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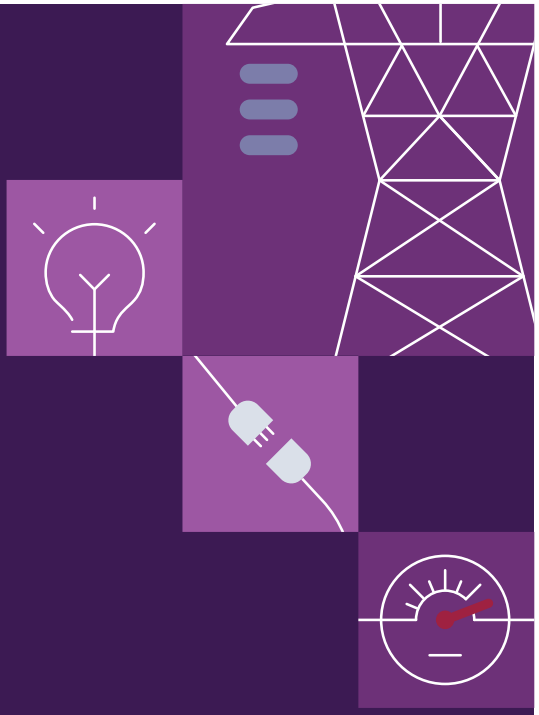

2025 Flexible Trading Arrangements

Consultation paper - Standard consultation for the National Electricity Market

Published: 11 April 2025

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Australian Energy Market Operator Ltd ABN 94 072 010 327

Explanatory statement and consultation notice

This issues paper commences the first stage of the standard rules consultation procedure conducted by AEMO on the proposed changes to the Retail Electricity Market Procedures (**Procedures**) to implement the National Electricity Amendment (Unlocking CER benefits through flexible trading) Rule 2024 (**FTA Rule**), what AEMO calls Flexible Trading Arrangements (**FTA**). This consultation is being conducted under clause 7.16.7 of the National Electricity Rules (NER), in accordance with the consultation requirements in NER 8.9.

The FTA Rule:

- Enables the creation of a secondary settlement point at a customer's premises to separately meter CER assets so that:
    a. Large customers can access flexible trading with multiple energy service providers, and
    b. Small customers are provided with opportunities to optimise CER flexibility with the same FRMP.
- Provides opportunities to optimise CER flexibility for small customers to separately measure CER assets with the same FRMP.
- Allows measuring energy flows from street furniture connections (e.g. streetlights, EV chargers) from previously unmetered supply points.
- Introduces new metering types to measure CER assets and street furniture connections, labelled type 8 and type 9 respectively.

This issues paper outlines the changes which AEMO is proposing and seeks stakeholder views to better understand the impacts of these changes for industry.

There are four main topics for this consultation.

- **Introduction of new metering installation type codes,** which includes three new codes for the purpose of metering secondary settlements points and previously un-metered supplies such as street furniture and public lighting. The new codes and associated service levels are described in Metrology Procedure Part A.
- **Proposed new roles in MSATS**, to allow two new roles to be created:
    - A new NMI Service Provider role that is responsible for the establishment and management of secondary settlement point NMIs
    - A Premises Network Service Provider role that allows a DNSP to access secondary settlement point metering data and standing data.
- **Proposed new change requests in MSATS** to facilitate the installation and management of secondary settlement points in the market and type 9 metering arrangements.
- **Other changes** including terminology and guidelines for metering provider and metering coordinators.

The FTA Rule commences over two dates.

- 31 May 2026 – the commencement of type 9 metering installations.
- 1 November 2026 – the commencement of the remainder of the FTA Rule.

To implement the FTA Rule, AEMO will need to update the Procedures. To enable industry input at an early stage, updates to Procedures have been supplied at the Issues Paper stage for participant consideration.

Consultation notice

AEMO is now consulting on this proposal and invites written submissions from interested parties on the issues identified in this paper to nem.retailprocedureconsultations@aemo.com.au by 5:00pm (Melbourne time) on 28 May 2025.

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.

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1. Stakeholder consultation process

As required by the National Electricity Rules (**NER**) clause 8.9.2 AEMO is consulting on the Procedures in accordance with the standard rules consultation procedure in NER 8.9.2. AEMO's indicative process and timeline for this consultation are outlined below. Future dates may be adjusted, and additional steps may be included, if necessary, as the consultation progresses.

Consultation steps	Dates
Issues paper published	11 April 2025
Industry forum to review Issues Paper	28 April to 16 May 2025 (tbc)
Submissions due on consultation paper	28 May 2025
Draft report published	Expected 1 July 2025
Industry forum to review Draft Report	7 July to 18 July 2025 (tbc)
Submissions due on draft report	Expected 13 August 2025
Final report published	30 September 2025*

*AEMO's procedures must be finalised by 30 September 2025.

1.1.1. Pre-consultation

AEMO has conducted the following pre-consultation meetings and published documentation with industry.

High Level Implementation Assessments (HLIA)

AEMO provided preliminary information about the implementation assessment of the Unlocking CER benefits through flexible trading rule change via a draft HLIA and final HLIA.

- Draft HLIA - April 2024 paper and webinar session
- Final HLIA - September 2024 paper and webinar session

Focus Group Sessions

To facilitate ongoing dialogue from the HLIA, AEMO conducted a series of workshops split by participant type to examine specific elements of the FTA rule. Feedback from these sessions has been an input into the creation of this Issues Paper.

23 October 2024 DNSP discussion

- regarding accessing metering data and standing data from secondary settlement point(s)

28 October 2024 Street Lighting supplier discussion

- regarding participation of street lighting into type 9 metering arrangements

7 November 2024 Retailer discussion

- regarding malfunctions, energy allocation and NMI discovery

20 November and 27 November Metering Parties discussion

- Metering Coordinator/Metering Data Provider/Metering Provider discussion regarding outages and disconnections, metering installation type codes

18 February 2025 Industry session

- Industry session discussing potential business to market and business to business impacts based on several use-cases.

7 March 2025 Street Lighting supplier discussion

- providing further detail about existing smart street lighting infrastructure transitioning into a type 9 metering arrangements and the requirements to participate for new connections from 31 May 2026.

2. Background

2.1. NER requirements

AEMO is responsible for the establishment and maintenance of metering procedures specified in Chapter 7 except for procedures established and maintained under NER 7.17. The procedures authorised under NER Chapter 7 must be established and amended by AEMO in accordance with the Rules consultation procedures.

2.2. Context for this consultation

On August 15, 2024, the Australian Energy Market Commission (AEMC) published the FTA Rule and determination regarding the "Unlocking Consumer Energy Resources (CER) benefits through flexible trading" project. This FTA Rule aims to enhance the flexibility of how consumer energy resources, such as solar panels and batteries, are used and traded within the National Electricity Market (NEM). The primary objective is to enable consumers to manage their energy usage more effectively and to participate actively in the market.

The FTA Rule is about the integration of CER in the NEM. It makes a series of changes designed to allow consumers or their service providers to manage CER in ways that provide benefits to the customer and to the energy system.

The FTA Rule introduces changes to enable:

- Flexible trading with multiple energy service providers at large customer premises.
- Opportunities to optimise CER flexibility for small customers.
- Measuring energy flows from street furniture connections (e.g. streetlights, EV chargers).

2.2.1. Flexible trading with multiple energy service providers at large customer premises

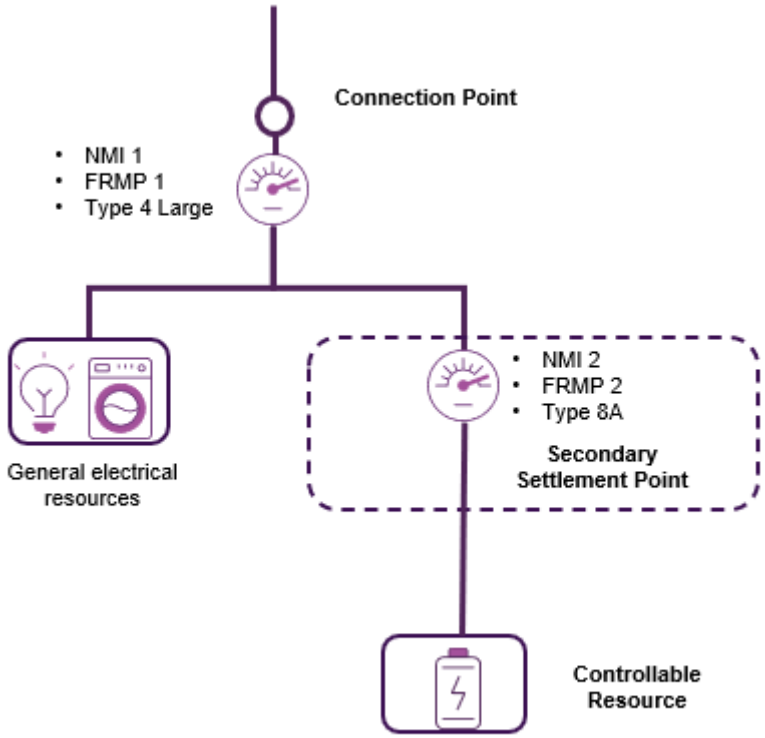
The changes enable large customers to establish secondary settlement points (SSPs) and engage multiple energy service providers to manage flexible resources at these points. The key features of this framework are:

- It is voluntary.
- Large customers can establish SSPs and engage multiple FRMPs at their premises.[1]
- The relationship between FRMPs is governed by existing regulatory arrangements and contractual arrangements.
- A new accredited role, NMI Service Provider, is responsible for establishing and maintaining SSP NMIs and would have visibility of standing data from SSP NMIs.
- Existing subtractive settlement arrangements are used to minimise implementation costs.
- Distribution network charges are allocated to the FRMP at the premises connection point (PCP).
- New meter type 8A applies for any SSP at a large customer premises.

[1] A SSP cannot be established for a *scheduled resource* or in a *regulated SAPS*

- Any MC wishing to provide services at a type 8A metering installation must include this metering type in their Meter Asset Management Strategy and have that strategy approved prior to the commissioning of any type 8A metering installation.
- Installation of type 8A metering installation devices can be carried out by any person qualified under applicable law, not necessarily an MP, however the commissioning of a type 8A metering installation must only be performed by an appropriately accredited MP.
- A Metering Provider must maintain the type 8A metering installation, consistent with the appointing MC's Meter Asset Management Strategy, that must have received prior approval for the inclusion of type 8A metering installations from AEMO.

Figure 1 Example Large Customer Premises



2.2.2. Opportunities to optimise CER flexibility for small customers

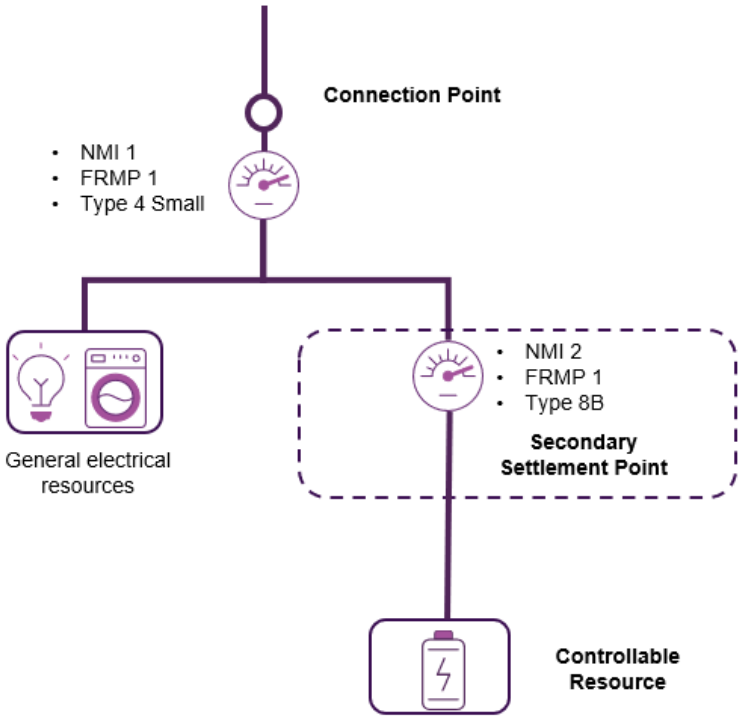
The changes enable small customers to identify and manage flexible CER separate from inflexible or passive energy use and allow flexible CER to be better recognised in the energy market. The main features of this framework are:

- Small customers can establish a SSP without a separate connection to the distribution network for their flexible CER which would be assigned a NMI.[2]

[2] A SSP cannot be established for a *scheduled resource* or in a *regulated SAPS.*

- Flexible CER energy consumption would be separately metered through either a smart meter (type 4 metering installation or a new type 8B metering installation) integrated into the customer's CER or wired externally to the device – refer to figure 2.
- The new arrangements are voluntary and based on consumer choice.
- Small customers continue to only have one FRMP at their premises.
- Subtractive settlement arrangements would apply between the PCP and SSP(s) at small customer premises.
- Distribution network charges are allocated to the FRMP at the PCP.
- A new accredited role, NMI Service Provider is responsible for establishing and maintaining the NMI for the consumer's retailer.
- The FRMP can choose a different contestable MC at the SSP compared to the PCP.
- Any MC wishing to provide services at a type 8B metering installation must include this metering type in their Meter Asset Management Strategy, and have that strategy approved prior to the commissioning of any type 8B metering installation.
- Installation of type 8B metering installation devices can be carried out by any person qualified under applicable law, not necessarily an MP, however the commissioning of a type 8A metering installation must only be performed by an appropriately accredited MP.
- An MP must maintain the type 8B metering installation, consistent with the appointing MC's Meter Asset Management Strategy, that must have received prior approval for the inclusion of type 8B metering installations from AEMO.
- DNSPs can access metering data from SSP NMIs if they choose to.

Figure 2 Example Small Customers



2.2.3. Measuring energy flows for street furniture connections (e.g. streetlights, kerbside EV chargers, etc.)

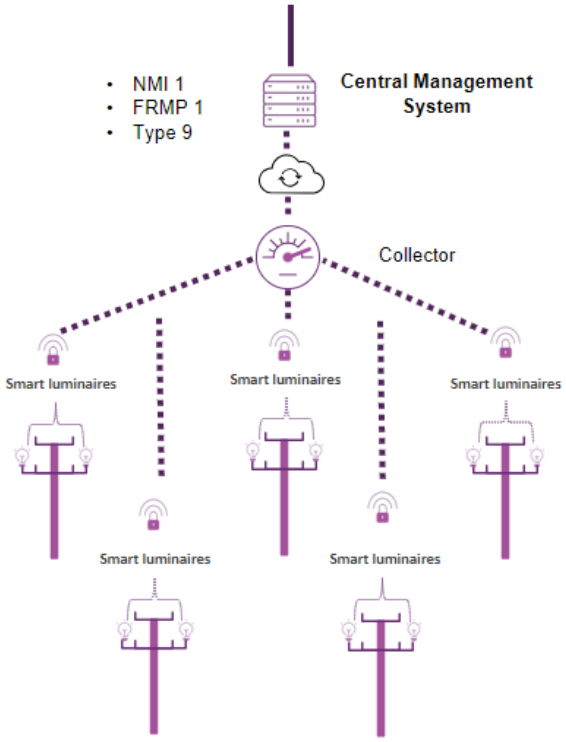
The changes introduce the type 9 metering installation, designed to allow for street furniture connections such as smart streetlighting systems, kerbside EV charging points, and some existing unmetered connections where traditional metering cannot be practically accommodated.

The main features of this framework are:

- Arrangements are voluntary and cover a range of use cases, including kerbside EV chargers and streetlights.
- The minimum specifications will be determined by AEMO in procedures, guided by principles in the NER; the specification is generally expected to be lower than for a type 4 *small customer metering installation*.
- They require National Measurement Institute Pattern Approval.[3]
- Street furniture connection arrangements can include the aggregation of multiple metering points (i.e., multiple streetlights) under one NMI using a central management system (CMS) – a new definition in the NER which is 'a device or system that collects electronic signals from *measurement elements* and packages it into *trading intervals*'.

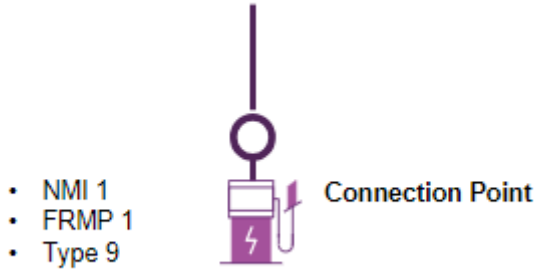
[3] The CMS does not have to be pattern approved.

Figure 3 Example Street Lighting



- MPs and MDPs require new accreditation requirements for each new metering installation type.
- The MC role is contestable – i.e. no party is mandated to provide MC services, with appointment responsibility residing with the FRMP, as is standard for type 1-4 metering installations.
- The MC for type 9 metering installations can propose alternative testing and inspection arrangements to AEMO for approval through an asset management strategy.

Figure 4 Example Kerbside Charging



2.2.4. Changes to Procedures

The FTA Rule has two commencement dates: 31 May 2026, and 1 November 2026. This staggered implementation allows for the introduction of type 9 metering, which includes street furniture and public lighting, into the NEM before the flexible trading arrangements take effect.

AEMO's initial assessment is that the start date of 31 May 2026, is less impactful to Procedures than the 1 November 2026. In particular, the 31 May 2026 start date broadly impacts enumeration changes to accommodate type 9 installations as well as procedural changes for participants to consider.

31 May 2026

Arrangement for type 9 metering being on 31 May 2026. Material procedural impacts:

- Changes to MSATS Principles
- Changes to Standing Data for MSATS
- Change to Metrology Procedure Part A
- Changes to Metrology Procedure Part B

1 November 2026

Arrangement for type 8 metering being on 1 November 2026. Material procedural impacts:

- Changes to MSATS Principles
- Changes to Standing Data for MSATS
- Change to Metrology Procedure Part A
- Changes to Metrology Procedure Part B
- New NMI Service Level Procedure
- MDFF NEM12 and NEM13
- Guide to the Role of the Metering Coordinator
- Service Level Procedure Metering Provider

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. FTA change proposals

AEMO is proposing to make changes to the Procedures to implement the FTA Rule. These proposals are explored in the following sections.

3.1. Metering Installation Type Codes – Type 8A, 8B and 9

3.1.1. Description and effect of proposal

Clause S7.5.2 of the NER requires AEMO to establish, maintain and publish procedures for Type 8A, 8B and 9 metering installations, and that these procedures are guided by the following principles:

- comply with any applicable requirements of the National Measurement Act;
- provide for the recording of sufficient historical data consistent with current requirements of the Rules;
- provide for the remote retrieval of metering data; and
- provide for interval energy data to be prepared and recorded in intervals which correspond to a trading interval.

The minimum services specification of a type 8A, 8B and 9 metering meets the minimum specification if it:

- provides the services specified in AEMO's procedures;
- is connected to a telecommunications network which enables remote access to the metering installation; and
- achieves the maximum allowable overall error (±%) at rates not exceeding the rates set out in table S7.4.3.5 or S7.4.3.7 of the NER.

To comply with the requirements of clause S7.5.2 of the NER, AEMO proposes the following amendments to Metrology Procedure Part A:

- A minimum services procedure for type 8A, type 8B, and type 9 metering installations.
- The service levels for type 8A, type 8B, and type 9 metering installations.
- The technical requirements for type 8A, type 8B, and type 9 metering installations.
- The application processes for type 8A, type 8B, and type 9 metering installations.

Additional changes to Metrology Procedure Part A include:

- A modification to the grandfathering clause to include type 9 metering installations, aimed at accommodating existing public lighting installations already installed in the National Electricity Market (NEM).
- Guidance on the requirements for transitioning type 7 metering installations to type 9.

The following section outlines the details of each proposed change.

3.1.2. Proposed new minimum services for type 8A, type 8B and 9 metering

Table 1 outlines the minimum services required for type 8A, 8B, and type 9 metering installations. Using the Minimum Services Specification (Schedule 7.5 of the National Electricity Rules - NER) as a baseline, the table specifies the minimum services and service levels for types 8A, 8B, and 9. This table has removed remote connection or disconnection services. Additionally, the metering installation inquiry

and advanced meter reconfiguration services are excluded for type 9 metering installations that use a Central Management System (CMS).

Table 1 Type 8A, 8B and 9 Minimum Services

Service	Description	Access Party
Remote On-Demand Meter Read	The remote retrieval of trading interval metering data including quality flags for a specified point or points in time and the provision of such data to the requesting party.	Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation Local Network Service Provider (in the role of the Premises Network Service Provider) for a SSP located within premises connected to its network
Remote Scheduled Meter Read	The remote retrieval of trading interval metering data including quality flags on a regular basis and the provision of such data to the requesting party.	Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation Local Network Service Provider (in the role of the Premises Network Service Provider) for a SSP located within premises connected to its network
Metering Installation Inquiry*	The remote retrieval of information from, and related to, a specified metering installation and the provision of the following information to the requesting party: • Instantaneous reading of voltage, with a date and time stamp for that reading • Instantaneous reading of current, with a date and time stamp for that reading • Instantaneous reading of watts, with a date and time stamp for that reading • Events that have been recorded in meter log	Registered Participants with a financial interest in the metering installation or the energy measured by that metering installation Local Network Service Provider (in the role of the Premises Network Service Provider) for a SSP located within premises connected to its network
Advanced Meter Reconfiguration*	Remote activation or de-activation of data stream or data streams	N/A

* Metering Installation Inquiry and Advanced Meter Reconfiguration service are excluded for type 9 metering installations that use a CMS.

Remote On-Demand Meter Reads

As with existing services for small customer metering, registered participants can request on-demand meter reads of SSP metering or type 9 metering installations. This would include relevant quality flags and quality of supply units of measure. Registered participants allowed to request this data include:

- NMI Service Provider (for type 8A or type 8B) - access to NMI standing data only
- Metering Coordinator
- Metering Data Provider
- Metering Provider
- Retailer
- Premises Network Service Provider (the role created for the Local Network Service Provider to access SSP metering data and standing data).

Remote Scheduled Meter Read

Type 8A, Type 8B and Type 9 metering installations would be required to provide remote acquisition of metering data as described in the Service Level Procedure MDP services. Registered participants would include:

- NMI Service Provider (for type 8A or type 8B) - access to NMI standing data only
- Metering Coordinator
- Metering Data Provider
- Metering Provider
- Retailer
- Premises Network Service Provider (the role created for the Local Network Service Provider to access SSP metering data and standing data).

Remote acquisition and data delivery timeframes would meet the requirements of type 4 metering in Service Level Procedure MDP services.

Metering installation Inquiry

AEMO proposes type 8A, type 8B, and type 9 metering installations to record current, voltage, and watts, and these values can be retrieved from the metering installation as instantaneous values. AEMO's proposal to include these units of measure to be provided as instantaneous is consistent with the minimum services specification. AEMO's proposal may give the participants better granularity of CER resources, which can negatively impact customers or network performance.

Installations that are type 9 using a CMS would not be required to provide this service. AEMO understands public lighting technologies and the nodes that record data may not record the additional units of measure outlined. In addition, the value of recording watts, volts, and current as separate units of measure for these installation types is not as critical to customers or network performance as flexible loads are as part of SSPs.

Advanced Meter Reconfiguration

AEMO considers remote activation and deactivation of data streams are required for type 8A, type 8B and type 9 metering installations. This service would not be required for type 9 CMS installations.

Remote disconnection and connection for type 8A, type 8B and type 9

The National Electricity Retail Rules (NERR) include a provision ensuring that if the primary retailer attempts to disconnect a premises, existing arrangements for small customers regarding disconnections and customer protections will still apply. This provision requires that the retailer may not de-energise a SSP separately from the premises connection point.

AEMO has proposed not including remote disconnection and reconnection as services for type 8A, type 8B, and 9 metering installations. Type 8A and type 8B metering installations function as SSPs within the customer's electrical installations, while type 9 metering installations can be installed in public infrastructure, such as street lighting assets like bus shelters. Typically, type 9 metering installations are

equipped with relays that manage the load and are controlled by the customer. For type 8 metering installations, the connection point meter will have remote service capabilities.

AEMO proposes that remote disconnection and reconnection should not be required for metering installations within a customer's electrical installation or on public assets. AEMO is seeking industry feedback on whether these remote services should be included in the minimum service requirements.

3.1.3. Proposed new minimum service levels for type 8A, type 8B and 9 metering

Using the minimum service levels for small customer metering installations as a base, AEMO has relaxed the standards for small customer metering installations and extended this to the trading interval.

Except for periods of a loss of communication, metering installations must be capable of meeting the minimum services specification at all times and completed within 5 minutes of the command being received by the metering installation.

3.1.4. Proposed technical requirement for type 8A, type 8B and 9 metering installations

AEMO proposes the technical requirements for type 8A, type 8B and type 9 metering installations meet the specification of small customer metering installations and be capable to measure four quadrants. Specifically:

Measurement

- It must be capable of measuring active energy (Wh) and leading and lagging reactive energy (varh) for both production or consumption energy flows.
- For type 9 CMS metering installations, these are only required to record active energy (Wh) consumption energy flows. AEMO understands public lighting systems, and the nodes recording devices, are limited in their technical recording capability.

Interval Length

- It must record in 5-minute trading intervals.[4]
- For CMS applications, the node or connected device, must record in 5-minute trading intervals.

Data Storage

- It must record at least 35 days of data.
- For CMS applications, the NMI as a CMS can record 35 days of data.

Data Transfer (telecommunications)

- It must meet the requirements of the NER.

Accuracy

- Type 8A and Type 9 must meet the requirements of Table S7.4.3.5 of the NER.
- Type 8B must meet the requirements of Table S7.4.3.7 of the NER.

[4] If AEMO receives a reading from an SSP that is not in 5 minute intervals, AEMO will apply a zero reading

Compliance

- Meet the requirements set out in the NER including pattern approval by the National Measurement Institute National Measurement Act.

Data stream obligations for Secondary Settlement Points

- To enable the correct allocation of energy for premises with SSPs, both the Premises Connection Point meter and the SSP meter are required to be configured for E and B data-streams.

3.1.5. Proposed Metering Installation type applications

AEMO proposes to assign metering installation types to SSPs and specific load and connection types for type 8 and type 9 metering installations. These metering installations would be included under the Minimum Services for type 8A, 8B and 9 metering installation in Metrology Procedure Part A.

Type 8A

- A SSP of a large customer or a small customer

Type 8B

- A SSP of a small customer

Type 9

All types of street furniture with an annual energy volume of less than 750 MWh per annum, including any metering installation that meets S7.5.2 of the NER and is supplied for loads:

- that would otherwise be part of the NEM load table: Public lighting, NSW and SA traffic signals;
- that is currently part of a DNSP's inventory table/NONCUML;
- kerbside EV charging units; and
- variations of the above to be approved by AEMO to be metered by a type 9 – for example, a network battery located on a pole.

Rationale - Type 8A

The AEMC Final Determination allows type 8A meters:

- to be installed at primary connection points and SSPs of a large customer
- be installed by, or on behalf of the customer
- have in-built measurement or be externally installed

In pre-consultation with industry and as part of AEMO's High-Level Implementation Assessment (HLIA), AEMO sought to address the challenge of articulating the role and use of type 8A meters as primary connection points. The HLIA included the proposal of COMMS48A, which suggested they would be only eligible on premises CP with LARGE NMI Class Code (where the type 4 metering installation also meets the 8A services specification). Industry feedback to this proposal was broadly against this concept.

AEMO assesses that large customer metering installations, installed at the connection point and externally metered, should meet the requirements of COMMS4 metering and be installed by metering providers as a COMMS4 installation. A Large Customer at a connection point, which is not part of an aggregated load, will meet the NMI Classification Code of Large in the MSATS Procedure. AEMO considers these connection points to be as appropriate as COMMS4. AEMO's proposed minimum

service specification would allow those connections that meet COMMS4, COMMS4C, or COMMS4D to be metered externally.

At the time of publication, AEMO was unaware of any built-in measurement device that meets pattern approval requirements. AEMO notes that the final determination refers to OIML G 22:2022 Electric Vehicle Supply Equipment. However, this has yet to be pattern approved by the National Measurement Institute, which has given OIML G22:2022 a general certification. AEMO proposes that:

- Type 8A refers to SSPs for large customers
- Large customers who are not part of an aggregated load and who wish to meter flexible loads at the premises connection point are required to install COMMS4 metering, which meets the minimum specification outlined above.

AEMO will reconsider this position when in-built measurement devices, for large connection points, meet the requirements of the NER, including pattern-approval by the National Measurement Institute.

Rationale - Type 9 metering installations

AEMO notes a disparity between the FTA Rule and Final Determination for type 9 metering installations, allowing a type 9 metering installation to have a SSP and defining a type 9 metering installation that can only be used as a primary connection point. Specifically:

NER 7.2.6(b)(3): Establishing Secondary Settlement Points within Premises:

the metering installation for the connection point for the premises is a type 1, 2, 3, 4, 8A or 9 metering installation;

Final Determination, page 47

...and type 9 meters will only be able to be used at primary connection points for street lighting and street furniture.

AEMO proposes type 9 metering installations refer to primary connection points for the specific use cases listed. This provides the industry with certainty about the applications for a type 9 metering type and extends the use cases provided by the Final Determination. Under this approach, use cases that are not listed may be considered by AEMO subject to approval.

AEMO is seeking industry feedback on the use cases for connections which would be type 9 SSPs.

3.1.6. Proposed Metering Installation Type Codes

To support the metering types 8A, 8B and 9, new values will be required to be included within MSATS.

Meter Installation Type	Metering Installation Type Code	Description
Type 8A	COMMS8A	Secondary Settlement Point meter for a large customer that meets the services specification detailed in the Metrology Procedure Part A
Type 8B	COMMS8B	Secondary Settlement Point meter for a small customer that meets the services specification detailed in the Metrology Procedure Part A
Type 9	COMMS9	Only eligible on a connection point that meets the services specification detailed in the Metrology Procedure Part A

3.1.7. Alternative approach for Type 8 metering installations Metering Installation Type Codes

To streamline metering arrangements within MSATS, AEMO is also seeking participant feedback to remove the COMMS8A and COMMS8B metering arrangements in MSATS to COMMS8 only. The advantages of this approach are:

- Does not require any MSATS updates when moving from Small to Large
- Better accommodates the aggregation of small customers to large customers
- It simplifies system processes

The proposal would not allow the metering installation to be less than technically specified; compliance of the installation would occur as part of the device approval process and be subject to MC audit.

Questions

1. **Do you agree with the proposed minimum services for type 8A, type 8B and type 9 metering installations? If not, please specify your reasoning and any alternative options relevant**
2. **Do you think remote disconnection and reconnection is required for type 8A, type 8B and type 9 metering installations? If so, what benefits are provided by this service?**
3. **Do you agree with the minimum service levels for type 8A, type 8B and type 9 metering installations?**
4. **Are the technical requirements sufficient to meet the requirements of type 8A, type 8B and type 9 metering installations? If not, why?**
5. **Do participants agree with the concept of COMMS8 only metering installation type code in MSATS?**

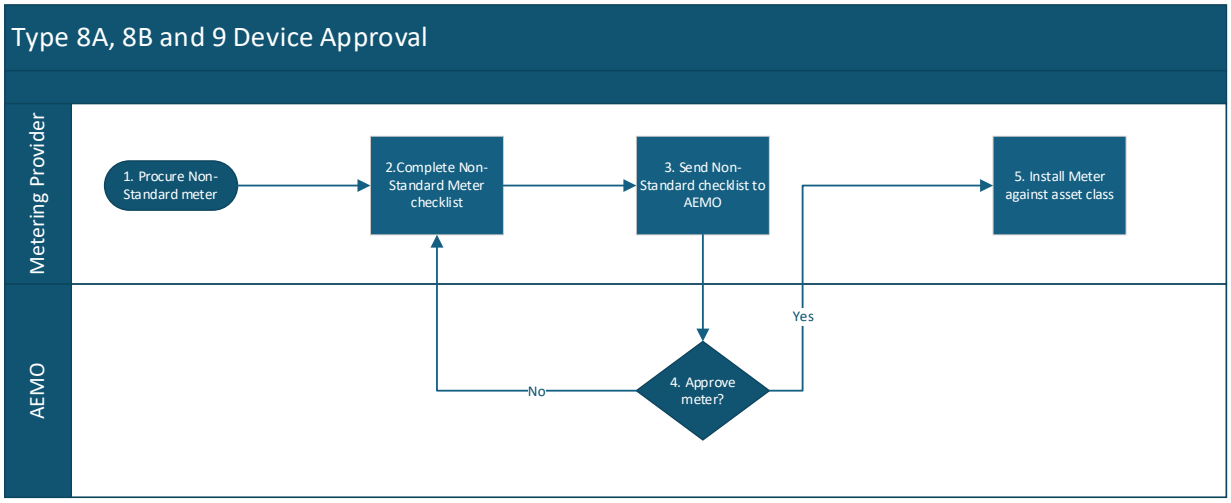
3.1.8. Type 8A, 8B and 9 Device Approval

Description and effect of proposal

As part of their accreditation, Metering Providers are required to submit to AEMO all devices they intend to install as a component of a metering installation and provide evidence that the device is suitable for use in the NEM.

AEMO recognises the FTA Rule provides opportunities for non-standard metering. To ensure industry certainty, AEMO proposes any new device to be installed as part of a type 8A, type 8B or type 9 metering installation is approved by AEMO prior to installation or prior to commissioning. Once the device has been approved, it may be used for that specific asset type. Figure 5 outlines the process a Metering Provider is required to complete for a device procured by the Metering Provider.

Figure 5 Device Approval



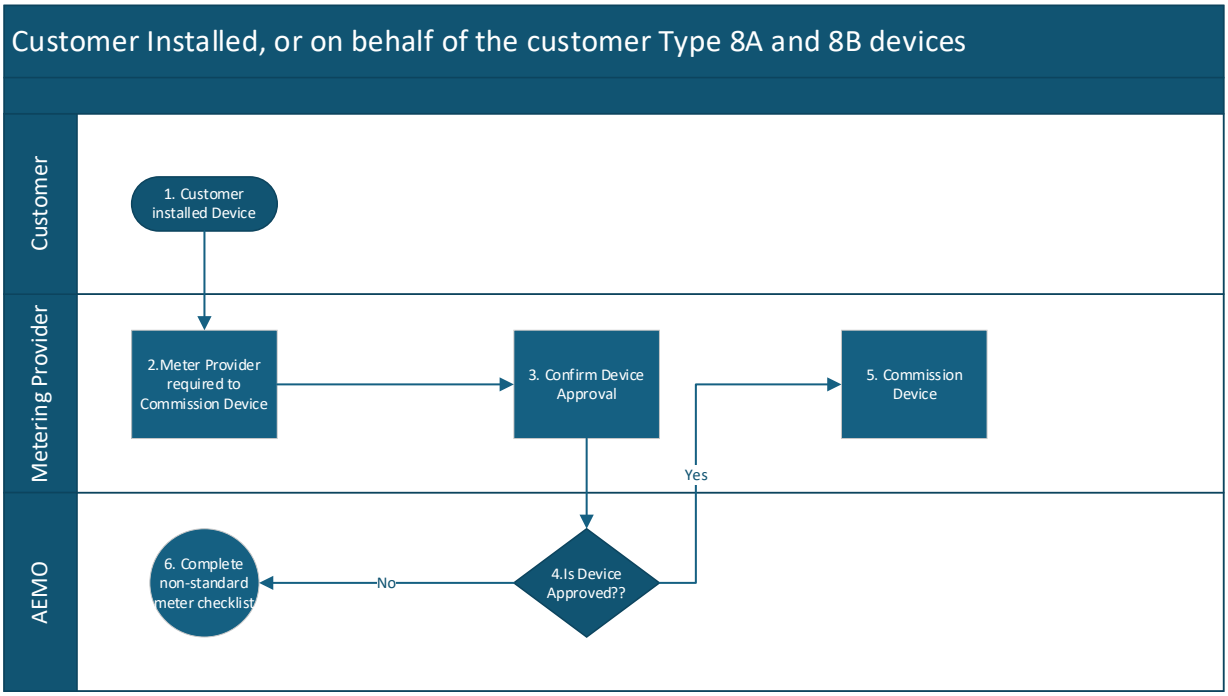
1. The Metering Provider procures a device(s) with relevant technical documentation.
2. The Metering Provider completes AEMO's 'Non-standard meter checklist'.
3. The Metering Provider sends the Non-standard checklist to AEMO for assessment.
4. AEMO approves or not approves the proposed meter for installation as a type 8A, type 8B or type 9 metering installation.
5. If the meter is not approved the Metering Providers may resubmit the application or wish to request or discontinue with proposing this device as an approved meter type.
6. The approved meter is able to be installed against the asset class.

Customer Provided Devices – Type 8A and Type 8B

Type 8A and type 8B metering installations can be installed by the customer or on behalf of the customer. To enable the device to participate in the market, a Metering Provider is required to commission the device prior to the device providing services in the market.

Figure 6 outlines the steps required by the Metering Provider for a customer installed device prior to the meter performing services in the market.

Figure 6 Device Approval



1. A type 8A or type 8B device can be provided by the customer.
2. The Metering Provider is required to commission the device.
3. Prior to Commissioning, the Metering Provider is required to confirm if the device is approved to provide services in the market, and request AEMO to confirm.
4. AEMO confirms the device is approved or not approved.
5. If the device is approved the Metering Provider can commission the device.
6. Complete a non-standard meter checklist if the device is not approved.

A new section is proposed to be created in the Metering Provider (MP) Service Level Procedure outlining the obligations for installation and commissioning of a type 8A, type 8B and type 9 devices. Appendix B of this Issues Paper includes a draft of the Non-Standard Meter Checklist.

3.1.9. Grandfathering

Smart Street Lighting systems

The Final Determination has identified smart street lighting systems as a potential application for type 9 metering installations, enabling the functionality from a Central Management System to aggregate multiple streetlights under one NMI. During pre-consultation with the industry, smart street lighting providers have raised questions about whether existing smart street lighting installations, currently classified as type 7 devices in Local Network Service Provider (LNSP) inventory tables, can be transitioned into the market as type 9 metering installations.

AEMO has advised industry that it will consider existing deployment of smart street lighting systems as a type 9 metering arrangement, based on the traceability of the nodes to appropriate standards, the

capability of nodes to record time of use data and the capability of the CMS system to record 35 days of data and disaggregate readings if necessary, into trading intervals.

To facilitate the transition of an existing smart street lighting installation to type 9 metering, AEMO requires the Metering Coordinator to submit a 'Non-standard Meter Checklist' as part of the accreditation process.

3.1.10. Transition to type 9 metering installations

A new clause has been included in Metrology Procedure Part A, which requires the LNSP to ensure any movement from the inventory table to a type 9 installation is appropriately managed.

Questions

5. **Do you agree the MP is required for any new device to be installed as part of a type 8A, type 8B or type 9 metering installation, to be approved by AEMO prior to installation or prior to commissioning?**
6. **Are the proposed changes to Grandfathering arrangement appropriate?**

3.2. Malfunctions

3.2.1. Description and effect of proposal

Type 8A and type 8B metering installations can be installed by the customer or on behalf of the customer. Clause 7.8.10(e) of the NER requires the FRMP to:

- notify the customer of the metering installation malfunction and that repairs to the metering installation need to be made as soon as practicable but no later than 20 business days after the notice; and
- if those repairs are not undertaken within that period, designate the secondary settlement point at which the type 8A or 8B metering installation is located as inactive until the customer completes the repairs.

3.2.2. Proposed change to MSATS Procedures – Principles and Obligations for All Connection Points

AEMO proposes to include a new clause in the Obligations by Role section for the FRMP in the MSATS Procedures document to include the following:

> *If a metering installation malfunction is not repaired within 20 business days for a type 8A or 8B installed by a customer or on behalf of a customer, the FRMP must request the NMI Service Provider to update secondary settlement point NMI Status Code to 'N' (Off Market NMI).*

AEMO notes that whilst Metering Providers may install type 8A or type 8B metering installations at the request of retailers for customers, the malfunction requirements outlined in clause 7.8.10(e) of the NER apply, regardless of whether it is MP installed or provided by the customer.

Questions
7. Do you agree with the proposed change to MSATS Procedures to include a new clause in the Obligations by Role to require the FRMP to notify the NMI Service Provider?

3.3. Outages and Disconnections

3.3.1. Description and effect of proposal

The Determination requires that:

AEMO metrology procedures will specify that when metering data providers (MDPs) 'flag' to AEMO that there is a disconnection or network outage at the connection point, AEMO will use that flag when processing the metering data for the SSPs (and revert the value to zero). This will flow through to existing arrangements for settlement under Chapter 3 of the NER.[5]

AEMO has identified three use cases for outages and disconnections where AEMO would zero out settlement reads for the SSP:

- An outage to a loss of supply for a PCP due to unforeseen events or network interruptions. Examples include storms, floods and network-planned outages.
- A local disconnection whereby there is a de-energisation of a PCP via a network or customer fuse.
- A remote disconnection whereby there is a de-energisation of a PCP from the meter.

Outages and remote disconnections

The MDFF NEM 12 13 Procedure requires that the MDP must apply a reason code for all intervals with substituted or final substituted metering data.

The MDP must apply:

- *A ReasonCode…for all Intervals and consumption values where the QualityFlag 'S' (substituted metering data) or 'F' (final substituted metering data).*
- *A Reason Code…for Actual Meter Readings (QualityFlag 'A') for all Intervals where the meter has recorded a power outage (reason code 79), time reset (reason code 89), or tamper (reason code 61).*

AEMO proposes using the reason codes stored against the interval in the NEM12 file for sites with a meter disconnection or outage. AEMO will ingest the NEM12 file and apply the following logic:

- For any CP/Premises NMI, if the specified Reason code of 43, 79 or 91 is in the NEM12 for an interval but SSP NMI has a valid meter read, a zero value will be settled for the SSP.
- For any CP/Premises NMI, if the specified Reason code of 43, 79 or 91 is in the NEM12 for an interval but SSP NMI has substituted meter read, zero value will be settled for the SSP.

[5] Australian Energy Market Commission, Rule Determination: Unlocking CER benefits rule change, 15 August 2024, p. 19.

Local Disconnections:

MSATS Principles procedure requires that the MDP must update the data streams to 'I' (inactive) within two business days from when the MDP becomes aware of the de-energised connection point for premises connection point or SSP.

AEMO proposes that a zero value will be settled for the SSP where the datastream is inactive for the premises connection point.

3.3.2. Proposed change to MDFF Specification NEM 12 NEM 13

To enable zero settlements to be applied against the SSP for outages and remote disconnections, AEMO proposed in pre-consultation with industry to use Reason Code 33 (de-energised without readings) and Reason Code 79 (Power Outage Alarm) as the codes AEMO would use to apply zero settlements to the SSP. AEMO's re-assessment is reason code 33 might not be appropriate for the use case of a connection point de-energised by the meter.

For the use-case of a premises connection point de-energised by the meter, AEMO proposes a new Reason Code in the MDFF specification NEM 12 NEM13 Procedure:

Reason Code	Reason Code Description	Detailed Description
91	Meter de-energised	Applies when the premises is disconnected via the meter

- Where there are multiple reason codes assigned to the interval data AEMO proposes power outage and remote de-energisation take precedence of all other codes that may concurrently occur against the interval.
- The Reason Code of 'Meter De-energised (reason code 91)' must be included for Actual Meter Readings (QualityFlag 'A').

The proposed changes regarding outages and disconnection of PCPs and SSPs would also apply to the connection points and child connection points of an Embedded Network.

3.3.3. Proposed change to Service Level Procedure MP Services

Under Metrology Procedure Part A, the MP must enable the following alarms in an interval meter.

- power failure/meter loss of supply for instrument transformer connected metering installations only
- VT or phase failure
- pulse overflow
- cyclic redundancy check error
- time tolerance.

Power failure/meter loss of supply for instrument connection metering installations, caters to reason code 43 or 79 in the NEM12 file for an outage at a PCP. There is no alarm or requirement for the

Metering Provider to record against the NEM12 file a premises connection point that is de-energised by the meter — the only requirement is for the MP to update the meter register status in MSATS to D.

AEMO proposes to include a new clause in the Service Level Procedure MP Services, which requires the MP to include reason code 91 to the MDP when a meter has disconnected a connection point using remote services.

AEMO considers this will not only assist for the purposes of this Rule change but also provide another avenue of visibility to the MDP of the reason why a meter is supplying zeroes to the market.

3.3.4. Proposed change to Settlement Reconciliation Reports

Network islanding may occur when a system (such as a solar and battery) continues to operate independently off the grid during a power outage. In this situation:

- the premises connection point meter will not record data, but the SSP meter will record data.
- Retailers will receive metering data from the MDP for the SSP, which is not zero.
- AEMO will apply zeroes to the SSP for settlements.

To assist the FRMPs in the reconciliation of their settlement values, a new report is proposed to identify settlement trading interval data for each NMI for the settlement case. This report will include SSP trading interval(s)I that have been replaced with a “Zero” settlement value due to the PCP recording an outage or disconnection.

The new report will be available to the FRMP, LR or AEMO and will provide trading interval settlement data for the requested NMI.

8. Do you agree with the proposed approach of using the reason code to apply zero settlements to the secondary settlement point?

9. Do you agree with a new reason code to be used for sites where the connection point has been remotely disconnected by the meter?

3.4. NMI Service Provider role

3.4.1. Description and effect of proposal

The AEMC draft rule required LNSPs to create and maintain NMIs for SSPs. After receiving feedback from the industry about the potential costs of providing this service from the LNSP, the AEMC, in the FTA Rule, created a new role, NMI Service Provider, to create and maintain SSP NMIs.

The NMI Service Provider role is comparable to that for an Embedded Network Manager. The responsibilities are[6]:

- creating a NMI for a SSP at small and large customer premises (at the request of the customer or the customer’s retailer)

[6] Australian Energy Market Commission, Rule Determination: Unlocking CER Benefits rule change, 15 August 2024, p.23

- linking the NMI at the SSP to the NMI at the PCP
- creating and maintaining the relevant NMI standing data at SSPs in MSATS
- updating NMI standing data if the supply circumstances at the SSP change, such as reactivation and deactivation (unless deactivation occurs as a result of a change in the FRMP, in which case MSATS will be updated automatically).

AEMO is required to create a new NMI Service Provider Service Level Procedure that brings together accreditation requirements, processes, and other matters.

3.4.2. Proposed NMI Service Provider Service Level Procedure

The proposed NMI Service Provider role is equivalent to the Embedded Network Manager service level procedure. The key features of this NMI Service Provider level procedure are:

- Create SSP National Metering Identifier/s NMI/s
- Maintain SSP NMI/s
- Act in the Role of Local Network Service Provider (LNSP) in MSATS for its SSP/s
- Provide the MC, FRMP and when required, the ENM with the NMI of the SSP/s
- Establish and maintain systems and business interfaces to manage SSP/s, creation, updates, notifications, objections, reports and relevant standing data
- Maintain a MarketNet connection for the purpose of communication and file transfer in MSATS
- Maintain information about each SSP.

A draft of this service level procedure is provided for feedback. Participants seeking accreditation as an NMI Service Provider are encouraged to review the changes proposed in the MSATS Procedures – Principles and Obligations for All connection points. AEMO will provide a NMI Service Provider guideline document as part of this consultation at the draft determination stage.

3.4.3. Proposed changes to MSATS Principles

New Change Request: CR 2040 – Create NMI Details – SSP

At the request of a FRMP, the NMI Service Provider is required to create a NMI for an SSP. A new CR, CR 2040, is proposed to be created to allow a NMI Service Provider to create a SSP. Key attribute of this CR:

Prospective only CR

In its final determination, the AEMC noted:

In its rule change request, AEMO noted that periods of power outages coupled with back-up power flows may lead to settlement anomalies under subtractive settlement arrangements. This scenario may lead to off market power flows within an electrical installation or embedded network to be incorrectly settled in the market. Additionally, retrospective activation of NMIs as described by AEMO may lead to gaming of the market. AEMO has advised that this issue currently occurs under embedded network arrangements and could occur under flexible trading arrangements used where the New NMI Service Provider prospectively establishes the initial set of information in MSATS about a secondary settlement

point… AEMO procedures could prohibit retrospective NMI activation and deactivation for the purposes of flexible trading.[7]

To meet this requirement, AEMO has created a prospective only CR to prevent the risk of settlement anomalies under subtractive settlements.

NMI Classification Codes of SMALL, LARGE, and NREG:

AEMO propose SMALL, LARGE and NREG are the only NMI Classification Codes that a SSP can be applied.

The Rule introduces a new term, *small resource secondary settlement point,* which is a secondary settlement point for one or more small generating units or small bidirectional units, which would be applied to an NREG connection.

Auto Field Population

Pre-consultation with industry requested if AEMO could auto-populate new attributes against the SSP at NMI creation. To provide a cost-effective process for NMI Service Providers, AEMO proposes to auto-populate the following fields at the creation of the SSP.

DLF Code	TNI Code	LR (SLR)
PNSP	Meter Read Opt In	Jurisdiction Code

AEMO notes the Final Determination does not require the SSP to record the network tariff, and network tariffs will be levied at the PCP.

New Change Request: CR 2540 – Create NMI Details – SSP

In alignment with other change requests, CR2540 allows the NMI Service Provider to make a Prospective Change to the Datastream and metering installation details. At the same time, it also establishes the initial set of information in MSATS about a connection point connected to a SSP.

Modifications to existing change requests

Backdate NMI CR 5021

Used where AEMO, on request from an ENM or NMI Service Provider, or the ENM or NMI Service Provider, backdates the initial set of information in MSATS about a child connection point or SSP.

Change NMI Embedded Network – Child or NMI Secondary Settlement Point CR 5060/5061

Used where the Current ENM or NMI Service Provider is required to make a Prospective or Retrospective change to the information in MSATS about a child connection point or SSP.

Change LNSP CR6100/6110

Used where the New LNSP, New NMI Service Provider or the New ENM is required (either by a regulatory change or due to an error in the NMI Master Record) to apply a Prospective Change or Retrospective Change to the name of the Current LNSP, Current NMI Service Provider or the Current ENM in MSATS.

[7] Australian Energy Market Commission, Rule Determination: Unlocking CER Benefits rule change, 15 August 2024, p.27.

New Attributes

The FTA Rule relies on a subtractive settlement approach to the allocation of energy flows. In a connection point with a SSP, any energy flowing at the SSP NMI is measured and following validation, is assigned to the FRMP at that SSP NMI. This value is subtracted from the energy flowing at the PCP NMI to calculate the allocation for the FRMP at the PCP NMI.

Critical to this arrangement is the accurate linking of PCP and SSP NMIs in MSATS standing data – which establishes the NMI relationship to enable the subtractive calculation and the correct assignment of energy flows to respective FRMPs. To enable subtractive settlements from the PCP to the SSP, AEMO proposes three new attributes that link the PCP to the SSP.

Standing Data Attribute	Description
Premises NMI	Populated with the premises connection point NMI on each SSP
IsPCP	A flag field set to Y on premises connection point when a SSP is associated to it; otherwise set to Null
Service Type	Populated with FTA on the PCP and SSP. The field would be part of an enumerated list and enables other services that might utilise subtractive arrangements in the future.

The new standing data attributes would be included in the Standing Data for MSATS document.

Questions
10. Are there any gaps in the NMI Service Provider Procedure?
11. Are the new change requests or 2040 and 2540 appropriate for the new role of NMI Service Provider?

3.5. Premises Network Services Provider Role

3.5.1. Description and effect of proposal

Clause 7.15.5(c)(7) of the FTA Rule enables LNSPs to access NMI Standing Data, settlement ready data, and metering data from SSP NMIs within their network. While DNSPs have the right to access data from SSP NMIs, they are not obligated to do so.

During pre-consultation with DNSPs, AEMO presented two options for enabling LNSPs to access SSP data:

- Introducing a new role within MSATS, which would allow LNSPs to access metering data and NMI standing data from SSPs.

- Establishing a new delivery mechanism enabling LNSPs to request standing data and/or metering data for SSPs where they have an active responsibility.

Following feedback from DNSPs to leverage existing processes, AEMO proposes the creation of a new role in MSATS, named "Premises Network Services Provider" (PNSP). This role would enable the LNSP to access NMI Standing Data and metering data for SSP NMIs. To implement this, AEMO proposes:

- The creation of a new role in MSATS, called "Premises Network Services Provider."
- Introducing an optional change request to allow the PNSP to request metering data from the MDP. When an SSP is created, the corresponding field would default to 'N'. The PNSP could then initiate a change request to update this field to 'Y', thereby enabling access to SSP metering data.

3.5.2. Proposed changes to MSATS Principles for PNSP Role

New PNSP role

AEMO proposes the new PNSP role in MSATS is characterised by the following obligations:

- The new role only allows registered LNSPs to be assigned
- The role will be assigned automatically using the LNSP associated with the Premises Connection Point.
- Upon completion of the change request, the LNSP receives access to SSP NMI Standing Data
- The PNSP is unable to object to any CR related to a SSP and is unable to opt out of standing data notifications.

Assign PNSP role in MSATS

AEMO proposes to create change request 2040 to Create the SSP NMI. When an NMI Service Provider initiates this Change Request, this CR will automatically update the PNSP role. Key obligations by role include:

- The role will apply the DNSP participant ID from the premises connection point and apply this to the PNSP attribute in MSATS.[8]
- On completion of the role assignment the PNSP receives NMI Standing Data of the SSP
- The PNSP cannot raise objections and is unable to opt out of standing data notifications.

Metering data from the SSP

To enable the option of the PNSP receiving metering data from the SSP, AEMO proposes to create a new Change Request 5065. Key features of this change request:

- It would be an opt-in Change Request, with a default position of N. The PNSP would initiate the change request to change it to Y
- The CR would only apply to the NMI classification codes of Small, Large and NREG
- The recipient would be the MDP of the SSP. The recipient may reject to the request based on the Object code of contract. The contract objection code has been amended to include the

[8] For an Embedded Network, the Embedded Network Manager of the SSP will be assigned to the EN child for this transaction.

requirement: *the MDP does not have an agreement with the distribution business who is requesting metering data for a secondary settlement point.*

For FRMPs at the PCP, they will be able to obtain access to the metering data, and receive CR notifications, as they will be the LR for the SSP NMI.

Questions
12. Do participants think that the PNSP meets the intent of the Final Determination of a DNSP to receive metering data and standing data from a secondary settlement point?
13. Can you provide what changes, if any, should be made to the new Change Requests?

3.6. NMI Discovery

3.6.1. Description and effect of proposal

NMI Discovery allows participants to access NMI Standing Data based on the participant type and its relationship to the NMI. There are three options where participants can access NMI Standing Data:

- NMI Discovery 1: Allows FRMP and LNSPs to search via DPID, meter serial ID and address. If a match occurs MSATS will return NMI Standing Data items detailed in the MSATS Principles document.
- NMI Discovery 2: Allow participants with access to the NMI to discover NMI Standing Data information.
- NMI Discovery 3: Assists in the identification of the Current or most recent previous Retailer for an NMI and allows Retailers to provide a reason for their request.

3.6.2. Proposed changes to NMI Discovery

As a consequence of the three new attributes of 'IsPCP', 'NMI Premises' and 'FTA Type', AEMO proposes changes to NMI Discovery 1 and NMI Discovery 2.

NMI Discovery 1

Participants with appropriate access rights can use NMI Discovery 1, provided their participant ID is registered against the role. For a LNSP, they can only search for their own NMIs. FRMPs may request a NMI Discovery for any premises when they have customer approval, whereas a LNSP may only request a NMI Discovery for premises where they have a relationship; the MSATS system manages this validation.

Type 1 NMI discovery provides three search options:

- DPID
- Meter Serial ID
- Address (without DPID)

AEMO proposes to change the type 1 NMI discovery process to include in the results window:

- IsPCP – populated for Premises Connection Points

- Premises NMIs – populated for secondary settlement points.

Including these fields will enable participants, who have access, to determine all appropriate NMIs using the initial results.

NMI Discovery 2

Type 2 NMI discovery is the process of returning standing data to assist retailers and provide a quote to an End-use Customer and final Meter Read data information for the customer switching process.

AEMO proposes to change the results window for NMI Discovery 2 to include the new standing data attributes of:

- IsPCP
- Premises NMI
- ServicesType

For the PCP FRMP, it will be given the LR role for the SSP NMI in MSATS and will be able to view the SSP standing data details.

Questions
14. Do participants agree with the proposed NMI discovery changes? If not, why?

3.7. Large and Small customers

3.7.1. Description and effect of proposal

The FTA Rule allows large customers to choose multiple energy service providers for their premises. Small customers can separate and manage their flexible CER from their passive load with the same retailer.

AEMO's MSATS system uses the NMI Classification Code to define small and large customers at the connection point. The NERR, however, allows a business customer with several connection points across several sites to aggregate its load across these individual connection points to meet the threshold of a large customer. In this scenario, whilst the NMI Classification Code is small, the business customer meets the NERR requirement of a Large customer and may engage a different FRMP for the SSP.

During the pre-consultation meetings, participants expressed concerns about how AEMO's system can accommodate the requirement for aggregation. AEMO initially proposed using the NMI Classification Code for small and large customers. However, this approach is insufficient, as the NMI Classification Code relates only to the individual connection points.

3.7.2. Proposed changes to MSATS Principles

To meet the NERR requirement to allow aggregation of small connection points becoming a large customer, AEMO proposes creating a new Customer Classification Code of 'Large NMI Aggregation' to identify those connection points aggregated under the NERR to become a large NMI aggregation. Key elements of this proposal:

Conditions Precedent

- NMI Classification of the PCP may be SMALL or LARGE,
- Customer Classification Code must be BUSINESS for each PCP NMI in the aggregation,
- End User at each BUSINESS PCP NMI to be aggregated must be the same,
- All BUSINESS NMIs to be aggregated must be within the same Jurisdiction, and
- The FRMP Participant ID must be the same for all BUSINESS PCP NMIs to be aggregated.

New MSATS Large NMI Aggregation Code

"Large NMI Agg Code" – is a unique code to identify an individual group of aggregated BUSINESS NMIs. This would be populated and maintained by PCP FRMPs as they know the identity of the Business end user with multiple Business sites that are to be aggregated.

Large NMI Agg Code structure:

- Up to 16 alphanumeric
- First character Jurisdiction ID – Q, N, A, V, S, T
- Next up to eight characters – Participant ID
- Last seven characters – Unique code created by a specific FRMP
- Where the Participant ID is only 4 characters the maximum code length will be 12 characters (e.g. VENGY0A1B2C3)

SDQ reporting

To ensure the "Large NMI Agg Code" (LNAC) is appropriately maintained by FRMP participants, new SDQ checks will be developed to validate the Aggregated NMIs. The new checks will consist of the following:

- LNAC NMI count check – when a NMI is added to or removed from a Large NMI Aggregation the number of NMIs will be validated to ensure there is more than one NMI assigned to the LNAC.
- LNAC NMI jurisdiction check – when a NMI is added to or removed from a Large NMI Aggregation the jurisdiction of NMIs will be validated to ensure the aggregated NMIs are all in the same jurisdiction.
- LNAC upper energy consumption threshold check – when a NMI is added to or removed from a Large NMI Aggregation the ADL value of all PCP NMI settlement datastreams within the aggregation will be summed to ensure the ADL equals or exceeds the following configurable values:
    - 274 KWh per day for QLD, NSW and ACT, i.e. 100 MWh per year
    - 411 KWh per day for TAS, i.e. 150 MWh per year
    - 438 KWh per day for SA and VIC, i.e. 160 MWh per year
- LNAC FRMP check – will validate that the FRMP responsible for the NMI equals the participant id for all NMIs within the LNAC.
    - E.g. FRMP Participant ID = LNAC code removing first character (Jurisdiction) and Last 7 characters (unique FRMP created code)

Change Request updates

Update 5054, 5055 Change NMI – Customer Classification Code change requests will be updated to include the Large NMI Agg Code field as an optional input field.

New validations will be required when the field is validated to ensure the following:

- The Customer Classification Code (CCC) assigned to the PCP NMI is set to “Business” or the CR includes an update of the CCC to “Business”.
- The first character of the Large NMI Agg Code equals the first character of the Jurisdiction assigned to the NMI.
- The active FRMP responsible for the PCP NMI equals the participant code within the LNAC by removing the jurisdiction and unique participant code characters.

Questions

15. Do participants agree with the proposed Large NMI Agg code to identify NMIs that have had their load aggregated from small customer to large customer?

3.8. Large to Small customer transition

3.8.1. Description and effect of proposal

For Large customer SSPs with a different FRMP to the PCP, clause 2.3.2 of the NER includes obligations on the FRMP of the SSP to notify AEMO when a large customer becomes a small customer, specifically:

(1) a Market Participant has classified a SSP within the premises of a person who was a large customer as one of its market connection points;

(2) the Market Participant is not also financially responsible for the connection point for the premises; and

(3) the person ceases to be classified as a large customer.

Where the above paragraphs apply:

(1) the Market Participant must notify AEMO that the customer has ceased to be classified as a large customer as soon as practicable and in any event no later than 10 business days after becoming aware of the change; and

(2) the Market Participant must cease to classify the SSP as one of its market connection points from the time the notice is given.

3.8.2. Proposed changes to MSATS Principles

A change to the PCP NMI Classification Code from Large to Small will be initiated by the FRMP of the PCP. To meet the requirement of the Rule, AEMO proposes:

- The FRMP of the SSP will receive a change request notification of a change from Large to Small at the PCP NMI

- A new SDQ report will identify those small connection points where the PCP FRMP is different from the SSP FRMP
- The FRMP of the SSP will request the NMI Service Provider to make the SSP inactive – a new clause has been included to refer to this requirement in 'Obligations by role'.

3.9. Retailer of Last Resort

3.9.1. Description and effect of proposal

The Final Determination outlined that if a retailer fails on the premises connection point or secondary settlement point, the Retailer of Last Resort (RoLR) provisions in the NERL apply, transferring the customer to a designated RoLR. If a non-retailer secondary FRMP fails, metering data from the secondary NMI stops, and the primary FRMP takes responsibility for the entire energy flow.

As part of the consultation with the industry, AEMO sought to understand how this process should apply. AEMO's initial position proposed assigning the RoLR to the impacted PCP or SSP (or both) and ensuring that the SSP will remain active. FRMPs have argued that if a RoLR event occurs for the SSP, the RoLR FRMP should not be obligated to provide services to the SSP for which it may not have a product.

3.9.2. Proposed Changes to RoLR

AEMO proposes:

- If a RoLR event occurs for a small customer, the SSP should be set to non-market and have the data streams made inactive. This approach ensures the FRMP at the PCP is not mandated to provide SSP services; the customer may elect to re-activate the SSP NMIs with the current FRMP if SSP services are available or with a different FRMP.
- If a RoLR event occurs for a large customer, the SSP FRMP should revert to the RoLR.

Questions
16. For small customers with an SSP, do participants agree that the SSP NMI should be made inactive where a RoLR event occurs?
17. For Large customers with an SSP, do participants agree that the SSP NMI should revert to the RoLR retailer where a RoLR event occurs?

3.10. Other FTA topics

3.10.1. Changes to NMI Procedure

AEMO has amended the NMI Procedure document and proposes the following changes:

- Section 2.1 NMI Allocation by AEMO
- Section 2.2 Issue of NMIs by LNSPs, ENMS and NMI Service Providers

- New diagrams in Appendix E to illustrate SSPs for Large customers, Small customers and those SSPs in embedded networks
- Includes a clause in NMI extinction and proposes a SSP NMI is extinct when the ‘flexible load” at the SSP is removed.

3.10.2. Changes to Glossary and Framework

The FTA Rule for the NERR has defined four terms in the NERR, premises connection point, primary retailer, customer premises and secondary meter. AEMO proposes these terms are included in the Glossary and Framework.

AEMO proposes that these be added to the Glossary and Framework document, along with new initialisms and terms related to a type 9 CMS installation.

Premises Connection Point:

- The point of connection between the distribution system and a customer's premises.

PCP:

- Premises Connection Point

Primary Retailer:

- For a small customer, the FRMP for the customer's premises; For a large customer, the FRMP at the PCP. Refer to NERR definition of primary retailer.

Secondary Meter:

- A *meter* for a *secondary settlement point*. Refer to NERR definition of secondary meter.

Secondary Settlement Arrangement:

- Where metering data from one or more secondary settlement points within a customer's premises is used to calculate the customer's energy bill.

SSP

- Secondary Settlement Point

NMISP

- NMI Service Provider

CMS

- Central Management System

PNSP

- DNSP at the PCP

Node

- *Energy* measuring device related to a CMS

3.10.3. Changes Guide to the Role of the Metering Coordinator

New clauses have been added to the Guide to the Role of the Metering Coordinator to ensure the Metering Provider commissions type 8 metering installations and that type 8 and type 9 metering installations meet the minimum services specification.

3.10.4. Proposed changes to SDQ reporting

The standing data quality reporting provides participants with abnormalities within MSATS or MDM standing data. SDQ reports are a set of separate queries that run on a weekly basis and produce a report for individual participants to investigate and correct. The reports are broken into market Roles and/or role categories (e.g. ENM is a category of the LNSP role). To facilitate the FTA Rule, AEMO proposes the following SDQ reports.

TYPE 8A

Metering installation type code COMMS8A is to be used for SSP where PCP NMI Class is LARGE or NREG and will report to the active MP when the following conditions are met:

where PremisesNMI is null

and MITC code is COMMS8A

and NMIClassCode is not equal to ‘LARGE’ or ‘NREG’

TYPE 8B

Metering installation type code COMMS8B is only allowed on a Small SSP and will report when the following conditions are met:

where PremisesNMI is not null

and MITC code is equal to COMMS8B

and NMIClassCode not equal to ‘SMALL’

or

where PremisesNMI is null

and MITC code is COMMS8B

NoActivePremises

A SSP cannot be active when the PCP NMI is inactive and will report when the following conditions are met:

Where PCP NMI has IsPCP = ‘Y’

And CP does not have any DS Status = ‘A’

And Premises CP NMI = SSP PremisesNMI

And SSP DS Status has DS Status =’A’

IsPCPNotSet

A PCP NMI with an associated SSP must have IsPCP = Y unless all SSPs are Abolished and will report when the following conditions are met:

Where SSP NMI Status not = 'X'

And SSP PremisesNMI = PCP NMI

And PCP NMI IsPCP is null

IsPCPNoChild

When a CP NMI have IsPCP = Y there must be a not Abolished SSP and will report when the following conditions are met:

where PCP NMI IsPCP = 'Y'

and

where SSP PremisesNMI is not null

and SSP NMI Status is not 'X'

and PCP NMI not in SSP NMI list

SmallSSPInvalidFRMP

For a Small PCP all SSP FRMP must equal PCP FRMP and will report when the following conditions are met:

Where PCP NMI IsPCP = 'Y'

and PCP NMI Class = SMALL

and PCP Large NMI Agg Code is null

and PCP NMI = SSP PremisesNMI

and SSP status = A

and PCP active FRMP ParticipantId <> SSP active FRMP ParticipantId

SSPInvalidLR

For a PCP all SSP LR must equal PCP FRMP and will report when the following conditions are met:

Where PCP NMI IsPCP = 'Y'

And PCP NMI = SSP PremisesNMI

and SSP NMI Status is not 'X'

And PCP active FRMP ParticipantId <> SSP active LR ParticipantId

Questions
18. What conditions do participants believe leads to a SSP NMI being made extinct?
19. Do participants agree with the proposed diagrams in the NMI Procedure?
20. Do participants agree with the proposed inclusions for the Glossary and Framework?
21. Are there any other SDQ reports which should be created for this Rule change?

4. Summary of issues for consultation

Submissions may be made on any matter relating to the proposal discussion in this consultation paper. AEMO would welcome particular comment and feedback on the following matters:

1. Amendments to Metrology Procedure Part A which details the minimum services specification for type 8 and type 9 metering arrangements.
2. Changes to MSATS Procedures – Principles and Obligations for All Connection Points, which includes the new roles of NMI Service Provider and Premises Network Services Provider and accompanying change requests and associated changes to Standing Data for MSATS.
3. Creation of the NMI Service Provider service level procedure.
4. Changes to the Guide to the Role of the Metering Coordinator and Service Level Procedure MP services.

Appendix A. Full List of Questions

Questions
1. Do you agree with the proposed minimum services for type 8A, type 8B and type 9 metering installations? If not, please specify your reasoning and any alternative options relevant
2. Do you think remote disconnection and reconnection is required for type 8A, type 8B and type 9 metering installations? If so, what benefits are provided by this service?
3. Do you agree with the minimum service levels for type 8A, type 8B and type 9 metering installations?
4. Are the technical requirements sufficient to meet the requirements of type 8A, type 8B and type 9 metering installations? If not, why?
5. Do participants agree with the concept of COMMS8 only metering installation type code in MSATS?
6. Do you agree the MP is required for any new device to be installed as part of a type 8A, type 8B or type 9 metering installation, to be approved by AEMO prior to installation or prior to commissioning?
7. Are the proposed changes to Grandfathering arrangement appropriate?
8. Do you agree with the proposed change to MSATS Procedures to include a new clause in the Obligations by Role to require the FRMP to notify the NMI Service Provider?
9. Do you agree with the proposed approach of using the reason code to apply zero settlements to the secondary settlement point?
10. Do you agree with a new reason code to be used for sites where the connection point has been remotely disconnected by the meter
11. Are there any gaps in the NMI Service Provider Procedure?
12. Are the new change requests or 2040 and 2540 appropriate for the new role of NMI Service Provider?
13. Do participants the PNSP meets the intent of the Final Determination of an DNSP to receive metering data and standing data from a secondary settlement point?
14. Can you provide what changes, if any, should be made to the new Change Requests?
15. Do participants agree with the proposed NMI discovery changes, if not, why not?
16. Do participants agree with the proposed Large Customer Agg code to identify NMIs that have had their load aggregated from small customer to large customer?
17. Do participants agree that SSP NMIs for small customers should be made inactive where a RoLR event occurs? For Large customers with an SSP, do participants agree that the SSP NMI should revert to the RoLR retailer?
18. What conditions do participants believe leads to a SSP NMI being made extinct?
19. Do participants agree with the proposed diagrams in the NMI Procedure?
20. Do participants agree with the proposed inclusions for the Glossary and Framework?
21. Are there any other SDQ reports which should be created for this Rule change?

Appendix B.MP Type 8 and 9 checklist

~~NON-STANDARD~~NON-STANDARD METER CHECKLIST

Non-Standard Meters that are used for Type 8 and 9 Connection points

Manufacturer:	
Model:	
Accuracy Class:	
Maximum Current Rating:	
Single Phase or Three Phase:	
WC or LVCT Connected:	
Metering Installation Type:	8A, 8B, 9, 9CMS (list all applicable types used for)

Main Section	Item	Requirements	Compliance (Y/N) If = N please provide reason	Applicant's Comments
1. Compliance with Australian Standards	**1.1**	Has the meter been pattern approved by the National Measurement Institute (NMI)?		
	1.2	Does the meter comply with the full requirements of AS 62052.11:2023 (General Requirements)? If not, please confirm if the meter complies with: • Section 6 Meter marking and documentation. • Appendix ZB, ZB.2 terminal covers over mixed voltage level terminals and where Figure ZB.7 required a segregation with fixed continuous barrier. Also, please confirm what the meter does not comply with		

	1.3	Does the meter comply with the full requirements of AS 62052.31:2017 (Product safety requirements and tests)? If not, please confirm what the meter does not comply with.		
	1.4	Does the meter comply with the full requirements of AS 62053.21:2023 (classes 0.5, 1 and 2 AC active energy)? If not, please confirm what the meter does not comply with.		
	1.5	What other Standards does the meter comply with that are relevant?		
	1.6	Provide supporting evidence from the manufacturer that the meter complies with the above Australian Standards.		
2. Compliance with National Measurement Institute (NMI) Requirements	**2.1**	Has the meter been pattern approved by the NMI?		
	2.2	If yes, what is the pattern approval number? Please provide certificate		
	2.3	If not, is the meter in the process of being pattern approved? or other please specify?		
3. Compliance with NER Chapter 7 Requirements	**3.1**	NER 7.8.2(a)(1) has either a visible or an equivalently accessible display of the cumulative total energy measured by that metering installation (at a minimum), provided by means of a device contained as part of the metering installation or, by some other means, made readily available to the customer with no delay;		
	3.2	NER 7.8.2(a)(2) is accurate in accordance with clause 7.8.8; Does the meter meet the accuracy requirements of Schedule S7.4 for the relevant metering installation type(s) the meter will be used for? What is the accuracy class of the meter?		
	3.3	NER 7.8.2(a)(2) is accurate in accordance with clause 7.8.8; Does the metering installation meet the overall accuracy requirements of Schedule S7.4 for the relevant metering installation type(s)?		

	3.4	NER 7.8.2(a)(2) is accurate in accordance with clause 7.8.8; Does the metering installation meet the clock error (seconds) in reference to EST requirements of Schedule S7.4 for the relevant metering installation type(s)?		
	3.5	NER 7.8.2(a)(4) includes a communications interface to meet the requirements of clause 7.3.2(e)(4);?		
	3.6	NER 7.8.2(a)(5) is secure in accordance with rule 7.15;?		
	3.7	NER 7.8.2(a)(6) records energy data in a manner that enables metering data to be collated in accordance with clause 7.10.5;? (i.e. does the meter measure, records and stores 5 minute intervals)		
	3.8	NER 7.8.2(a)(7) is capable of separately recording energy data for energy flows in each direction where bi-directional active energy flows occur or could occur;?		
	3.9	NER 7.8.2(a)(8) has a measurement element for active energy and if required in accordance with Schedule 7.4 a measurement element for reactive energy, with both measurements to be recorded;?		
	3.10	NER 7.8.2(a)(9) includes facilities for storing interval energy data for a period of at least 35 days if the metering installation is registered as a type 1, 2, 3, 4, 8 or 9 metering installation;?		
	3.11	NER 7.15.3(a) is the energy data held in the metering installation protected from local access and remote access by suitable password and security controls?		
4. Compliance with NER Chapter 7 Requirements Schedule S7.5 Functional Capabilities	**4.1**	Remote disconnect/reconnect capabilities?		
	4.2	Ability to provide status of the switch used to effect the disconnection and reconnection services?		

	4.3	Ability to provide instantaneous voltage, current, power (watts) and/or frequency (hertz) – incl. date & time stamp?		
	4.4	Ability to provide average voltage and current over a nominated trading interval for one or more nominated trading intervals?		
	4.5	Ability to provide event/alarm logs – incl. recorded information in the tamper detection alarm, reverse energy flow alarm and metering device temperature alarm? What other event/alarm logs are available? List all relevant ones.		
	4.6	Ability to remote set the operational parameters of the meter?		
5. MDP Functionality	**5.1**	Can the MDP remotely & securely collect the interval data from the metering installation?		
	5.2	Can the MDP check the accuracy of the clock of the metering installation with reference to EST on each occasion that the metering installation is accessed (i.e.. daily)?		
	5.3	Can the MDP remotely reset the meter clock of the metering installation so that it is maintained to the required standard of accuracy?		
6. Metering Installation Design	**6.1**	Is the metering installation design generic, which will apply to many sites or site specific? Please provide a metering installation single line diagram (SLD) showing wiring connections and remote communications.		
	6.2	Is the remote communications link separated for MP and MPD access only to the metering installation? or is the communications link shared with a 3rd party, if share for what reason(s)?		
	6.3	Are all the metering installation components appropriately secured? (i.e. sealable and tamper proof)? If so demonstrate how the metering installation components are secured?		

	6.4	Is the metering installation electrically safe (i.e. no exposed terminals, wiring etc)?		
	6.5	Is the metering installation accessible for managing communication faults?		
	6.6	Is the metering installation accessible for managing in-service accuracy testing?		
	6.7	Is the metering installation installed within and appropriate IP rated environment (water/dust)? If so what is it rated for?		
	6.8	Does the metering installation have appropriately rated Service/Metering Protection Device (SPD/MPD), either: • service protection fuse assembly; or • circuit breaker		
7. Metering Installation Procedures	**7,1**	What is the testing and inspection process for this metering installation? Please provide copy of the procedure(s)		
	7.2	What is the commissioning and installation procedure for this metering installation? Please provide copy of the procedure(s)		
8. Central Management System (CMS) (If applicable)	**8.1**	Will this meter be used in a central management system? Please describe in what capacity		
	8.2	Does the MDP have direct access to the meter used as part of the CMS?		