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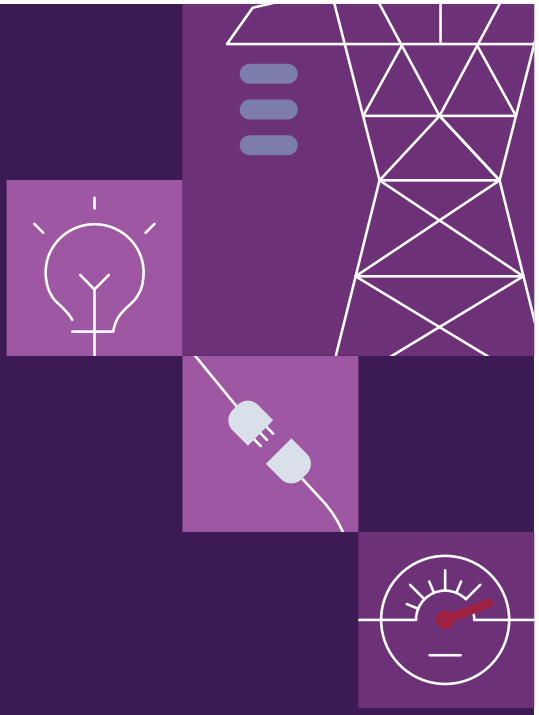

2025 Metering Services Review Package 2 Consultation

Consultation paper - Standard consultation for the National Electricity Market

Published: 10 February 2025

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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

Explanatory statement and consultation notice

This Consultation Paper commences the first stage of the standard rules consultation procedure conducted by AEMO (**Consultation**) to consider the changes that are proposed (**Proposal**) to the Retailer Electricity Market Procedures (**REMPs**) under the National Electricity Rules (**NER**), which relate to changes described in the Accelerating Smart Meter Deployment (**ASMD**) rule.

This consultation considers explicitly:

- Development of an asset management strategy to 'reliably test metering installation accuracy and identify metering installation condition faults in a reasonable period, regarding costs and benefits to consumers'.
- Modifying the Metering Installation Malfunction Exemption procedure and changing the Metering Installation Exemption Guideline procedure for metering installation malfunctions to comply with the new requirements in the Final rule.

Develop an asset management strategy

The ASMD Final Rule requires AEMO to develop an Asset Management Strategy Guideline (Guideline). In reviewing the framework for Metering Services, the AEMC identified Metering Coordinators ('MCs') testing and inspection requirements as ambiguous and allowed for different testing and inspection requirements to be applied[1]. The Final Rule introduces a new requirement for AEMO to produce the Guideline to meet the Asset Management Strategy Objective, which is to have a testing and inspection strategy in place to reliably test metering installation accuracy and identify metering installation condition faults in a reasonable period.

In developing the Guideline, the Rule requires AEMO to take into account:

- that testing and inspection requirements are effective and proportionate to the expected benefits
- new technologies and designs of metering installations and innovations in equipment and processes used to verify metering installation accuracy and condition
- any other matters AEMO deems relevant to the Asset Management Strategy Objective.

Accordingly, AEMO is consulting to create the Guideline. AEMO proposes to develop the Guideline within a new part of the Metrology Procedures (Part C), encompassing all NEM metering installation testing and inspection requirements. A draft copy of this Procedure is provided at the Issues Paper stage to facilitate industry discussion before the draft determination.

Modification to Metering Installation Malfunctions

Under the Final Rule, the categories of Metering installation malfunction in 7.8.10 of the NER have been extended to include specific timeframes for rectifying small customer metering installation malfunctions, as follows:

- 15 business days for individual malfunctions
- 70 business days for meters that have failed under a sample-based testing methodology

The Rule allows an MC to apply for an exemption where the MC cannot repair or replace the malfunctioning metering installation within the specified time frames. In considering the change to the

[1] https://www.aemc.gov.au/sites/default/files/2024-04/draft_rule_determination_-_accelerating_smart_meter_deployment.pdf, p. 30.

malfunction timeframes for small customers, AEMO is proposing to modify the Exemption Procedure Metering Installations Malfunctions to streamline the process by which an MC can apply for an exemption, specify the components of the metering installation that can be exempted, and specify the maximum timeframe for the exemption. AEMO believes this approach will create efficiencies and provide cost savings for participants.

AEMO proposes amending the Exemption Procedure for Metering Installation Malfunctions and the Metering Installation Exemption Guideline document. As part of this consultation stage, a draft marked-up copy of the Exemption Procedure for Metering Installation Malfunctions has been provided.

Consultation notice

AEMO is now consulting on this proposal and invites written submissions from interested persons on the issues identified in this paper to NEM.Retailprocedureconsultations@aemo.com.au by 5:00 pm (Melbourne time) on 24 March 2025.

All submissions must be forwarded in electronic format (both pdf and Word). Please send any queries about this Consultation to the same email address.

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. We 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

1. Stakeholder consultation process

As required by National Electricity Rules (NER), AEMO is consulting on the Proposal in accordance with the standard rules consultation procedure in NER 8.9.2.

This Consultation Paper uses terms defined in the NER, which are intended to have the same meanings.

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

Table 1 Consultation process and timeline

Consultation steps	Dates
Consultation paper published	10 February 2025
Submissions closed on the consultation paper	24 March 2025
Draft report published	28 April 2025
Submissions due on draft report	6 June 2025
Final report published	1 July 2025

Pre-consultation engagement

AEMO discussed the proposed changes to the Exemption procedure and outline of the approach of the Asset Management Strategy document with interested parties on 29 November 2024.

Feedback from this session has been considered as part of this consultation.

2. Background

2.1. Context for this consultation

On 28 November 2024, the Australian Energy Market Commission (AEMC) published the Accelerating Smart Meter Deployment (ASMD) Final Rule to achieve universal smart meter deployment in the NEM by 2030. The Final Rule introduces a package of reforms designed to accelerate the deployment of smart meters and unlock the benefits of smart meter data.

In consultation with industry before the publication of the draft Rule in April 2024, AEMO split the consultation into three work packages. The work packages reflect the draft rule approach of considering several core reforms and enabling reforms to accelerate the deployment of smart meters and utilise the functionality of the smart meters. The core reforms relate to the acceleration of smart meters in the NEM and delivery of power quality data to DNSPs; enabling reforms include reducing barriers to installing smart meters and new approaches to minimise the costs for industry and consumers for testing and inspection of metering installations. The Final Rule has kept the approach of core reforms and enabling reforms from the Draft Rule.

Table 2 outlines the consultation approach across the three packages of work.

Table 2 Consultation Packages

Consultation	Issue Paper	Expected Final Determination
Package 1: Acceleration*	29 May 2024	2 April 2025
Package 2: Testing/Inspection and Malfunctions	10 February 2025	1 July 2025
Package 3: Power Quality Data	2 April 2025	30 September 2025

*The draft determination for Package 1 was published on 18 December 2024.

This consultation reviews the procedural impact of package 2, Testing/Inspection and Malfunctions.

2.1.1. Package 2: Testing/Inspection and Malfunctions

Testing/Inspection

In their review of the framework for Metering Services, the AEMC identified the testing and inspection requirements for Metering Coordinators (MCs) as ambiguous and allowed for different interpretations to be applied. The Final Rule introduces a new requirement for AEMO to produce an Asset Management Strategy Guideline to ensure MCs have a testing and inspection strategy in place to reliably test metering installation accuracy and identify metering installation condition faults in a reasonable period.

Under the NER, an MC must test and inspect metering installations according to a time-based schedule or an approved Asset Management Strategy. Testing and inspection requirements are outlined across several Procedures and Documents, including:

- Section 8 of the ‘Metrology Procedure Part A’ directs MC on their testing and inspection requirements and outlines acceptable alternative testing practices for meter testing.
- The document ‘Alternate Testing and Inspection Guidelines for Metering Installation in the NEM’ details alternative low-voltage CT testing options for MCs.

The Final Rule removes the requirement for the Metrology Procedure to record the asset management strategy for testing and inspection requirements — new obligations require AEMO to develop an Asset Management Strategy Guideline. Specifically, additions to the NER include changes to the following clauses and tables:

- Clause S7.6.1 describes the objective of the Guideline, the information AEMO must include in it, and what AEMO must consider when developing it.
- Clause S7.1.2(b)(6) and S7.6.1 include references to asset management strategies
- Tables S7.6.1.2 and S7.6.1.3 require testing and inspections under either an asset management strategy or in accordance with the timeframes in these clauses, unless covered by a Legacy Meter Replacement Plan – this includes exempting MCs from testing and inspecting legacy meters during the LMRP period.

AEMO proposes creating a new guideline within the ambit of the Metrology Procedures (similar to adopting the Network Device and Meter Churn procedure requirements in the NER). The document would expand the current Alternative Testing and Inspection Guideline for Metering Installations in the NEM v2.0, accommodating matters such as LV CT arrangements.

Malfunctions

Under the Final Rule, small customer metering installation malfunctions in 7.8.10 of the NER have different timeframes for rectification for individual malfunctions (15 business days) and those that have failed under a sample-based testing methodology (70 business days). If an MC cannot rectify the malfunction in the allocated timeframe, it can apply to AEMO for an exemption.

Considering the rule change to the malfunction timeframes, AEMO proposes modifying the Exemption Procedure Metering Installation Malfunctions. The proposal streamlines the process by which an MC can apply for an exemption for a small customer metering installation by identifying the components of the metering installation that can be exempted and the timeframe for the exemption. AEMO believes this approach will improve efficiencies and provide cost savings for participants.

2.2. NER requirements

AEMO is responsible for establishing and maintaining the Retail electricity market procedures specified in NER Chapter 7, except for procedures established and maintained under NER 7.17.

AEMO must establish and maintain the procedures authorised by NER Chapter 7 in accordance with the Rules 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. MSR Package Two Proposals

AEMO is proposing to:

- Create an Asset Management Strategy Guideline outlined in the ASMD rule
- Change the Metering Installation Malfunction Exemption procedure and the Metering Installation Exemption Guideline.

These proposals are explored in the following sections.

3.1. Asset Management Strategy Guidelines

3.1.1. Description and effect of proposal

The ASMD rule has amended schedule 7.6 of the NER Inspection and Testing Requirements to include new obligations on AEMO to develop, maintain, and publish an Asset Management Strategy Guidelines (Guidelines) for developing and approving asset management strategies. The Guidelines replaces Section 8 of the Metrology Procedure Part A to record the guidelines for creating an AMS.

The objective of the Guidelines is for MCs to have a testing and inspection strategy in place to reliably test metering installation accuracy, identify metering installation condition faults in a reasonable period.

The ASMD rule outlines the structure of the Guidelines, specifically:

- the information that AEMO requires MCs to include in an asset management strategy and the information that AEMO will make available during the asset management strategy approval process;
- the process for submission of a proposed asset management strategy to AEMO for approval and the relevant time frames for assessing the proposal; and
- the criteria that AEMO will consider when deciding whether to approve a proposed asset management strategy.

The ASMD rule requires AEMO to consider the following when making or amending the Guidelines:

I. whether the requirements in the Guidelines are effective and proportionate to the expected benefits resulting from achieving the Asset Management Strategy Objective; and

II. new technologies and designs of metering installations and innovations in equipment and processes used to verify metering installation accuracy and condition.

- may consider any other matters that AEMO deems relevant to the Asset Management Strategy Objective.

AEMO proposes creating a new Procedure to meet the requirements of the Rule.

3.1.2. Proposed content of the Asset Management Strategy Guidelines

Before the commencement of the Final Rule, under the NER an MC must test and inspect metering installations according to a time-based schedule or an approved Asset Management Strategy. Testing and inspection requirements are outlined across several Procedures and Documents, including:

- Section 8 of the 'Metrology Procedure Part A' directs MCs on their testing and inspection requirements and outlines acceptable alternative testing practices for meter testing.

- The document 'Alternate Testing and Inspection Guidelines for Metering Installation in the NEM' details alternative low-voltage CT testing options for MCs.
- The Final Rule removes the requirement for the Metrology Procedure to record the asset management strategy for testing and inspection requirements — new obligations require AEMO to develop an Asset Management Strategy guideline document.

AEMO proposes creating Metrology Procedure Part C: Testing and Inspection guidelines for metering installations in the NEM (the Procedure). AEMO considers that by establishing the guideline requirements within AEMO's Procedures, future amendments will be subject to the standard rule change processes, providing a transparent mechanism for all interested parties to propose and be consulted on amendments and additions. A draft of this document is provided as part of this consultation. This approach can provide flexibility to robustly consider and adopt NEM-specific testing and inspection requirements in line with the increasingly fast-paced development of new technologies. This level of flexibility and expediency is not afforded by the adoption of AS/NZ Standards.

The Procedure is intended to meet the requirements of the ASMD rule and provide the basis for MCs to submit their asset management strategies to AEMO, allowing an MC to use an alternate testing and inspection approach for all NER metering installations. Key features of the Procedure are:

Initial Life of New Metering Installation Components

The initial life of new metering installation components defines the period from the initial installation to the first date when an MC is required to add it to routine testing. AEMO proposes that the periods described will also apply to those new metering types (types 8 and 9) established under the Unlocking CER Benefits Through Flexible Trading rule[2].

Key points proposed under this section:

- Transformer-connected meters have a 5-year initial life
- Whole current meters include the concept of drift for MCs to consider
- Transformers have a 10-year initial life.

Sample testing of Meters

The procedure allows an MC to sample test meters based on the metering installation's energy throughput. Testing requirements are based on the metering installation's connection type and the energy volume limit per annum per connection type. If the metrological performance of higher-volume energy throughput connections is inaccurate, the impact on settlements will be commensurately material. Consequently, AEMO considers time-based testing remains appropriate for these installations. Conversely, metering installations at smaller energy flow connections may be tested using sample testing methodologies, which are likely to provide a cost-effective approach to assure the accuracy of installations.

Key points proposed under this section:

- Change to the sample testing approach based on AS1199.2 (in line with OIML G20:2017).
- Expansion of test points.
- Introduction of the concept of 'drift' for whole current meters.

[2] https://www.aemc.gov.au/rule-changes/unlocking-CER-benefits-through-flexible-trading

- The grouping of meters into families has been expanded beyond the provisions of AS1284.13.

Instrument Transformer Sample testing

The proposed Procedure maintains the position of an MC using an alternate method of testing for low-voltage current transformers. AEMO considers this an effective and efficient approach to ensuring the installation's accuracy.

Key points proposed under this section:

- Sample sizes to be determined by NMIs and removal of the option to base a family size on CTs.
- Alignment of sample sizes to meter sizes.

Physical Inspections

The final determination notes the lack of clarity regarding inspections in clause S7.6.2(f) of the NER.[3] AEMO proposes to define the inspection characteristics for HV, LV CT, and all current installations.

Key points proposed under this section:

- If the connection is HV, or the MC does not have an alternative inspection practice approved by AEMO, the following inspection frequencies apply:
    i. Whole Current metering installations every 10 years.
    ii. LV CT metering installations, greater or equal to 750Mwh, every 2.5 years.
    iii. LV CT metering installations, less than 750MWh, every 5 years.
    iv. HV to Table S7.6.1.3 of the NER.
- Inspection items are auditable—the MC must include them in a physical inspection at the site.

Alternate Inspections

The Final Determination outlines that asset management strategies should promote efficiency, flexibility, and innovation in testing and inspection practices.

The capability of modern smart metering installations at small customer connection points, enables MCs to remotely monitor the condition of some aspects of the metering installations under their auspice. Noting that the technology, processes and systems that support remote monitoring are likely to differ between MCs, AEMO considers that robust remote monitoring arrangements can provide an equal or superior outcome as are delivered through time-based physical inspections.

MCs are well positioned to demonstrate to AEMO how their unique combination of systems, processes, people and technologies can best achieve a robust remote monitoring arrangement, and to adapt these arrangements as their capabilities improve and as new technologies arise.

Key points proposed under this section:

[3] Page 48 of the Final Determination notes Clause S7.6.2(f) of the NER includes the words ‘may include’.

- AEMO proposes that an MC must demonstrate that their proposed alternative inspection method meets the following characteristics:
  - Equivalent or superior to the current arrangements set in clause S7.6 of the NER;
  - Verifiable and auditable, with traceable results and record keeping; and
  - Assessed and reported on regularly to assure all parties of ongoing suitability and applicability.
- Evidence is required to support AEMO approval, including:
  - Processes and Procedures for alternative inspection practices (for example, meter events, power quality and other initiated triggers).
  - The systems required to capture the data.
  - Working examples of alternate inspections.
  - Summary reports that are auditable and can be provided to AEMO on request.

The overall accuracy of metering installations

A metering installation must meet the overall error requirements for active and reactive energy as set out in clause S7.4.3 of the NER. The Procedure details a step process for MCs to calculate the overall error estimation.

Key points proposed under this section:

- HV requirements for three-element (four-wire) and two-element (three-wire) metering arrangements.
- Details the requirements for coincidental meter and CT test, and CT testing only.
- Details the obligations for whole current metering installation overall error estimation.

Additional Items for Consideration

In addition to the key items listed above, the Procedure describes AEMO's obligations under the ASMD rule, including the process for submitting the asset management strategy and the criteria AEMO considers when approving it.

Key points to consider are:

- Test strategy and test plan requirements.
- Approval process of test strategy.

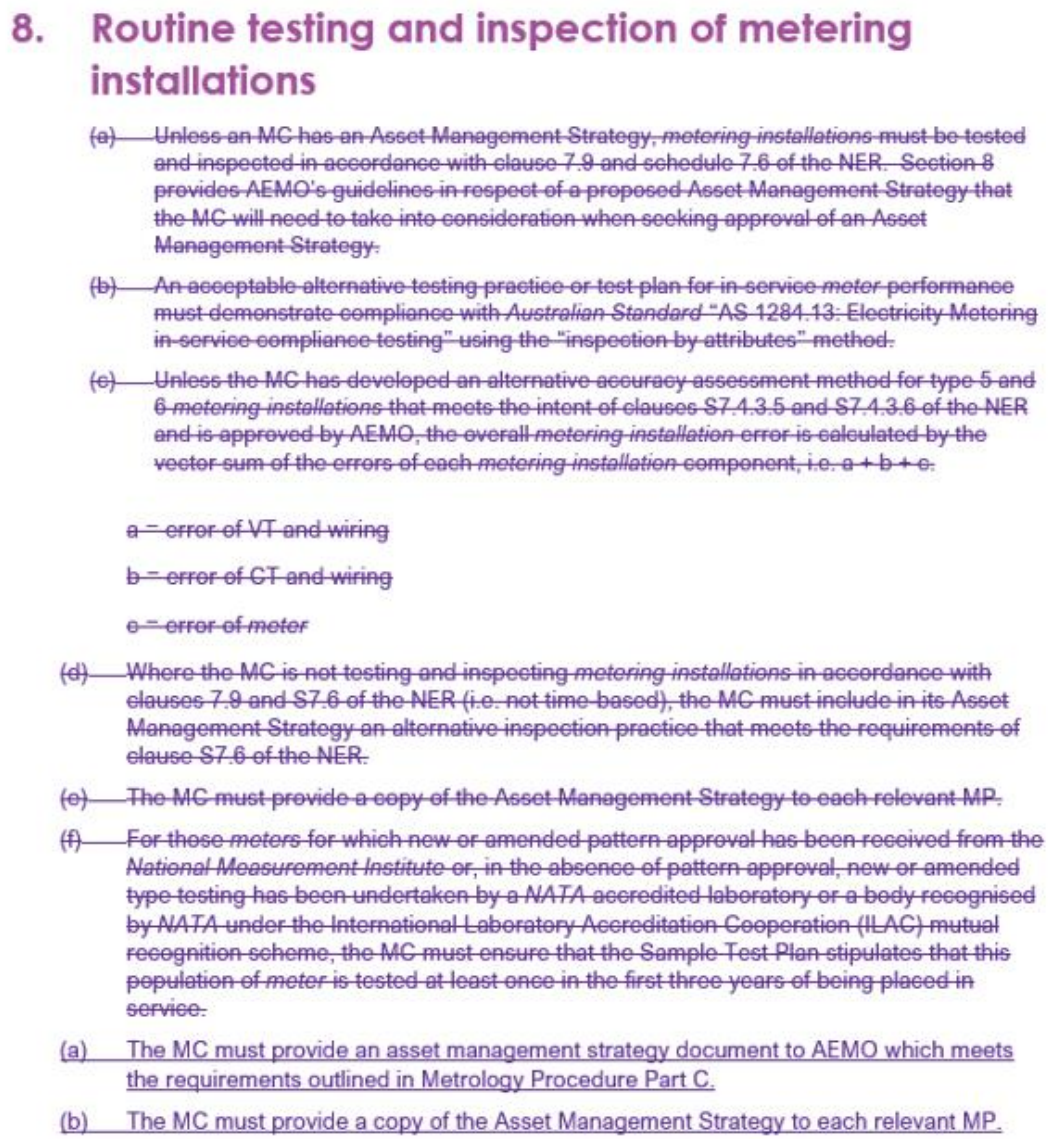
3.1.3. Proposed Amendments to Procedures and Documents

The introduction of the Procedure affects the following documents and procedures: Metrology Procedure Part A, Alternate Testing and Inspections Guidelines for Metering Installations in the NEM, the Guide to the Role of the Metering Coordinator, and Service Level Procedure MP Services. AEMO proposes the following changes to these.

Metrology Procedure Part A – Section 8 amendments

Metrology Procedure Part A: Section 8 outlines the alternate testing and inspection approach that an MC should consider when developing an asset management strategy. The Procedure supersedes these and details the information to be included in an asset management strategy. The proposed changes to Metrology Procedure Part A - Section 8 are detailed below

Figure 1 Proposed change to Metrology Procedure Part A



8. Routine testing and inspection of metering installations

~~(a) Unless an MC has an Asset Management Strategy, *metering installations* must be tested and inspected in accordance with clause 7.9 and schedule 7.6 of the NER. Section 8 provides AEMO's guidelines in respect of a proposed Asset Management Strategy that the MC will need to take into consideration when seeking approval of an Asset Management Strategy.~~

~~(b) An acceptable alternative testing practice or test plan for in-service *meter* performance must demonstrate compliance with *Australian Standard* "AS 1284.13: Electricity Metering in-service compliance testing" using the "inspection by attributes" method.~~

~~(c) Unless the MC has developed an alternative accuracy assessment method for type 5 and 6 *metering installations* that meets the intent of clauses S7.4.3.5 and S7.4.3.6 of the NER and is approved by AEMO, the overall *metering installation* error is calculated by the vector sum of the errors of each *metering installation* component, i.e. a + b + c.~~

~~a = error of VT and wiring~~

~~b = error of CT and wiring~~

~~c = error of *meter*~~

~~(d) Where the MC is not testing and inspecting *metering installations* in accordance with clauses 7.9 and S7.6 of the NER (i.e. not time-based), the MC must include in its Asset Management Strategy an alternative inspection practice that meets the requirements of clause S7.6 of the NER.~~

~~(e) The MC must provide a copy of the Asset Management Strategy to each relevant MP.~~

~~(f) For those *meters* for which new or amended pattern approval has been received from the *National Measurement Institute* or, in the absence of pattern approval, new or amended type testing has been undertaken by a *NATA* accredited laboratory or a body recognised by *NATA* under the International Laboratory Accreditation Cooperation (ILAC) mutual recognition scheme, the MC must ensure that the Sample Test Plan stipulates that this population of *meter* is tested at least once in the first three years of being placed in service.~~

(a) The MC must provide an asset management strategy document to AEMO which meets the requirements outlined in Metrology Procedure Part C.

(b) The MC must provide a copy of the Asset Management Strategy to each relevant MP.

Alternate Testing and Inspections Guidelines for Metering Installations in the NEM 2.0

The Alternative Testing Guidelines for Metering Installations in the NEM provides a guideline for any MC seeking to apply to AEMO for approval of an asset management strategy that defines an alternative testing practice under NER S7.6 (Guidelines) for the inspection, maintenance, and testing of low-voltage current transformer metering installations (LV CT) by an MC.

The introduction of the Procedure includes inspecting, maintaining, and testing low-voltage current transformer metering installations (LV CT) for MCs using an alternate testing and inspection approach. Consequently, this document will be removed from AEMO's Metering and Retail webpage and not considered a relevant artefact for MCs proposing an alternate testing and inspection strategy for LV CTs.

Guide to the Role of the Metering Coordinator

An administrative change is needed for the Guide to the Role of the Metering Coordinator document to eliminate the reference to Metrology Procedure Part A. The proposed changes are detailed below.

Figure 2 Proposed change to Guide to the Role of the Metering Coordinator

4.9. Inspections, Testing and Audits

Inspections, testing and audits of *metering installations* must be coordinated by MCs in accordancewith clause 7.9.1, and relevant results provided to AEMO under clause 7.9.1(k). Arrangements to restore the accuracy of *metering installations* are to be made in accordance with 7.9.2(a).

The standards to which *metering installation* equipment must be tested are specified in clause S7.6.1, including frequency of testing and inspections. MCs may propose an asset management strategy with an alternative testing practice under clause S7.6.1(c)(2) ~~and section 8 of Metrology Procedure: Part A.~~ that meets the requirements of Metrology Procedure Part C.

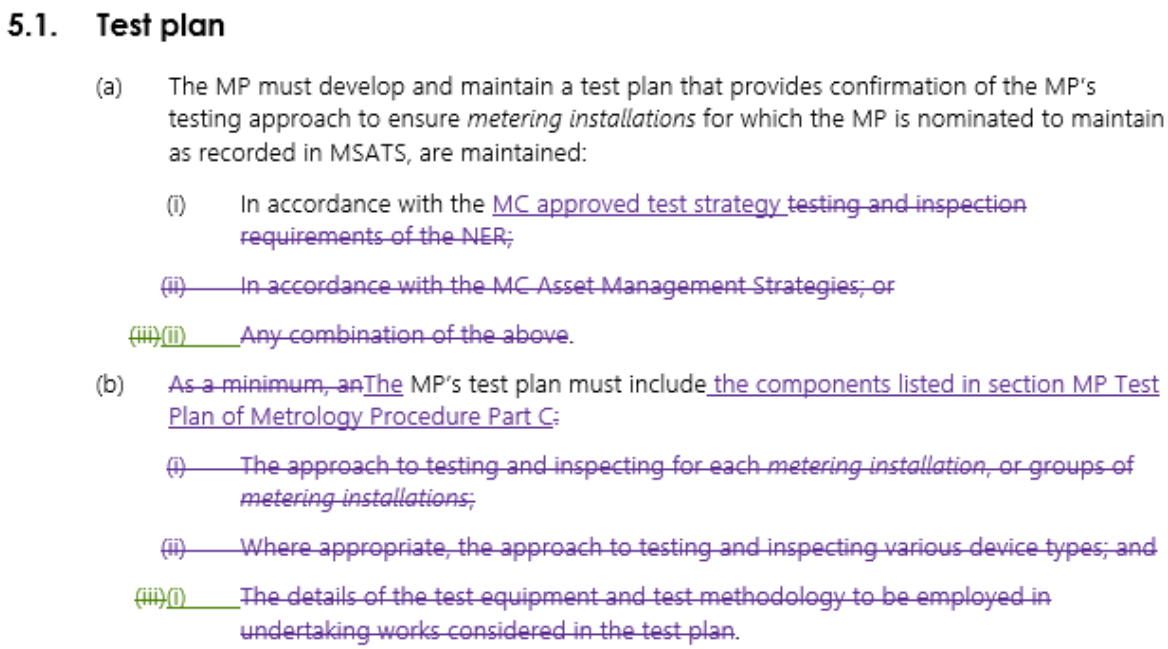
Under clause 7.9.3(e1), MCs must ensure that AEMO has unrestrained access to *metering installations* for the purpose of carrying out random audits.

When advised by AEMO under clause 7.12.2(a) that the *metering register* indicates that a *meteringinstallation* or *check metering installation* does not comply with the NER, the MC must ensure the discrepancy is corrected within 2 *business days* of AEMO's notice under clause 7.12.2(b).

Service Level Procedure: Metering Provider Services

A Metering Provider's (MP) Test Plan's is a document prepared by an MP that must align with AEMO approved MC test strategies. The Procedure details the minimum requirements an MP must submit to AEMO, to allow AEMO to correlate the test plan with the MC's approved test strategy. AEMO propose section 5.1 of the Service Level Procedure MP Services has the following changes.

Figure 3 Proposed changes to Service Level Procedure MP Services



5.1. Test plan

(a) The MP must develop and maintain a test plan that provides confirmation of the MP's testing approach to ensure *metering installations* for which the MP is nominated to maintain as recorded in MSATS, are maintained:

(i) In accordance with the MC approved test strategy ~~testing and inspection requirements of the NER;~~

~~(ii) In accordance with the MC Asset Management Strategies; or~~

~~(iii)~~(ii) ~~Any combination of the above~~.

(b) ~~As a minimum, an~~The MP's test plan must include the components listed in section MP Test Plan of Metrology Procedure Part C~~:~~

~~(i) The approach to testing and inspecting for each *metering installation*, or groups of *metering installations*;~~

~~(ii) Where appropriate, the approach to testing and inspecting various device types; and~~

~~(iii)~~(i) ~~The details of the test equipment and test methodology to be employed in undertaking works considered in the test plan~~.

Transitional arrangements

On publication of the draft determination for this consultation, AEMO will consider whether any general transitional arrangements are required for currently approved asset management strategies, and if necessary will communicate directly with individual MCs at that time, or in line with the final determination and publication of the procedures.

Questions
1. Do you agree with AEMO's proposal to accommodate the guideline requirements within the Metrology Procedures? Are there alternative approaches AEMO should consider?
2. What amendments (if any) should AEMO consider within the body of the proposed Metrology Procedure (Part C) and the other materials presented in this section?

3.2. Metering Installation Malfunctions

MCs can request an exemption from AEMO for malfunctions in metering installations under the Metering Installation Malfunction Exemption procedure. This procedure specifies the information that MCs must provide to qualify for an exemption and outlines the assessment process AEMO uses to approve these exemptions.

Since implementing the Power of Choice rule change outcomes, distribution network service providers (DNSPs) have experienced substantial failures with their Type 5 and Type 6 meters. As of August 2021, approximately 349,000 malfunctioning meters had been granted an exemption. However, replacing these malfunctioning meters has not occurred within the expected timeframes.

The ASMD rule removes the requirement for DNSPs to test their existing Type 5 and Type 6 meters during the accelerated deployment of smart meters period, which reduces the potential for generating

new failures. Family failures, the main driver of exemption applications to date, will not feature at all for Type 5 or 6 metering installations until after the end of the replacement plan period, at the earliest. Additionally, all existing exemptions must be included in DNSPs' LMRPs, thereby ensuring that the rectification of existing malfunctions will be scheduled.

The Metering Installation Malfunction Exemption Procedure and the Exemption process will continue to apply to Type 1, Type 2, Type 3, and Type 4 metering installations during the accelerated deployment of smart meters period.

The ASMD rule also removes the requirement for a Metering Provider to submit a rectification plan to AEMO. Instead, this responsibility is now assigned to the MC.

The ASMD rule introduces two separately defined categories for small customer meter malfunctions:

- Individual failures with a 15-business day replacement timeframe
- Family failures (statistical testing) with a 70-business day replacement timeframe

The newly defined category for small customer metering installation malfunctions requires a review of AEMO's Metering Installation Malfunction Exemption Procedure and the Exemption process in MSATS. In particular, the change allows AEMO to provide specific guidance to MCs about which types of events will be acceptable for an MC to apply for an exemption and the proposed timelines for those exemptions. The following section details the proposed changes to the Procedure and exemption process.

3.2.1. Metering installation malfunction exemption procedure

AEMO proposes changing the Metering Installation Malfunction Exemption procedure to include separately defined categories as part of the ASMD rule and clearly outline when an MC can seek an exemption and the timeframes that can be applied for an exemption.

Use of exemption process

The current Metering Installation Malfunction Exemption procedure does not guide MCs on relevant reasons for requesting a metering installation malfunction exemption from AEMO. AEMO proposes to allow MCs to apply for exemptions for the following reasons:

- Procurement delays for instrument transformers
- Authorised access to specialised equipment
- Family failures

Procurement delays for instrument transformers

For malfunctions caused by inaccurate instrument transformers, MCs can apply for an exemption beyond the timeframes set in the NER, where the procurement and delivery of instrument transformers are beyond the exemption window.

Authorised access to specialised equipment

Sites may require authorised access, such as induction training, requiring a period beyond the malfunction timeframe for an MC to rectify the installation. Additionally, some sites may require specialised equipment or authorised personnel by a third party to rectify the malfunction.

Individual and Family Failures

The ASMD rule allows for different timeframes for exemptions for metering installation malfunctions at small customer premises. AEMO proposes allowing an MC to apply for exemptions for all current metering installations of 15 business days for individual malfunctions and 70 business days for family failures.

Out of Scope

Unsafe electrical installations and unforeseen extraordinary events, such as weather events, and issues preventing access to the metering installation (other than considered above) will not be considered as reasons for an exemption application. If a metering installation malfunction is not rectified within the timeframes specified in the NER, for example, due to an action or inaction by a third party such as the customer or the DNSP, the metering installation will become NER non-compliant.

Matters relating to the customer's electrical installation, premises, actions or inactions by the customer, or any other information about a customer must not be shared with AEMO or otherwise provided to AEMO or AEMO systems.

Should an MC determine to proactively replace metering installations that have not been found to have malfunctioned, individually or as part of a family, then there is no metering installation malfunction identified, and the exemption arrangements do not apply.

Exemption Periods

AEMO considers that the length of any exemption approved by AEMO must be cognisant of the extensive consideration given by the AEMC in determining the rectification timeframes for metering installation malfunctions in the NER. In granting an exemption, AEMO considers that the rectification timeframe should not be disproportionate, and that as in normal circumstances MC processes must be designed to rectify malfunctions within the timeframes provided in the NER, benchmark timings in the NER can be replicated for malfunction amelioration. Accordingly, AEMO proposes that:

- For metering installations with family failures, the MC may apply for an exemption period of no longer than 70 business days.
- For whole current metering installations with individually identified malfunctions, the MC can apply for an exemption period of no longer than 15 business days.
- For metering installations with instrument transformers, the MC must specify the desired exemption expiration date in their application, which should be the date the malfunction is planned to be rectified.

Extensions to Exemptions

Extension to exemptions will only be allowed where an instrument transformer(s) has malfunctioned and requires replacement, due to the design variances and inherent complexity of these devices and their installation arrangements.

For all other types of metering installation malfunction, the amendments to the NER make clear the expectations for the management of malfunctions, and in particular the acceptable timeframe by which they must be rectified. AEMO considers that in applying for an exemption, the onus is on the MC to specify the date by which they will rectify the malfunction and to perform rectification by that date. Accordingly, no extension to an exemption is warranted, except for metering installations with instrument transformers, which are inherently complex.

MSATS Exemption Process

The proposed changes to the malfunction procedure streamline the exemption process, allowing an MC to nominate via MSATS the nature of the malfunction and the type of exemption sought. AEMO is proposing the following approach.

Exemption Type

Four exemption types would be created:

- Whole current connected NMI
- LV CT connected NMI
- HV connected NMI
- Family failure

Exemption Nature

Under each exemption type, new 'exemption nature' valid to that exemption type would be created:

- Faulty Meter
- Faulty comms module
- Faulty CT
- Faulty VT
- Blown fuse
- CT cabling or test block
- VT CT cabling or test block
- Marshalling box
- Whole current meter
- LV CT meter
- LV current transformer

Allowable combinations are:

- Malfunction > Whole current connected NMI > Faulty meter
- Malfunction > Whole current connected NMI> Faulty comms module
- Malfunction > LV CT connected NMI > faulty meter
- Malfunction > LV CT connected NMI > faulty comms module
- Malfunction > LV CT connected NMI > faulty CT

- Malfunction > LV CT connected NMI > CT cabling or test block
- Malfunction > HV connected NMI > Faulty meter
- Malfunction > HV connected NMI > Faulty metering unit
- Malfunction > HV connected NMI > Faulty comms module
- Malfunction > HV connected NMI > Faulty CT
- Malfunction > HV connected NMI > Faulty VT
- Malfunction > HV connected NMI > Blown fuse
- Malfunction > HV connected NMI > VT CT cabling or test block
- Malfunction > HV connected NMI > Marshalling box
- Malfunction > Family failure > Whole current meter
- Malfunction > Family failure > LV CT meter
- Malfunction > Family Failure > LV current transformer

Under this approach, the MC can choose the Exemption Type and Nature of Exemption. For meter failures, the MC is required to rectify the malfunctions within the timeframes outlined in the Procedure. Malfunctions at instrument transformers connected sites will be assessed on a case-by-case basis.

AEMO has provided a marked-up version of the Exemption Procedure Metering Installation Malfunction document for this consultation.

Transitional arrangements

Communications regarding the ongoing treatment of AEMO approved exemptions leading up to and post 31 December 2025, particularly for type 5 and 6 metering installations that are the result of a family failure, will be provided to relevant parties by AEMO operational teams, and are outside the scope of this consultation.

Questions
1. Do you have comments or suggestions regarding the approach taken by AEMO to align the procedure with the changes in the NER?
2. Considering the timeframes provided in the NER for small customer metering installation malfunction rectification, do you have comments as to whether the proposed maximum timeframes for exemptions (in effect 100% increase to the timeframes considered reasonable by the AEMC in the NER) are reasonable, too long, or too limiting?
3. Do you have comments or suggestions regarding the proposed marked-up change to the Exemption Procedure Metering Installation Malfunction document?
4. Are there expected to be material impacts on participant systems because of AEMO's proposed amendments?