

Simplify your
energy transition



INTELLIHUB GROUP

SUBMISSION TO THE AEMC DRAFT DETERMINATION ON UNLOCKING CER BENEFITS THROUGH FLEXIBLE TRADING

11 April 2024



The Intellihub Group (Intellihub) welcomes the opportunity to provide feedback on the AEMC's Draft Determination on Unlocking CER Benefits Through Flexible Trading.

Intellihub is an Australian and New Zealand based digital energy management specialist that is simplifying the transition to sustainable energy through our holistic ecosystem of smart devices and services. We deliver innovative metering, data and behind the meter solutions that maximise digital and new energy services. We are an experienced and leading provider of multi-utility services across electricity and water networks for residential, commercial & industrial, embedded network and solar metering customers. We specialise in asset management, installation, financing, and the day-to-day operations of smart meters, managing more than 2.5 million advanced smart meters.

The Draft Determination proposed three main changes:

1. a new framework that enables large customers to engage multiple energy service providers at their premises without the need to establish a new connection point on a DNSP's network
2. enabling small customers (households and small businesses) with customer energy resources (CER) to separate their passive and flexible loads so they can realise the most value from their CER and in turn contribute to a more reliable, lower emissions and lower cost energy system
3. introduction of two new meter types with lower minimum specifications to enable technology with in-built measurement capability to be used for settlement and billing

Our comments in this submission primarily relate to points 2 and 3.

Importantly, the above options are voluntary which means customers can choose to adopt these changes when they see a positive value to them. There is a risk that the uptake of these new flexible trading arrangements is low because the options are too complex for a customer to understand or the options are too costly which offsets the benefits for a customer.

The cost-benefit assessment undertaken by Energeia for the AEMC found that the draft rule would have net benefits. Most of the identified benefits related to network benefits to DNSPs, primarily resulting from a view by Energeia that the rule would enable DNSPs to more effectively use CER to reduce peak demand and avoid network expenditure. However, implementing the new options permitted by the rule will impose costs that are borne by customers or retailers, creating a split incentives problem where the costs are not borne by the party that receives the benefits.

To create sufficient value for customers and retailers to incentivise them to adopt the new options permitted by the rule, DNSPs will need to start making large amounts of network support payments to retailers or customers that incentivise the uptake of these new arrangements, which has not occurred in the past. Similarly, retailers will need to offer new products that offer value to customers, although it is difficult to see what additional value the new options provide to retailers unless they receive new network support payments from DNSPs. Without such incentives, there is a significant risk that the new rules simply introduce additional costs and complexity that do not deliver benefits to customers and are not used in practice, other than perhaps public (and semi-public) EV charging where there is a clear application for type 9 or type 8 metering.



Whilst we are supportive of the AEMC's policy intent we believe some amendments or clarifications could be made to help make the rule change more effective and increase customer adoption of the changes. We will primarily focus on metering and the commencement date.

Metering matters

Multi-element meters: We note the AEMC considered multi-element meters when considering secondary settlement points and decided to not allow them to be used to separately identify and measure flexible CER because of limitations in AEMO systems to separate data streams and significant and costly reconfiguration of AEMO and market participant IT systems. In context, we appreciate the reason for the decision however we believe a multi-element meter should not be ruled out completely and instead they should be allowed to be used provided they comply with the requirements of the rules and the metrology procedures, which will help to drive innovation in metering technology. Whilst we are pleased to see the draft rule remains technology agnostic and does not place any limitations on the use of a multi-element meter we believe it is worth clarifying in the final determination that any meter can be used provided they comply with the requirements of the rules and the metrology procedures, which could be a multi-element meter.

Installation of type 8 meters: A new type 8 meter was introduced which can be an in-built measurement device (for example EV chargers with in-built measurement capability). The draft rule addresses this by recognising in clause 7.3.2(a)(3) that a type 8 metering installation may be installed by or on behalf of a customer and if that is the case then the MP's role is limited to commissioning and maintaining the meter and the MP is not responsible for its provision or installation. This is in recognition that a customer may arrange to install the primary equipment that has the in-built type 8 meter. We support this approach in principle and support clarifying that the MP is not responsible for installing the type 8 meter in these circumstances.

However, the new rules create several potential areas of confusion as to the responsibilities for type 8 meters that the AEMC should clarify in the final determination.

- Under the draft rules for type 8 meters, the MC remains responsible for appointing the MP, the MP remains responsible for commissioning and maintaining type 8 meters, and the MC and MP have various obligations in relation to type 8 meters including security of access to data and undertaking meter tests and inspections. MPs may not have the capability to maintain every potential version of type 8 meters, particularly in-built meters that are built and installed by other parties, so may not be capable of being appointed as the MP for some type 8 meters. As a result, there will need to be a commercial arrangement between the person who provides/installs the meter and the MC or MP that sets out their respective roles and responsibilities and the MP's agreement to be appointed in relation to that meter. This agreement or consent could be added as an express requirement of clause 7.3.2(a), or could be addressed by MPs or MCs in practice as part of their agreements with the retailer to be appointed to those roles, however it would be useful for the AEMC to clarify in the final decision that such arrangements will be necessary.



- A type 8 meter can also be an external measurement device and the draft rule could lead to confusion as to who is responsible for installation of the meter in those circumstances. Clause 7.3.2(a)(3) refers to a metering installation being installed ‘by, or on behalf of, the customer’ and does not limit this provision to type 8 meters that utilise built-in measurement capabilities of other equipment such as EV chargers. The AEMC should clarify that clause 7.3.2(a)(3) only applies to a type 8 meter that uses measurement capability that is built into another device, and for all other type 8 meters an MP must be appointed for the installation of the under clause 7.3.2(a)(1). The current wording implies that any person, including a customer themselves or a non-accredited installer, can install any type 8 meter, which would create significant safety risks.
- The AEMC may need to consider requiring any person who installs a type 8 meter to be accredited by AEMO and comply with certain obligations under the rules. The current approach in the draft rule would involve type 8 meters being installed by a person who is not accredited and is not subject to the rules. As discussed below, this creates significant potential risks in relation to issues like security of metering installation and energy data and remedying metering malfunctions. Under the draft rule, most of those obligations remain on MCs and MPs, but MCs and MPs are unlikely to be able to meet the existing obligations in relation to meters that are provided and installed by another party.

MC for small customers: We note the following statement was made in the draft determination:

The draft rule provides that the Metering Coordinator (MC) responsible for the small customer’s connection point would also be responsible for the settlement points linked to the connection point. The Commission considers given there is only FRMP, the existing metering role arrangements should be maintained for secondary settlement points.

We agree with this policy intent because it will simplify and reduce cost for managing metering data substitutions and performing tests and inspections. In addition, we agree that given the FRMP at the secondary settlement point must be the same as the connection point, having a single MC for the connection point and secondary settlement point will help to ensure there is a single party who is responsible for the entire small customer site which will help to reduce complexities in customer issues and complaints and have a single party responsible for compliance with the relevant provisions of the rules.

The AEMC’s draft determination does not explain how this policy intent is reflected in the draft rule. Our interpretation is that it is implemented through the continuation of the existing requirements in clauses 7.2.1(a)(1), 7.3.1(a) and several other rules provisions that the MC is appointed ‘in respect of a connection point’. These requirements mean there can only be one MC per connection point and different MCs cannot be appointed for each secondary settlement point given that the secondary settlement points sit behind a single connection point.

In contrast, the existing rules provide that the MP is appointed in relation to ‘the metering installation’ (eg see clause 7.3.2(a)(1)) and this has not changed in the draft rule. This approach appears to mean that the secondary settlement points at a customer’s connection point would need to have a single FRMP and MC but could have separate MPs.



We support this approach, however we request that the AEMC clarify that this is the intention and how it is given effect to in the relevant rules.

Maximum allowable error for type 8/9 meters: We note the following statement was made in the draft determination with regards to a type 8 meter:

Crucially, while this meter type has some lower service specifications, it requires a 2% level of accuracy to retain market confidence in the data being recorded at the secondary settlement point.

We agree with having the minimum accuracy level defined in the rules to provide market confidence on the accuracy of the metering data. However, we note that Item 7 under Table S7.4.3.1 allows AEMO to relax the maximum allowable error of a type 8 or 9 meter in the Metrology Procedures. We note that this allowance is not provided to AEMO for a type 4 meter. We believe the allowance provided to AEMO will erode market confidence therefore we suggest that Item 7 be removed and if there is a need to change the allowable error of a type 8 or 9 meter then this can be done via a rule change request.

Inspection of CT type 8/9 meters: Table S7.6.1.3 states that a CT type 8 or 9 meter is to be inspected every 5 years. We agree with this requirement if the meter was installed at a connection point (noting that a type 8 can only be installed as a secondary settlement point), however we believe this requirement is excessive for a secondary settlement point and suggest it is allowed to be inspected in accordance with an asset management strategy. We believe providing this flexibility will allow for more effective and efficient approaches depending on the uniqueness of each site.

Malfunctions and other compliance issues for inbuilt type 8 meters: There are potential complexities that need to be considered should type 8 meters be permitted to utilise a customer's internet connection (wifi or ethernet), rather than adopting the approach for a type 1 to 4 meter and using a communications pathway that is managed by the MP & MDP (typically a cellular modem). Many existing devices with in-built measurement capability utilise the customer's internet connection rather than a dedicated communications pathway. There may be upfront cost advantages to utilise an in-built measurement device that is paired with the customer's internet connection, but doing so creates a greater risk that the meter will lose communications, for example if the customer's internet connection fails or the customer changes its password. There may also be scenarios where the customer is incentivised to temporarily disconnect their device from the internet to avoid that device being curtailed in some form as part of a network and/or retailer initiated event at the secondary settlement point. Without a dedicated communications pathway that is managed by the MP/MDP, the customer can readily disconnect a device from the MP/MDP's control by unplugging the device's ethernet cable or turning Wi-Fi off temporarily.

The draft determination and draft rule do not currently address whether such a communications approach is permitted for type 8 meters, and if so how it will be treated for the purposes of various rules provisions including meter malfunctions, security of data and inspections.



For example, it is not clear how a loss of communications would be treated for the purposes of the MC's meter malfunction obligations under clause 7.8.10 and the changes the draft rule makes to clause 7.8.10(e) do not appear to be sufficient to address this issue.

It is unclear whether clause 7.8.10 requires a site visit to confirm if loss of communications is related to the meter or something external to the meter such as customer's internet connection. Having to perform a site visit to only identify issues with equipment that does not belong to the MP is inefficient and would increase the cost of type 8 metering services, which would need to be passed on through additional charges to the retailer and customer.

Clause 7.8.10(e) could alternatively be read as providing that where any type of malfunction occurs in relation to a type 8 meter provided by someone other than the MP, all that the MC is required to do is notify the FRMP that there is a malfunction and all the FRMP is required to do is to notify the customer that there is a malfunction and then deactivate the secondary settlement point if repairs are not completed within 20 business days. There does not appear to be any obligation to provide the customer information on the nature of the malfunction or investigate its potential cause. This interpretation would reduce costs to MCs and is probably the most practical solution. However, such a notification is likely to create significant confusion for customers as to what they need to do and who is responsible for rectifying the issue. The wording in this provision referring to 'a type 8 metering installation provided by the customer' is also unclear and is different to wording used in other similar clauses, noting that it is highly unlikely that the customer provided the meter itself.

It is also likely to be difficult for the MC and MP to comply with the security of metering installation and energy data provisions in clause 7.15 if another person has installed a type 8 meter that uses a communications pathway that is not controlled by the MC or MP. Exceptions are likely to be required to these provisions to address situations where a person other than the MP installed a type 8 meter.

Similarly, consideration should be given to physical inspection requirements for in-built measurement devices. Under such an example, the MP would probably not be able to access the meter to perform an inspection and would need to rely on remote monitoring.

We believe these scenarios require further consideration so that we can have an effective process for the industry and the customer. As discussed above, the AEMC may need to consider requiring any person who installs a type 8 meter to be accredited by AEMO and comply with certain obligations under the rules, or to enter into an agreement with the MP setting out the respective roles and obligations of the parties. We would be pleased to discuss this further with you.

Subtractive arrangement principle: The approach in the draft decision is constructed on the basis that a secondary settlement point is in a subtractive arrangement. However, there does not appear to be any requirement in the draft rules to use subtractive metering for secondary settlement points.

We believe a requirement to use subtractive metering for secondary settlement points should be added to the rules or as a requirement for AEMO to implement when defining the metrology requirements for a



secondary settlement point. This will avoid consideration of other arrangements without a further rule change, which will allow other potential impacts/required changes to the rules to be considered in the rule change process.

Subtractive arrangement should not negatively impact the customer: We believe a primary principle is that the subtractive arrangement should not negatively impact the customer. For example, if a customer had solar installed at the connection point and later installed an EV charger with an inbuilt type 8 meter then any energy generated by the solar and used by the EV charger should not be included in AEMO's settlement or the customer's network or retail charges because this is energy generated by the customer's CER and used within the customer's premises. We are currently working with AEMO to develop a workable solution to scenarios like this and suggest that the final determination considers what a workable solution may look like. We would be pleased to discuss this further with you.

Power quality data: The AEMC's draft decision for the 'Accelerating smart meter deployment' rule change was published after the draft decision for this rule change and is being consulted on in parallel to this rule change. The accelerating meter deployment rule change draft rule contains a number of amendments to the rules to introduce new obligations on MCs to provide DNSPs access to power quality data. The timing for the two rule changes is likely to mean that the accelerating smart meter deployment final rule will be made before the unlocking CER benefits through flexible trading final rule so the AEMC will need to consider the interaction between the two rules in its final decision for this rule change.

We believe there is some overlap between these rule changes and want to highlight that we do not believe power quality data should be provisioned for the secondary settlement point. This is because the secondary settlement point is behind the connection point, which is beyond the boundary of the DNSP's responsibility, and it will add additional cost to the type 8 and 9 meters. The accelerating smart meter deployment draft rule contains very little detail on the implementation of the power quality data obligations and leaves most of the details to AEMO procedures. However, the draft amendments to the rules refer to the provision of power quality data 'with respect to a metering installation' (eg see the draft amendments to clause 7.3.1). Our initial view is that this wording will be inappropriate if secondary settlement points are introduced and that power quality data should only be provided in relation to a connection point or that type 8 and 9 meters should be excluded from these obligations.

Responses to AEMC's questions: Our responses to the questions the AEMC raised in the draft decision are set out below:

Q1: we agree that 750 MWh per annum per connection point is an appropriate limit for a type 8 meter.

Q2: We believe that the rules should require a MP to be appointed to install an external type 8 or 9 meter, and require a MP to be appointed to maintain all type 8 and type 9 meters, both external and in-built. This is to ensure an appropriately qualified person is responsible for these meters.

Q3: We believe there should not be a frequency defined for AEMO to review specifications and procedures for type 8 and type 9 meters. Instead AEMO should perform a review when required, for example when there are any changes that may impact on metering then all meter types, including type 8 and 9, should be considered in a review.



Q4: Practical operational matters should be considered when aggregating multiple streetlights under a single NMI, for example the FRMP, MC and TNI should all be the same for the NMI

Commencement date

The proposed effective start date of 2 February 2026 does not appear workable for two reasons:

- The transitional provisions only require AEMO to publish amendments to its procedures by the effective date of 2 February 2026, with the rules commencing on the same day. This will not be workable as participants will require the finalised AEMO procedures in order to complete system and process changes and undertake testing to ensure compliance with the amended procedures.
- It will be challenging to meet a 2 February commencement date because industry testing will need to be completed in December and January, a period when most vendors and project teams only provide limited support. The alternative of bringing the industry testing before December 2025 will not be workable and would not allow sufficient time for design and build, particularly given that AEMO's updated procedures are needed first.

This change has a high reliance on AEMO updating their procedures. To allow industry to better plan and prepare for the required changes we suggest the rule (draft transitional rule 11.[xxx].2(a)) require AEMO must publish their final procedures by 9 months from the final determination date. This would allow 3 months for AEMO to review the final determination and prepare for consultation and 6 months for the formal consultation process. Also we suggest that the IEC also be obligated to review and if necessary update the B2B procedures by the same date.

Industry will then require time to implement system and process changes and undertake testing after the amended procedures are published before the rules commence. On this basis, we recommend that the rules commence no earlier than May 2026.

We would be happy to provide more detail and to work closely with the AEMC. If you have any questions regarding this submission please contact Dino Ou, Industry Development Lead on dino.ou@intellihub.com.au or 02 8303 4033.

Regards,

Jonathan Hammond
Executive General Manager, Strategy and Corporate Development
Intellihub