

16<sup>th</sup> February 2023

Ms Jessica Curtis  
Australian Energy Market Commission  
15/60 Castlereagh Street  
Sydney NSW 2000

Dear Ms Curtis,

**Consultation Paper**  
**Unlocking CER Benefits Through Flexible Trading**  
**Ref: ERCO346**

Metropolis Metering Services Pty Ltd (Metropolis) is a registered Metering Coordinator and accredited Metering Provider, Metering Data Provider and Embedded Network Manager.

Since 2018 Metropolis has provided services to enable our clients to offer flexible trading arrangements to residential, small business and commercial end use electricity customers.

**Existing Framework**

Metropolis disagrees with AEMO's position that the embedded network framework is not applicable to distributed energy resources for the purpose of flexible trading arrangements. Quite the contrary, it is entirely suited to establishing and operating sub-connection points.

AEMO draws a distinction between an Embedded Network, being a part of the National Electricity Grid and subject to a network licensing exemption, and an End User's Electrical Installation not being a network or forming part of the National Electricity Grid.

But the point establishes only that a network licensing exemption is not required for an end user's electrical installation. It does not establish that an end user cannot currently have two registered metering installations, whether connected directly to the grid, or one behind the other.

For this reason Metropolis has, as Embedded Network Manager, used the existing Embedded Network Framework to create sub-connection points in MSATS since 2018.

The Private Metering Arrangement framework proposed by AEMO duplicates the Embedded Network Framework. It does not seem appropriate to us to have two parallel frameworks for the same purpose & outcome.

Metropolis has no objection to rebranding embedded network arrangements as Private Metering Arrangements, which is, in our opinion, a far more apt description for both flexible trading arrangements and the operation of conventional embedded networks. But we see no need to have a National Metering Identifier Service Provider separate from the Embedded Network Manager role.

**Making smart energy simple**

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In relation to the 'linking code' required to establish the subtractive settlement relationship between parent and sub-connection points in MSATS, it is a rule set by AEMO that the Distributor must provide the "code to AEMO within five business days from the time it receives the request from the Embedded Network Manager."<sup>1</sup>

Metropolis has experienced significant delays in having the necessary codes issued by Distributors, with one Distributor refusing to do so unless paid an unregulated fee for service – denying our clients, and in turn their end use customers, many thousands of dollars in value.

AEMO can, at its discretion, change the relevant provision in the MSATS Procedures to accept linking-codes directly from us. A rule change is not required.

### **Regulatory Barriers**

There are no regulatory barriers to establish flexible trading arrangements as proposed by AEMO. Any limitations are entirely physical.

For example, adding multiple 'settlement points' to an existing connection point or metering installation is impractical and costly.

Market compliant electricity smart meters come in three standard configurations – single-phase single-element, single-phase two-element (commonly used for hot water load control) and three-phase, which can also be used as a single-phase three-element meter.

The difficulty in metering multiple circuits is that premises must be rewired to separate each circuit and multiple meters are then required. For example, six individual circuits (eg. general light & power, hot water, pool pump, EV charger, battery and solar) would require two three-phase meters assuming single-phase supply, or up to six meters if the premises has a three-phase supply. In addition is the cost of upgrading the meter panels to accommodate several meters and isolation.

Similarly, it is impractical to establish an additional connection point to the Distribution network to accommodate a separate supply circuit, say for an EV charger, as it duplicates the end user's electrical infrastructure, from the service line to the switchboard, meter panel, internal wiring, protection and isolation, rather than piggy-backing off the existing infrastructure.

Regardless, it is unnecessary for a single retailer to price multiple circuits when 5-minute interval data is available, as cost based pricing is determined by time-of-use not the type of appliance or circuit. The fact that electric household hot water systems have separate circuits, and pricing, is an artefact from basic metering, where two meter registers were required. A two-element smart meter may be programmed to record only one datastream while retaining off-peak load control functionality and with no additional cost to the customer.

The reasoning for a sub-connection point framework to enable flexible trading arrangements is to separate control, time-of-use and arbitrage opportunities between different services and appliances, and to encourage competition between pioneering new service providers.

### **Metering Solutions**

As Metering Coordinator, Metropolis is at the forefront of innovative metering design and has become particularly adept at deploying cost effective metering solutions across sub-connection points. Metropolis presently operates a network of over 10,000 metering installations at sub-connection points, many entirely off-market, and many registered in MSATS.

Metropolis does not see a need to change the current type 4 metering requirements to accommodate flexible trading arrangements.

All sub-connection points metered by Metropolis, whether off-market or on-market, and whether subject to flexible trading arrangements or not, are compliant with the National Electricity Rules. All the meters are remotely read and all interval metering data is collected, validated, substituted, stored and delivered in accordance with the Metrology Procedures and AEMO Service Level Procedures.

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<sup>1</sup> Section 4.12(b)(iv) of the MSATS Procedures: CATS Procedure Principles And Obligations Version 5.31, 7 November 2022 – page 33

The current NEM metering installation requirements do not limit our ability to deliver compliant and cost-effective smart metering services at sub-connection points and does not restrict the uptake of flexible trading arrangements and consumer benefits.

No additional obligations need to be placed on Metering Providers and Metering Data Providers to enable flexible trading arrangements, and the testing and inspection regime for metering installations at sub-connection points should remain unchanged.

### ***Metering Accuracy***

The National Electricity Rules and Metrology Procedures set the standards for metering and measurement accuracy. Meters must be NATA certified, type tested and approved by the National Measurement Institute, and maintained in accordance with an AEMO approved Meter Asset Management Strategy. Data must be measured and recorded in 5-minute intervals and internal time clock accuracy must be maintained.

As far as Metropolis is aware, inverters, electric vehicle chargers and other devices with built in measurement capabilities do not meet these exacting requirements and are unfit for market settlements.

Metrology standards must be maintained across all connection points through which energy is traded and data requirements on Metering Data Providers should remain unaltered and consistent with the recent global settlement and 5-minute settlement rule changes.

### ***Metering Roles***

Metropolis strongly disagrees that there is a need to change the accreditation and registration of Metering Providers and Metering Data Providers for sub-connection points.

Metropolis has always applied the same standards to metering sub-connection points as it does to metering primary connection points, precisely because trading occurs or may occur through sub-connection points.

Metropolis points out that:

- ▶ it has always been a requirement that Metering Coordinators be able to service sub-connection points within embedded networks and that there are many sub-connection points within embedded networks through which energy is now traded;
- ▶ there is no difference identifying energy flows when supply to a connection point is down, regardless of whether it is a primary or sub-connection point; and
- ▶ the accurate linking of primary and sub-connection points is in fact a function of the Distributor, NMI Service Provider (ie. Embedded Network Manager) and AEMO – it is not, nor is it intended to be, a function of the Metering Coordinator, Metering Provider or Metering Data Provider, who are responsible for registering and operating metering installations at connection points, regardless of how they are linked.

### ***Data Access & Displays***

Metropolis disagrees that meter face displays are unnecessary as they are used by our Field Technicians when commissioning and testing meters.

The rationale that face displays require larger meters is misinformed. The EDMI Mk10H, for example, is a DIN mounted meter with a small but well functioning LCD face display.

Metropolis agrees with AEMO that there are better ways for consumers to access data but we are aware of many end-users accessing face displays to monitor energy usage.

Metropolis provides clients and end-users for with real-time interval metering data access via mobile applications and web-based data portals across our entire network of primary and sub-connection points.

Noting that there are few, if any pattern approved electricity meters available in Australia without face displays, Metropolis recommends an exemption to the rules allowing individual Metering Coordinators to determine what best suits them and their clients.

***Minimum Services Specification***

Metropolis agrees with AEMO that the Minimum Services Specification need not apply to secondary connection points and recommends an exemption to the rules allowing individual Metering Coordinators to determine what best suits them and their clients.

***Remote Communications***

Metropolis agrees with AEMO that remote communications requirements must be maintained for all primary and sub-connection points as this meets the requirements for market settlements.

Best Regards,

A handwritten signature in black ink, appearing to read 'MB', with a stylized flourish extending to the right.

Marco Bogaers  
Executive Director