service Level Procedures Embedded Network Manager
- MSATS Procedures: Consumer Administration and Transfer Solution (CATS) Procedure Principles and Obligations.

Appendix A. Glossary

Term or acronym	Meaning
5MLP	Five-Minute Load Profile
CATS	Consumer Administration and Transfer Solution, a part of MSATS.
ENLR	Embedded Network Local Retailer
ENM	Embedded Network Manager
ERCF	Electricity Retail Consultative Forum
FRMP	Financially Responsible Market Participant
ICF	Issue / Change Form
LNSP	Local Network Service Provider
MDP	Meter Data Provider
MC	Metering Coordinator
MSATS	Market Settlements and Transfer Solution
NEM	National Electricity Market
NEL	National Electricity Law
NER	The National Electricity Rules made under Part 7 of the National Electricity Law
NMI	National Metering Identifier
NSLP	Net System Load Profile
PIN	Planned Interruption Notification
PoC	Proof of Concept
POC	Power of Choice
UAM	Uniform Allocation Method

Appendix B.List of Submissions and AEMO Responses

Table 5 Feedback on Net System Load Profile Methodology (ICF_072) discussion

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree that Option 1 best achieves the desired objectives and principles? If not, why?	AGL	AGL supports Option 3 over Option 1, but recognises that Option 1 may be simpler to implement.	AEMO notes the respondent's comment.
1	Do you agree that Option 1 best achieves the desired objectives and principles? If not, why?	CitiPower Powercor	No comment.	
1	Do you agree that Option 1 best achieves the desired objectives and principles? If not, why?	Endeavour Energy	Based on the analysis provided by AEMO for the 3 options EE would agree that Option 1 would be the best fit to meet the desired objectives.	AEMO notes the respondent's support for Option 1.
1	Do you agree that Option 1 best achieves the desired objectives and principles? If not, why?	Energy Queensland	Yurika Metering has no comments.	
1	Do you agree that Option 1 best achieves the desired objectives and principles? If not, why?	Evoenergy	Keep it simple	AEMO notes the respondent's comment.
1	Do you agree that Option 1 best achieves the desired objectives and principles? If not, why?	Origin Enerygy	Origin Energy agrees that Option 1 achieves the desired objectives.	AEMO notes the respondent's support for Option 1.
1	Do you agree that Option 1 best achieves the desired objectives and principles? If not, why?	Red Lumo	Red Energy and Lumo Energy (Red and Lumo) agree that Option 1 best achieves the desired result.	AEMO notes the respondent's support for Option 1.
1	Do you agree that Option 1 best achieves the desired objectives and principles? If not, why?	TasNetworks	No comment	

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree that Option 1 best achieves the desired objectives and principles? If not, why?	Vector Metering	N/A – Not impacted	
2	Do you believe an alternative methodology would better achieve the desired objectives and principles? Why? Please provide details of the alternative methodology. • The selection of an alternative methodology would likely result in a delay to the longer-term methodology being implemented, as AEMO would need to develop, analyse and test this alternative.	AGL	While AGL considers that the NSLP profile needs improvement, AGL considers that Option 1 still distorts the outcome. AGL considers that the majority of accumulation customers will still be consuming some load in the middle of the day, and hence consider Option 3 to be more representative of the expected load. AGL notes AEMO's comments regarding analysis and development, but as this proposed implementation is over 12 months away, AGL considers that this is still achievable. Regardless of which option is implemented, AGL considers that the proposed accelerated rollout of smart meters will have impacts on the NSLP processes. NSLP processes work as a result of application of a profile to a statistically large fleet of consumers. As a result of the significantly diminishing fleet of accumulations meters, AGL strongly urges AEMO to schedule some analysis for around 2028 and again potentially around 2030 (dates dependent on smart meter rollout) to mitigate unusual outcomes from the substantially smaller number of accumulation meters still in service. Noting the previously identified issue of load changes to solar sites with 5 minute data, AGL also urges some attention be paid to ensuring generation sites (Solar and battery) have 5 min meters as soon as possible.	AEMO notes the respondent's comment. AEMO acknowledges that NSLP behaviour and trends differ among profile areas, and recognises that the proposed accelerated rollout of smart meters will have an impact to the magnitude of NSLP. AEMO notes that the implementation of Option 1 requires a review of NSLP trends and sufficient consideration of factors contributing to the NSLP to determine the most appropriate "minimum value/floor" per profile area. The intent is for this "minimum value/floor" to be set such that the resulting profiled energy volumes would still be representative of load. AEMO understands that a periodic review of the NSLP magnitude will help mitigate risks and unusual outcomes over time, and notes that Option 1 includes system functionality to enable AEMO to adjust this "minimum value/floor". AEMO acknowledges the respondent's comment on providing sufficient notice to Participants should any changes be required.
2	Do you believe an alternative methodology would better achieve the desired objectives and principles? Why? Please provide details of the alternative methodology. • The selection of an alternative methodology would likely result in a delay to the longer-term methodology being implemented, as AEMO would need to develop,	CitiPower Powercor	No comment.	

No.	Question	Stakeholder	Participant Comments	AEMO response
	analyse and test this alternative.			
2	Do you believe an alternative methodology would better achieve the desired objectives and principles? Why? Please provide details of the alternative methodology. • The selection of an alternative methodology would likely result in a delay to the longer-term methodology being implemented, as AEMO would need to develop, analyse and test this alternative.	Endeavour Energy	At this point in time EE has not proposed or reviewed an alternate methodology that would better achieve the desired objectives or principals.	AEMO notes the respondent's comment.
2	Do you believe an alternative methodology would better achieve the desired objectives and principles? Why? Please provide details of the alternative methodology. • The selection of an alternative methodology would likely result in a delay to the longer-term methodology being implemented, as AEMO would need to develop, analyse and test this alternative.	Energy Queensland	Yurika Metering has no comments.	
2	Do you believe an alternative methodology would better achieve the desired objectives and principles? Why? Please provide details of the alternative methodology.	Evoenergy	No comment	

No.	Question	Stakeholder	Participant Comments	AEMO response
	• The selection of an alternative methodology would likely result in a delay to the longer-term methodology being implemented, as AEMO would need to develop, analyse and test this alternative.			
2	Do you believe an alternative methodology would better achieve the desired objectives and principles? Why? Please provide details of the alternative methodology. • The selection of an alternative methodology would likely result in a delay to the longer-term methodology being implemented, as AEMO would need to develop, analyse and test this alternative.	Origin Enerygy	Origin Energy does not have any alternative methodology to propose.	AEMO notes the respondent's comment.
2	Do you believe an alternative methodology would better achieve the desired objectives and principles? Why? Please provide details of the alternative methodology. • The selection of an alternative methodology would likely result in a delay to the longer-term methodology being implemented, as AEMO would need to develop, analyse and test this alternative.	Red Lumo	Red and Lumo do not have an alternative to offer.	AEMO notes the respondent's comment.
2	Do you believe an alternative methodology	TasNetworks	No comment	

No.	Question	Stakeholder	Participant Comments	AEMO response
	would better achieve the desired objectives and principles? Why? Please provide details of the alternative methodology. • The selection of an alternative methodology would likely result in a delay to the longer-term methodology being implemented, as AEMO would need to develop, analyse and test this alternative.			
2	Do you believe an alternative methodology would better achieve the desired objectives and principles? Why? Please provide details of the alternative methodology. • The selection of an alternative methodology would likely result in a delay to the longer-term methodology being implemented, as AEMO would need to develop, analyse and test this alternative.	Vector Metering	N/A – Not impacted	
3	Do you agree that the preferred methodology should not be implemented prior to October 2024 and that with the implementation of the new methodology should occur during a historically less volatile pricing period? If not, why?	AGL	AGL supports the proposed implementation of Oct 2024 – aligning with the end/start of a settlement week, again assuming that there are no significant market events in play. AGL also suggest that AEMO remind settlements managers of the proposed change from August.	AEMO notes the respondent's support for the change.
3	Do you agree that the preferred methodology should not be implemented prior to October 2024 and	CitiPower Powercor	No comment.	

No.	Question	Stakeholder	Participant Comments	AEMO response
	that with the implementation of the new methodology should occur during a historically less volatile pricing period? If not, why?			
3	Do you agree that the preferred methodology should not be implemented prior to October 2024 and that with the implementation of the new methodology should occur during a historically less volatile pricing period? If not, why?	Endeavour Energy	EE supports an implementation date not prior to October 2024 and in a historically less volatile pricing period.	AEMO notes the respondent's support for the change.
3	Do you agree that the preferred methodology should not be implemented prior to October 2024 and that with the implementation of the new methodology should occur during a historically less volatile pricing period? If not, why?	Energy Queensland	Yurika Metering has no comments.	
3	Do you agree that the preferred methodology should not be implemented prior to October 2024 and that with the implementation of the new methodology should occur during a historically less volatile pricing period? If not, why?	Evoenergy	No comment	
3	Do you agree that the preferred methodology should not be implemented prior to October 2024 and that with the implementation of the new methodology should occur during a historically less volatile pricing period? If not, why?	Origin Enerygy	Origin Energy agrees that the preferred methodology (being Option 1 from our perspective) should be implemented from Oct 2024 onwards, and also agrees with the caveat around volalite pricing period, the lesser the better (based on historical data).	AEMO notes the respondent's support for the change.

No.	Question	Stakeholder	Participant Comments	AEMO response
3	Do you agree that the preferred methodology should not be implemented prior to October 2024 and that with the implementation of the new methodology should occur during a historically less volatile pricing period? If not, why?	Red Lumo	Red and Lumo would prefer an earlier effective date to remove the existing problems with NSLP energy calculation however we acknowledge the requirement for consultation, system build and benefit of assessment of the impact of the 5MLP methodology.	AEMO notes the respondent's comment.
3	Do you agree that the preferred methodology should not be implemented prior to October 2024 and that with the implementation of the new methodology should occur during a historically less volatile pricing period? If not, why?	TasNetworks	No comment	
3	Do you agree that the preferred methodology should not be implemented prior to October 2024 and that with the implementation of the new methodology should occur during a historically less volatile pricing period? If not, why?	Vector Metering	N/A – Not impacted	

Table 6 Feedback on Substitution Type review (ICF_054) discussion

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?	AGL	AGL supports the proposed Substitution methods and Reason Codes. AGL also notes that there could be additional reason codes, such as: Transposed Channel, Transposed Channel - UoM Correction, Transposed Channel – Reverse Polarity and Transposed Meter to cover some of the more commonly identified situations. See appendix for details.	AEMO notes the respondent's comment. The additional reasons codes have been shown as a marked change.

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?	CitiPower Powercor	CitiPower Powercor supports the proposed substitution types and reason code changes. CitiPower Powercor would like to see the marked up Meter Data File Format (MDFF) Specification in the Draft Report due to be published on 5 October.	AEMO notes the respondent's comment. A change marked procedure has been provided as part of the draft determination.
1	Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?	Endeavour Energy	EE agree's that the proposed changes to the substitution types and reason codes will provide clarity in the name changes, provide the MDP's with the desired range of substitution types and improve the backend processes for all parties.	AEMO notes the respondent's comment.
1	Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?	Energy Queensland	Yurika Metering has no comments.	
1	Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?	Evoenergy	Agree with proposal, but we need more reason codes. Suggest the following rewording and new one: • ~~Device~~ Temporarily unmetered connection point • Defined load method – Where Retailer/LNSP profile data based on off-market meter or other measured data that best represents the connection point load.	AEMO notes the respondent's comment and have added these as a marked change.
1	Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?	Intellihub	In principle we agree with the proposed changes and wish to provide the following suggestions: We agree that type 16 should be removed and as a transitional approach it could still be used for historical purposes. We understand the term 'historical purposes' to be in reference to when the substitution was created, as opposed to the date of the metering data – therefore to avoid confusion, we suggest it is made clear in the procedure a type 16 cannot be created from the effective start date however a type 16 can still be sent in the NEM12 if it was created prior to the effective start date. With the proposed new reason code of 'Device unmetered' we believe that this is too generic and it would be better to have reason codes that reflects the reason for a device to be unmetered. We have considered scenarios that may lead a device to be unmetered and we believe that they covered by existing and new proposed reason codes. Therefore, unless there are scenarios that may lead to an unmetered device that is not already covered by existing or new proposed reason codes, we suggest that this reason code not be introduced.	AEMO notes the respondent's comment. The additional reason code of Network by-pass extreme weather has been added as a marked change. The description of Network by-pass faulty meter has been used for reason code Network by-pass as agreed upon by the subgroup meeting on 18 September 2023.

<table>
<tr><th>No.</th><th>Question</th><th>Stakeholder</th><th>Participant Comments</th><th>AEMO response</th></tr>
<tr><td></td><td></td><td></td><td>With the proposed new reason code of ‘Network by-pass’ we believe that this does not provide sufficient detail to distinguish between different scenarios. We suggest that this new reason code be replaced with:<table><tr><td>Reason Code Description</td><td>Detailed Description</td></tr><tr><td>Network by-pass faulty meter</td><td>Network by passed the meter to get supply to the customer because they believe the meter is faulty</td></tr><tr><td>Network by-pass extreme weather</td><td>Network by passed the meter to get supply to the customer because an extreme weather event has affected the meter</td></tr></table></td><td></td></tr>
<tr><td>1</td><td>Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?</td><td>Origin Energy</td><td>Origin broadly agrees with the new substitution types and reason codes. However for type 16 substitution proposed to be made obsolete, it takes away the timeframes that were required to ‘final substituted sites’ within the 7 days for COMMS 1, 2 and 3 meter types, and 14 days for COMMS4 meter type.
Origin recommends changes to ‘Final Substitution’ rules to mitigate risks of ongoing temporary substitution for long term periods, and to ensure customers have accurate finalised reads within reasonable timeframes as well as a reduction in rebilling frequency due to various revisions.
This can be based on ability to extract actual meter reads from the meters and corresponds to the maximum period of 60 days for an MP to fix Meter Faults/Issues.
As such, Origin recommends:
For COMMS 1, 2 ,3 & 4 Meters : Finalise sub meter reads by 3 months/90 days, where the faulty/replaced meter has passed its storage capacity and unable to extract actual reads from the meter. This includes below scenarios.
• Finalise sub meter reads by 3 months/90 days where a meter has been replaced, and all attempts have been made to obtain actual reads from the old meter but have failed.
• Finalise sub meter reads by 3 months/90 days where all prior attempts have failed to obtain a replaced meter (lost meter/equipment).
• Finalise sub meter reads by 3 months/90 days where all prior attempts have failed to obtain actual reads from the faulty meter.</td><td>AEMO notes the respondent’s comment.
The introduction of a long-term substitution period capping would require MDPs to implement new processes to facilitate such an outcome. The consequences would result in system changes for MDPs.
Additionally, substitution type 16 did not place obligations on MDPs to produce a final substitution, only a substitution. Therefore no prescribed timeframes for final substitutions are being removed by rendering substitution type 16 obsolete. Therefore any form of capping is out of scope for this consultation.</td></tr>
<tr><td>1</td><td>Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?</td><td>PLUS ES</td><td>PLUS ES supports the proposed changes as they will deliver significant industry efficiencies.
We also note the following for consideration:
• The newly proposed Reason codes should have included a detailed description for completeness of review.
• Acknowledge that the proposed reason codes can only be provided for remote communication meters, in most scenarios once the metering installation has been visited/investigated. That is, these codes will never be applied to automatic processes. They will only be applied under agreed substitutions.
• The provisioning of marked up versions of the current associated procedures would have enabled a more efficient targeted review of the proposed items.</td><td>AEMO notes the respondent’s comment. A change marked procedure has been provided as part of the draft determination.</td></tr>
</table>

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?	Red Lumo	Red & Lumo are supportive of this proposal and believe it will achieve the desired outcoomes.	AEMO notes the respondent's support for the change.
1	Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?	TasNetworks	Yes. TasNetworks notes however that acceptance of the new reason codes is subject to clarity of the detailed descriptions to be associated with each code to describe their respective use case.	AEMO notes the respondent's support for the change. A change marked procedure has been provided as part of the draft determination.
1	Do you agree that the proposed changes, to the substitution types and reason codes, will achieve the desired objective? In not, why?	Vector Metering	Broadly agree however question the new reason code of 'Customer by-pass'. Customers cannot by-pass meters. If this is the reason why a sub is generated then the existing codes of '60 – Illegal' or '61 - Equipment tampered' appear to be adequate.	AEMO notes the respondent's comment.
2	Which of the proposed implementation dates do you believe should be pursued, and why?	AGL	AGL supports the November 2024 date as the preferred date for implementation so that the benefits can be more quickly accrued.	AEMO notes the respondent's support for the change.
2	Which of the proposed implementation dates do you believe should be pursued, and why?	CitiPower Powercor	CitiPower Powercor would like to pursue the 4 November 2024 implementation date.	AEMO notes the respondent's comment.
2	Which of the proposed implementation dates do you believe should be pursued, and why?	Endeavour Energy	EE would support the implementation date of 5th May 2025.	AEMO notes the respondent's comment.
2	Which of the proposed implementation dates	Energy Queensland	Energy Queensland's DNSPs, Ergon Energy and Energex, and Yurika Metering, strongly prefer the implementation date of 5 May 2025. There are a number of system changes already scheduled in 2024 which limits and constrains existing resources and their ability to test prior to implementation. As such, the later implementation date is preferred.	AEMO notes the respondent's comment.

No.	Question	Stakeholder	Participant Comments	AEMO response
	do you believe should be pursued, and why?			
2	Which of the proposed implementation dates do you believe should be pursued, and why?	Evoenergy	Date should be after all proposed settlement changes. Allows time for incremental system development.	AEMO notes the respondent's comment.
2	Which of the proposed implementation dates do you believe should be pursued, and why?	Intellihub	We suggest an implementation date of 5th May 2025. We agree the proposed changes will provide benefits to industry however this change is a substantial change to our system and processes, and will require extensive testing and change management. We already have projects (both driven internally and externally) locked in for 2023 and 2024, therefore we believe May 2025 is a practical implementation date. We note with significant changes within the industry occurring at the moment there is a shortage of resources within industry which is increasing project cost, timeline and risks for industry. Therefore, we request AEMO consider providing a longer implementation timeframe from what is normally provided to help ease the pressure on industry, especially on changes that do not have a rules driven go-live date like this proposed change.	AEMO notes the respondent's comment.
2	Which of the proposed implementation dates do you believe should be pursued, and why?	Origin Energy	Origin suggests this change to be implemented no earlier than November 2024. This is consistent with the 12-months implementation period as a standard industry practice and will ensure sufficient time is provided to perform detailed impact assessment on our retail processes and/or systems, followed by designing, building, testing and implementing the new changes.	AEMO notes the respondent's comment.
2	Which of the proposed implementation dates do you believe should be pursued, and why?	PLUS ES	PLUS ES supports an implementation date of 4 Nov 2024 to be pursued: • An earlier implementation date will deliver the efficiencies outlined sooner. • It is our preference to have these changes implemented and processes bi-laterally agreed, where required, and stabilised before the commencement of smart meter acceleration program (proposed date 1 July 2025).	AEMO notes the respondent's comment.
2	Which of the proposed implementation dates do you believe should be pursued, and why?	Red Lumo	Red Energy would prefer the implementation of 5 May 2025, this suits with the number of other system charges that are currently in the pipeline.	AEMO notes the respondent's comment.
2	Which of the proposed implementation dates do you believe should be pursued, and why?	SA Power Networks	SA Power Networks preference is 4 November 2024.	AEMO notes the respondent's comment.
2	Which of the proposed	TasNetworks	TasNetworks would be supportive of a 4 November 2024 effective date as we believe this provides sufficient lead time.	AEMO notes the respondent's comment.

No.	Question	Stakeholder	Participant Comments	AEMO response
	implementation dates do you believe should be pursued, and why?			
2	Which of the proposed implementation dates do you believe should be pursued, and why?	Vector Metering	November 2024 – the proposed changes provide some additional flexibility for MDP's in managing substitutions.	AEMO notes the respondent's support for a November 2024 implementation date.

Table 7 AGL Additional Reason Codes

Reason Code	Reason Code Description	Detailed Description
90	Transposed Channel	For use when meter data streams have been transposed (e.g. TOU with Controlled load).
91	Transposed Channel - UoM Correction	For use when data channels have been transposed (eg KWH with KVARH);
92	Transposed Channel – Reverse Polarity	For use when meter has been wired in reverse from install or where reverse polarity alarm occurs effectively swapping registration between export and import registers
93	Transposed Meter	For use when correcting data as a result of crossed meters

Table 8 Feedback on Summation Metering Changes (ICF_073) discussion

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	AGL	AGL considers that these metering arrangements are needed for complex environments with multiple entry and exit points, and sees no issue with including these cases in the metrology procedures.	AEMO notes the respondent's support for the change.
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	CitiPower Powercor	CitiPower Powercor supports the proposed inclusion of the three summation arrangements.	AEMO notes the respondent's support for the change.

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	Endeavour Energy	EE has no objections to the inclusion of the 3 summation arrangements.	AEMO notes the respondent's support for the change.
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	Energy Queensland	Yurika Metering agrees with the inclusion of the proposed summation metering arrangements.	AEMO notes the respondent's support for the change.
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	Evoenergy	This should only apply for existing HV connection points. A new connection point design should not have a physical restriction, allowing for standard metering.	AEMO notes the respondent's comment. AEMO did not consider reintroducing summation metering lightly and only allowed it for certain scenarios instead of opened it up to be used anywhere and misused. These have only been added as they could cause settlements issues that were identified under certain scenarios like for breaker and a half scheme, or it would be physically impossible to install multiple meters otherwise like on a poletop or padmount distribution transformer. Breaker and a half schemes are used at transmission level as they have the advantages of providing flexible operational switching, very high network security and reliability, isolation of either bus without disruption of service for maintenance or during a fault and so on. The breakers used in these schemes use CTs that have protection core CTs to provide busbar protection and feeder protection. In addition, as they are already there, these CT also generally include metering class core CTs built into them. Due to this practical use of these CTs, AEMO did not see the need to force additional CTs to be installed for breaker and a half schemes on the actual feeder itself as it would incur additional costs and take up more physical space.

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	Origin Energy	No comments	
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	PLUS ES	PLUS ES does not agree that the definition of the summation arrangements need to be as prescriptive as proposed in the CIP073_ MetA Summation Metering document. It has the potential to inadvertently and incorrectly include or exclude circumstances where summation metering should or shouldn't be applied. We have revised the proposed wording provided in CIP073 and included them at the end of this table, for consideration. (Blue font = insertions and Red font= deletions) Additionally, the proposed amendments of CIP073 were not included in the consultation paper. PLUS ES proposes for completeness, it should have, at a minimum, been referenced.	AEMO notes the respondent's comments and refers to response 5 table 8.
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	Red Lumo	Red and Lumo have no feedback on this ICF_073	AEMO notes the respondent's comment.
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	TasNetworks	No comment	
1	Do you agree with the proposed inclusion of the three summation arrangements? If not, why?	Vector Metering	N/A – Not impacted	
2	Do you believe that an alternative approach would better achieve the desired objective?	AGL	AGL has not identified any improved / cost-effective approach.	AEMO notes the respondent's comment.
2	Do you believe that an alternative approach would better achieve the desired objective?	CitiPower Powercor	CitiPower Powercor supports the proposed approach.	AEMO notes the respondent's support for the change.
2	Do you believe that an alternative approach would	Endeavour Energy	EE would consider any alternative approaches presented by other market participants.	AEMO notes the respondent's comment.

No.	Question	Stakeholder	Participant Comments	AEMO response
	better achieve the desired objective?			
2	Do you believe that an alternative approach would better achieve the desired objective?	Energy Queensland	Yurika Metering are comfortable with the proposed approach based on discussions at the Electricity Retail Consultative Forum (ERCF).	AEMO notes the respondent's support for the change.
2	Do you believe that an alternative approach would better achieve the desired objective?	Evoenergy	In all instances, Summation metering should be avoided in new designs.	AEMO notes the respondent's comment.
2	Do you believe that an alternative approach would better achieve the desired objective?	Origin Energy	No comments	
2	Do you believe that an alternative approach would better achieve the desired objective?	PLUS ES	PLUS ES supports that an alternative approach would better achieve the desired objective. In principle, summation arrangements should be described as circumstances, where: • The location of metering, with respect to the operation of the electrical infrastructure, has significant impact on market settlement, or • A physical restriction prevents the installation of a single set of current transformers over a single metering/connection point. The three examples listed should be listed as examples that may fit into that description. Additionally, AEMO should consider developing a guideline to support the above assessment.	AEMO notes the respondent's comment. AEMO did not consider reintroducing summation metering lightly and only allowed it for certain scenarios instead of opening it up to be used anywhere and misused. These have only been added as they could cause settlements issues that were identified under certain scenarios (e.g. breaker and a half scheme) or it would be physically impossible to install multiple meters otherwise like on a poletop or padmount distribution transformer. AEMO are happy to consider other specific scenarios that PLUS ES think would be valid to be included. However, under other scenarios, AEMO notes that under the NER a metering installation can be made up of multiple metering points for a connection point that is agreed upon by the customer and the LNSP. In this scenario the NMI that identifies this connection point would have multiple data streams (i.e. E1B1, E2B2 and so on, which would be settled correctly in the settlements system). There is no need to

No.	Question	Stakeholder	Participant Comments	AEMO response
				make them one datastream, physically or logically.
2	Do you believe that an alternative approach would better achieve the desired objective?	TasNetworks	No comment	
2	Do you believe that an alternative approach would better achieve the desired objective?	Vector Metering	N/A – Not impacted	
3	Is the summation method detailed enough or should it be more prescriptive?	AGL	AGL considers that this application is quite complex and that some worked examples and clear identification of where and why metering points should be located could be included as appendix material to provide greater clarity to market participants.	AEMO notes the respondent's comment and will take this under consideration if a guideline is required and where to best add this content, the main objective now is to reinstate it back into Metrology Part A for the specified scenarios.
3	Is the summation method detailed enough or should it be more prescriptive?	CitiPower Powercor	CitiPower Powercor supports the proposed approach.	AEMO notes the respondent's support for the change.
3	Is the summation method detailed enough or should it be more prescriptive?	Endeavour Energy	EE would like to see some more detail in the summation method.	AEMO notes the respondent's comment.
3	Is the summation method detailed enough or should it be more prescriptive?	Energy Queensland	Yurika Metering supports the summation method.	AEMO notes the respondent's support for the change.
3	Is the summation method detailed enough or should it be more prescriptive?	Evoenergy	Much more prescriptive to define or maybe better defined in the Rules Ch 5/5A.	AEMO notes the respondent's comment and will take this under consideration if a guideline is required and where to best add this content, the main objective now is to reinstate it back into Metrology Part A for the specified scenarios.
3	Is the summation method detailed enough or should it be more prescriptive?	Origin Energy	No comments	
3	Is the summation method detailed enough or should it be more prescriptive?	PLUS ES	PLUS ES proposes that the approved summation method should be described in terms of its ability to achieve the required overall error performance.	AEMO notes the respondent's comment and refers to response 15 table 8.

No.	Question	Stakeholder	Participant Comments	AEMO response
			For example, paralleling CTs doesn't work with unbalanced loads and mismatched ratios, where summation CTs are superior in this circumstance. The proposed wording, however, would preclude this approach. Additionally, multiple meters with an addition algorithm may also deliver a better accuracy result.	AEMO are happy to consider other specific scenarios that PLUS ES think would be valid to be included. Just because the NER does have a certain overall error performance, does not mean we should aim to maximise it on day one if avoidable. Adding an additional summation CT will only add further errors into the metering installation when they could potentially be avoided noting that an electronic meter is designed and rated for up to 15A to 20A maximum CT input, so there is a bit of leeway before we a summation CT should be considered. AEMO has not encountered scenarios where summation has been used for mismatched ratios, in any case it would not be recommended to do so as the point of summation is to ensure everything matches, CT ratio, part number and preferably the same manufacturer. This has been the common practice that AEMO has identified through the field audits where summation has been used and if AEMO were to write such a guideline, AEMO would be stating this as a requirement. Logical arrangements introduce risk in the NEM, therefore AEMO expects Participants to install conventional metering installations that comply with Chapter 7 of the NER. Logical algorithms require AEMO approval. They are to support the integrity of the collection and processing of metering data as per NER Clause 7.8.12. Logical calculations are not a replacement for NEM Compliant Metering Installations and are not to facilitate a Participant's commercial requirements. AEMO notes that under the NER a metering installation can be made up of multiple metering points for a connection point that is agreed upon by the customer and the LNSP. In

No.	Question	Stakeholder	Participant Comments	AEMO response
				this scenario the NMI that identifies this connection point would have multiple data streams (i.e. E1B1, E2B2 and so on, which would be settled correctly in the settlements system). There is no need to make them one datastream, physically or logically.
3	Is the summation method detailed enough or should it be more prescriptive?	TasNetworks	No comment	
3	Is the summation method detailed enough or should it be more prescriptive?	Vector Metering	N/A – Not impacted	
4	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	AGL	AGL has no issues with the May 2024 implementation.	AEMO notes the respondent's support for the change.
4	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	CitiPower Powercor	CitiPower Powercor agrees with the proposed effective date.	AEMO notes the respondent's support for the change.
4	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Endeavour Energy	EE supports the proposed effective date of 13th May 2024.	AEMO notes the respondent's support for the change.
4	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Energy Queensland	Yes.	AEMO notes the respondent's support for the change.
4	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Evoenergy	No comment.	

No.	Question	Stakeholder	Participant Comments	AEMO response
4	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Origin Energy	No comments	
4	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	PLUS ES	PLUS ES believes that an effective date of the procedure, 13 May 2024, would allow sufficient timeframe to adhere to the changes.	AEMO notes the respondent's support for the change.
4	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	TasNetworks	No comment	
4	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Vector Metering	N/A – Not impacted	
5.1	Legacy Summation Arrangements	PLUS ES	These provisions are included to support legacy arrangements for existing summation *metering installations* where allowed by Jurisdictional transitional arrangements in Chapter ~~11~~ 9 of the NER. (a) If summation *metering* is achieved by paralleling CT secondary circuits, the overall *metering installation* must meet the minimum overall error standards for a new *metering installation* under all *load* combinations of the individual CT secondaries. (b) If summation *metering* is achieved by the arithmetic sum of data registers or the accumulation of pulses, each individual *metering point* must meet the minimum standards for a new *metering installation* and the MC must on request demonstrate that the summation techniques reliably and accurately transfer data. (c) CT secondari~~es~~y circuits can only be paralleled using appropriate arrangements of links and, where applied, summation transformer terminals; this must not be done at the *meter* terminals.	AEMO notes the respondent's comment. Please note that this is a grandfathered clause and AEMO will not be deleting any set requirements under this arrangement.

No.	Question	Stakeholder	Participant Comments	AEMO response
			~~(d) For type 2 *metering installations* only: Direct summation, in which secondary wiring from a multiple number of feeders is connected directly into the terminals of a *meter*, or summation CTs are permitted provided that the overall errors of the *metering installation* are considered.~~	
5.2	New Metering Installation Summation Arrangements	PLUS ES	Summation metering is only permitted for ~~a~~ single connection point circumstances where location of metering with respect to the operation of the electrical infrastructure has significant impact on market settlement due to the location of metering, or where a physical restriction prevents the installation of a single set of current transformers over a single connection point.~~as follows:~~ ~~(a) HV breaker-and-a-half schemes~~ ~~(b) HV single transformer fed by multiple paralleled cables; this must not involve multiple feeders~~ ~~(c) Cross boundary supply single transformer with multiple LV secondary circuits~~ ~~(d)~~ Any proposed summation metering arrangement ~~under (a), (b) and (c)~~ must be approved by AEMO before implementation. Note: Examples of circumstances considered for summation metering may include HV breaker-and-a-half schemes, HV single transformer fed by multiple paralleled cables, and cross boundary supplies with multiple LV secondary circuits.	AEMO notes the respondent's comment and refers to response 15 table 8. AEMO are happy to consider other specific scenarios that PLUS ES think would be valid to be included.
5.3	Summation Method	PLUS ES	These provisions detail the summation method that can only be used for new summation metering installations described in 5.2. ~~(a)~~ Summation metering ~~is achieved by paralleling CT secondary circuits, the overall metering installation~~ must meet the minimum overall error standards for a new metering installation and under all load combinations of the individual CT secondary circuits. (b) CT secondary circuits can only be paralleled using appropriate arrangements of links and summation CTs where utilised, and not paralleled at~~; this must not be done at the~~ meter terminals. ~~(c) The use of additional summation CTs within the metering installation is not permitted.~~ Note 1: Multiple CTs or CTs with different ratios are difficult to parallel directly – this circumstance better served with summation CTs.	AEMO notes the respondent's comment and will take this under consideration if a guideline is required and where to best add this content, the main objective now is to reinstate it back into Metrology Part A for the specified scenarios.

No.	Question	Stakeholder	Participant Comments	AEMO response
			Note 2: Both summation methods have challenges with *demonstrating* accuracy performance in accordance with the NER. Note 3: Multiple meters (on auxiliary supplies, if required) can also generally achieve the same outcome and arguably more accurately that summation CTs or parallel CTs, albeit with the use of combining algorithms. Note 4: AEMO should have a guideline document to describe the various methods. If the proposed design is not in the guideline, then go to AEMO for approval. For example, the first three described would go in the guideline. The guideline should also consider the determination of overall errors.	

Table 9 Feedback on NMI Discovery for MCs discussion

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	AGL	AGL supports the change to allow MCs to undertake NMI discovery as their involvement spans multiple needs for multiple participants, for multiple functions, such as: 1) Crossed Meter investigations to find out who the current FRMP/MC/MDP is for the other NMI. 2) Multi-occupancy situations where an REC is replacing a meter board and all the meters have to be replaced a NMI discovery is used to confirm the retailers the REC has provided for each NMI, or where the REC has only provided the meter serial numbers determine the NMI's and the retailers so that they can be contacted to issue SO's to a MC to have the metering works done. 3) Special projects – e.g. a Government department who is a landlord wants to install solar on houses which requires the metering to be changed (usually in rural indigenous communities) and asks the MC to help locate the retailer so they can discuss this with them because they can't get the information from the tenant. 4) Meter investigations related to 'lost meters'. This occurs when we have deployed a meter to a site, we have lost comms, attended the site and been unable to locate the meter after repeated efforts. In many cases, we find that there are one or more NMI's allocated to the address by the network and the NMI our meter is on is effectively abolished but is still 'active' in the market. We use NMI discovery to	AEMO acknowledges that the examples provided by AGL might be considered reasonable use cases for MCs to be included as a party with access rights to NMI Standing Data beyond that which is currently provided for in the NER. As outlined in section 2.1.4 of this paper, AEMO has identified a very limited circumstance in which an MC might have legitimate access to NMI Standing Data via NMI Discovery. AEMO is considering whether to provide access, strictly for the purpose of enabling this use case. NMI Discovery access to NMI Standing Data for the matters raised by AGL would have to be provided for in the NER (7.15.5) before AEMO could enable such access for MCs. These matters are considered specifically in section 5.3 of this paper.

No.	Question	Stakeholder	Participant Comments	AEMO response
			search on address which will show more than 1 Active NMI's for that address. This is common in NSW because of the ASP scheme. 5) Investigations where we have been unable to locate a legacy meter for replacement and have UTC'ed the job. Using address searches or legcy meter searches identify other NMI's that are at the same property, or where the field resource thought he was at the correct address but was obviously not. Identifying Meters installed at the wrong property because the Network changed NMI addresses after the metering work was done (it happens…)	
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	CitiPower Powercor	No comment.	
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	Endeavour Energy	EE supports this change to NMI discovery for the MC's.	AEMO notes the respondent's support for the change.
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	Energy Queensland	Yurika Metering considers that the Consultation Paper has not clearly identified the proposal and are unsure what the intended outcome is for the NMI Discovery access for Metering Coordinators (MC). While we note the reference to the 'granting of limited NMI Discovery access to MCs' in AEMOs submission to the Australian Energy Market Commission (AEMC) Metering Services Regulatory Framework Review3 there has been no detail provided as to how this will be finalised in the procedure, e.g. by providing a marked-up CATS Procedures. Yurika Metering considers that there is a valid requirement for MCs to have the ability to conduct NMI Discovery searches to assist with timely and efficient resolution of metering activities and issues for electricity consumers.	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	Evoenergy	No relevant comment.	

[3] AEMO submission to AEMC Consultation *Review of the regulatory framework for metering services* (EMO0040)

No.	Question	Stakeholder	Participant Comments	AEMO response
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	Intellihub	We agree that an allowable scenario for the use of the MC NMI Discovery is a MC to confirm NMI Standing Data when the MC is appointed by a large customer. However, we disagree that these actions must be done within a single calendar day because in practice this is done over a few days and we do not see any reason to restrict a business process to a single calendar day. In addition, we also believe the MC NMI Discovery should be allowed to be used for the following scenario: 1. A large customer is interested in appointing a MC for metering services. The MC should be allowed to perform MC NMI Discovery prior to the appointment: a. to confirm the information provided by the customer is correct, for example NMI provided matches the customer's premises b. to obtain information that can help provide a quote, for example if the premises has CT We believe the above are aligned with clause 7.15.5.c.1 of the NER, in the best interest of the customer and supports an effective industry process. We acknowledge and support AEMO's submission to the AEMC that MCs be given more expansive rights to access NMI Standing Data. We believe the additional rights will significantly help achieve the industry goal of 100% uptake of smart meters by 2030 and manage complex issues that commonly get identified, for example managing multioccupancy sites and cross metering scenarios.	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	Origin Energy	Origin acknowledges the conflict that exists between NER and CATS Procedures and have no comments related to the proposed changes in CATS Procedure. Having said that, Origin understands that providing access to NMI Standing Data to prospective MCs have numerous merits including managing crossed meter investigations to find out who the current FRMP/MC/MDP is for the other NMI, and most commonly in the multi-occ situations where all the meters have to be replaced and NMI discovery is used to confirm the retailers for each NMI. Origin believes that removing the ability for prospective MCs to use NMI discovery will be detrimental to our end customers. If Origin is the current retailer for one of the sites within a multi-occ site, Origin relies on its contracted MCs to inform where there is a shared fuse, and meter exchange is taking place for	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.

No.	Question	Stakeholder	Participant Comments	AEMO response
			another site where Origin is not the current retailer. With the help of NMI Discovery, our MCs can check the FRMP on the site and provide all the information however failure to obtain this information, MCs would be required to contact (door knock?) the end customer to confirm their current retailer which would create friction in the process because customer may not be willing to engagne with a third party knocking on their door, who they do not know and deal with. Simlarly in crossed meters situations (most of which are ombudsman cases), the customer will need to get information from the neighbour, who they may not have a relationship with. Moreover, information provided by the customer will not be able to be verified, which will result in errors (wrong NMI's involved) and in many cases further delays.	
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	PLUS ES	The Issue Paper has not clearly articulated the proposed change to the CATS procedure. If it is referencing the potential exception to these limitations, where in a single calendar day, following the use of MC NMI Discovery, the sequential action of nominating an MC occur in MSATS, PLUS ES provides the following feedback: • Large customer agreements - requires an MC NMI discovery search to be able to confirm that all the customer NMIs are large, provide the customer an agreement, and then nominate as MC if the customer agrees. • The drafting, provisioning and acceptance of the agreement is not something that occurs or can be achieved within a single calendar day. • The MC NMI Discovery may be used in accordance with the proposed CATS changes and the NMI is verified as Small (which happens often). The MC cannot nominate themselves as MC. • The proposed actions will only support PLUS ES in a small volume of use cases. • The gap created is more prominent with small customers where the removal of MC access to NMI Standing Data has provided the MC/MP: o No pathway to get the information required – e.g. cross metering – MP/MC/FRMP of Meter B is not the MC/MP/FRMP of Meter A. The MC of Meter A has no rule enabled pathway to get the information required for Meter B to ensure a resolution	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.

No.	Question	Stakeholder	Participant Comments	AEMO response
			especially where planned outages are required for rewiring. Or, ○ A dependency, for rule enable pathways, on other participants, to provide them the information (which may take up to 5 business days). Information which was previously available within 2-5 mins via the MC NMI Discovery capability.	
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	Red Lumo	It's unclear what change to the CATS procedure is specifically proposed, however any variation in access to NMI Standing Data for a Metering Coordinator would require a change to the National Electricity Rule 7.15.5	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	TasNetworks	TasNetworks is accepting of the circumstance in which a prospective MC may require access to Standing Data in MSATS to verify the NMI Classification upon MC appointment by the large customer. However, TasNetworks seeks clarity on how AEMO is proposing to implement this change. Are AEMO proposing to implement a solution whereby a NMID request from a prospective MC only returns standing data when the NMI is large, and if not large then an error code is returned? Else the MC will still receive and have access to standing data for non-large NMI's.	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.
1	Do you agree with the proposed change to the CATS Procedure? If not, why?	Vector Metering	We support the proposed changes to remove the conflict between the NER and the CATS Procedure We also alert AEMO to the existence of a number of other legitimate Use Cases where MC's should be allowed to perform NMI discovery. Current restrictions on ND for MC's present barriers to the industry working effectively impacting customers and market participants from efficiently meeting their obligations. Typical Use Cases are: • Cross meter situations where MC needs to determine which other parties are impacted so that appropriate steps can be taken. • Assisting customers and customer REC's at multioccupancy sites where multi meter works is required to determine impacted NMI's and their associated retailers, so that appropriate steps can be taken. • Identifying causes of failed metering work due to incorrect standing data in MSATS (usually addresses or meter numbers)	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.

No.	Question	Stakeholder	Participant Comments	AEMO response
			• Identifying NMI's that are still active in the market but have new NMI's created in their place. These cause repeated site visits searching for a meter that has been removed. The recent removal for ND for MC's creates a barrier to solving the above issues that in many cases impact customers and results in reputational damage for the industry.	
2	Do you believe that an alternative approach would better achieve the desired objective?	AGL	AGL has not identified a better approach.	AEMO notes the respondent's comment.
2	Do you believe that an alternative approach would better achieve the desired objective?	CitiPower Powercor	No comment.	
2	Do you believe that an alternative approach would better achieve the desired objective?	Endeavour Energy	EE would review any proposed alternate approach but at this point in time does not have an alternative approach to achieve the desired outcome.	AEMO notes the respondent's comment.
2	Do you believe that an alternative approach would better achieve the desired objective?	Energy Queensland	No. There is no alternative to NMI Discovery as a tool for MCs to identify NMIs and participant Standing Data information for NMIs, where they are not the current MC. In Yurika Metering's experience, an incoming MC and as required under the initial proposal (ICF_005 (2018)4), there is a requirement for MCs to be capable of identifying the NMI Class as part of the engagement negotiations with Retailers or Large Customers, and where the MC is requested to self-nominate in the Responsible Person (RP) role. As self-nomination is not allowed for connection points with a NMI classified as 'Small', the MC needs to be able to verify the NMI Class prior to raising a market change request to nominate or appoint the MC5. NMI Discovery is the only facility where this can be achieved. The use of NMI Discovery would provide a simple and reliable source of information and assist MCs in resolving a number of varied metering related customer issues such as:	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.

[4] AEMO MSATS Procedures: *CATS Procedure Principles and Obligations and Procedure for the Management of WIGS NMIs V4.6 2018*
[5] AEMO MSATS Procedures: *CATS Procedure Principles And Obligations V5.51 2023*

No.	Question	Stakeholder	Participant Comments	AEMO response
			• Identification of participants associated with a NMI they are not the MC for as part of a transposed metering investigation (e.g. at a duplex premises). In order to resolve issues of this type it can involve two or more MC's and Financially Responsible Market Participants (FRMP). The use of NMI Discovery would allow the MC associated with one of the NMIs to identify the MC and FRMP for the other NMIs (which they are not MC). • Identification or confirmation of Retailers for NMIs on multi-tenancy site. This is necessary where the replacement of the MC meter requires replacement of meter/switchboard and additional meters (of which they are not MC). • NMI Discovery search can help with the identification of Retailers as part of special projects, e.g. Government lead metering programs for social housing. • Confirming NMI details (e.g. address) as part of metering investigations where details may have been captured incorrectly or updated by DNSPs. It is also worth noting that prior to creating the new registered participant category of MC, both the DNSP and FRMP had the ability to perform NMI Discovery search for these purposes when previously performing the 'RP' function.	
2	Do you believe that an alternative approach would better achieve the desired objective?	Evoenergy	No comment.	
2	Do you believe that an alternative approach would better achieve the desired objective?	Intellihub	We are not aware of an effective alternative.	AEMO notes the respondent's comment.
2	Do you believe that an alternative approach would better achieve the desired objective?	Origin Energy	An alternative approach is for AEMO to raise a rule change request to the AEMC, and if it receives unaniomous support, this could follow an expedited pathway keeping in mind there are no system changes required by any participant. This will also ensure AEMO honours the previously held consultation outcome for ICF005 that was performed under the Rules, and underwent AEMO's legal assessment at that time.	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.

No.	Question	Stakeholder	Participant Comments	AEMO response
			To minimise immediate customer detriment, which has a direct impact on Origin's as a retailer, and if AEMO believes that the outcome of ICF005 is in direct conflict with NER 7.15.5, it should seek a 'letter of no objection' from the regulator in providing NMI Discovery function to prospective MCs, while proceeding with the expedited rule change request. Additionally, AEMO should implement safeguards in MSATS to ensure this functionality is not being inappropriately used by the MCs, including any monitoring, reporting and auditing MC's processes that can be undertaken by AEMO as per the NER.	
2	Do you believe that an alternative approach would better achieve the desired objective?	PLUS ES	As noted above the issue is not limited to LARGE customers. If the scope of enabling the MC NMI Discovery is limited to LARGE customers, then AEMO must provide an alternative approach which does not constrain the use of MC NMI Discovery and nomination of MC to a single day. This potentially could be achieved by auditing requirements where the MC can verify the use of the MC NMI Discovery was for the purpose of the Large Customer. As ICF 005 noted, access to information to quote and verify LARGE customer sites is only available after the MC has been nominated in the role. However, the above does not resolve the operational inefficiencies and poor customer outcomes which the current rule constraints deliver for almost all customer sites (LARGE/SMALL). Extending MC access to NMI Standing Data where they are not the MC or ever have been nominated as MC to that site is critical. The use cases to qualify such access have existed also in the legacy metering space. The difference is that the LNSP and the MP were generally the same entity and the MP had access to the information. Not so, in the contestable world. It is evident that a rule change is required but the rule change process is lengthy. PLUS ES hopes that AEMO, the AEMC and the AER, develop and approve an interim measure to mitigate the current challenges, whilst more permanent determinations are considered and implemented. That is, measures which will enable the MC/MP continuous, seamless, and efficient resolution to their BAU tasks to mitigate increased costs and poor customer outcomes.	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.
2	Do you believe that an alternative approach would	Red Lumo	Red and Lumo do not have an alternative to offer.	AEMO notes the respondent's comment.

No.	Question	Stakeholder	Participant Comments	AEMO response
	better achieve the desired objective?			
2	Do you believe that an alternative approach would better achieve the desired objective?	TasNetworks	Clarification required as per response in Q1.	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.
2	Do you believe that an alternative approach would better achieve the desired objective?	Vector Metering	N/A	
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	AGL	AGL: supports the proposed implementation date (or earlier).	AEMO notes the respondent's support for the change date.
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	CitiPower Powercor	No comment.	
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Endeavour Energy	EE supports the effective date of 13th December 2023.	AEMO notes the respondent's support for the change date.
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Energy Queensland	Yurika Metering does not support the proposed effective date as insufficient detail has been provided. We do believe that there is currently a valid reason for MCs to have the ability to untilise the NMI Discovery process and would support any further activities to define and progress this matter.	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Evoenergy	Fine.	
3	Do you agree with the proposed effective date? If not, please provide an	Intellihub	We agree the effective date should be the same as the final determination date for this consultation.	AEMO notes the respondent's comment.

No.	Question	Stakeholder	Participant Comments	AEMO response
	alternative effective date with reasoning.			
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Origin Energy	Origin agrees that this issue need to be fixed on an as-soon-as possible basis.	AEMO notes the respondent's comment.
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	PLUS ES	The proposed scope of CATS Procedure changes has limited use cases. For the reasoning above, irrespective of the scope, PLUS ES would like to see reactivation of the MC NMI Discovery sooner than the 13 Dec 2023. The solution is proven and PLUS ES hopes that reactivating the functionality should be as efficient as deactivating it.	AEMO notes the respondent's comment and refers to the response provided in table 9, response 1.
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Red Lumo	The proposed effective date must consider if a Rule change is required to allow additional access for an MC to NMI Standing Data.	AEMO notes the respondent's comment.
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	TasNetworks	TasNetworks is supportive of the proposed 13 December 2023 effective date.	AEMO notes the respondent's support for the change date.
3	Do you agree with the proposed effective date? If not, please provide an alternative effective date with reasoning.	Vector Metering	Yes.	AEMO notes the respondent's support for the change date.