

(ACN 154 893 857)

SwitchDin Pty Ltd Level 1, Building B, 91 Parry Street, Newcastle NSW 2302

16 February 2023

Anna Collyer Chair Australian Energy Market Commission

Dear Ms Collyer,

RE: AEMC Consultation Paper on Unlocking CER Benefits through Flexible Trading

SwitchDin welcomes the opportunity to provide feedback to the Australian Energy Market Commission (AEMC) consultation paper on the proposed National Electricity Amendment (Unlocking CER Benefits through Flexible Trading) Rule.

SwitchDin is an Australian energy software company that bridges the gap between energy companies, equipment manufacturers and energy end users to integrate and manage energy resources on the switchDin's technology enables our clients to build and operate vendor-agnostic virtual power plants (VPPs) and microgrids, and to optimise performance across fleets of diverse assets. Founded in Newcastle NSW in 2014, SwitchDin operates in all states of Australia , including in leading -edge distributed energy projects like Simply Energy's national VPP, flexible export programs in South Australia (SA) and Victoria, Project Symphony in Western Australia (WA) and the Solar Connect VPP in the Northern Territory (NT), among others. SwitchDin works with distribution network service providers (DNSPs), electricity retailers, inverter original equipment manufacturers (OEMs) and aggregators to enable and utilise flexible export capability.

The AEMC consultation paper identifies many challenges and barriers that metering arrangements present to market participation by consumer energy resources (CER), including the specific issue of the measurement and billing framework for public lighting and other public infrastructure, and the more generic issues arising from metering specifications, and access to meter data.

SwitchDin supports the proposed reforms for the currently unmetered connection points for lighting and other public infrastructure. We recommend these reforms proceed **b** the next stage.

We do not believe the case has adequately been established for a rule change to enable a secondary settlement point *at this time*. The proposal seems premature and could prove to be unnecessary, depending on the results of the ongoing AEMC review of the regulatory framework for metering services. Introducing the secondary settlement point reforms prematurely would unnecessarily complicate the review of the metering arrangements for the primary settlement point. We recommend that the proposed secondary settlement point reforms be delayed until the results of the review of metering services at the primary settlement point are known.

The proposal would very likely create significant challenges for the implementation of policies and reforms such as the dynamic operating envelopes (DOEs), allocation of network charges, export pricing, and demand-based tariffs. The proposal has not adequat ely explained how primary and secondary settlement points would work together in the context of these policies and reforms.

A superior alternative to the potential new models outlined in the Consultation Paper would involve the following configuration:

- A market-aware, grid-aware home energy management system (HEMS) installed at the connection point,
- Local, real-time data from the smart meter available to the HEMS,
- Devices configured using the 's ubtractive metering' configuration,
- Control at the device level, managed by the HEMS, and
- A single financially responsible market participant (FRMP).

This approach would have the following advantages:

- Does not undermine or unnecessarily complicate other policy initiatives such as dynamic operating envelopes, allocation of network charges, export pricing, and demand-based tariffs,
- Allows AEMO or others to is sue curtailment instructions to devices,
- Allows optimisation of assets behind the meter for the greatest benefit to the customer,
- Avoids the complexity of multiple FRMPs,
- Avoids the need to separate the connection point from the settlement point(s),
- The only significant change required is to amend the National Electricity Rules to enable customers (and their authorised agents) to access data from the smart meter locally and in real-time and there is already an AEMC review considering this proposal.

We urge the AEMC in its Directions Paper to:

- Clearly define the problem to be addressed,
- Examine possible solutions to the problem, including the configuration involving a marketaware, grid-aware HEMS with access to local, real time data from the revenue meter and with control at the device level managed by the HEMS,
- Assess the merits and risks of the various possible solutions,
- Consider the costs and benefits and risks of the possible solutions from the perspective of the individual consumer and from a system-wide perspective.

The Directions Paper should not be published until the completion of the AEMC review of the regulatory framework for metering services.

These is sues are elaborated upon in our submission. Thank you for the opportunity to respond to these important is sues. I remain available for further discussions and inputs.

Best regards,

Andrew Mears, PhD Chief Executive Officer

Key Recommendations

1. Proceed with the proposed reforms for metering of public lighting and furniture

Unmetered connection points for lighting and other public infrastructure are a barrier to investment in efficiency improvements. The problem has been well articulated. There appears to be a sound case for moving from zero meters to one meter for public lighting and other public infrastructure.

2. Define the problem and the potential solutions against which this proposal can be compared

The rule change proposal jumps to the solution without adequately working through the problem. It lacks an adequate problem definition, and does not consider other potential solutions with which the flexible trading arrangements rule change proposal can be compared. This is further elaborated upon in the submission (see next page).

3. Consider development of flexibility services makets as an alternative solution

The lack of consumer interest in providing demand side flexibility might not be because customers don't have enough meters or enough Financially Responsible Market Participants (FRMPs) to engage in markets. It might be that there are not enough markets or financial signals to drive investment. Development of flexibility services markets might be more effective than adding multiple meters and multiple FRMPs.

4. Await the results of the AEMC review of the regulatory framework formetering services

A sound case has not been made for moving from one meter to two or more meters (and retailers) for a single connection point. The proposal is premature. The ongoing AEMC review of the regulatory framework for metering services should be allowed to reach its conclusion before policy makers consider the merits of enabling two or more meters.

5. Assess the implications of a pricing and access framework for local, real time meter data

In its Draft Report of the review of the regulatory framework for metering services, the AEMC outlined a proposal to engage with stakeholders to define a customer's right to local access to real-time data from the meter. Switch Dinstrongly supports this proposal. If implemented, it could render the flexible trading arrangements rule change proposal redundant. It would be unhelpful to proceed with the flexible trading arrangements rule change until after the proposal for a pricing and access framework for local, real time meter data has been properly considered.

6. Assess the implications of changes to the meter minimum specification

If the AEMC proceeds to define a customer's right to local access to real-time data from the meter, it will necess itate changes to the meter minimum specification. If the flexible trading arrangements rule change proceeds, it will very likely necess itate changes to the meter minimum specification. A review of the minimum meter specification is a foundational piece of work that should proceed even if the flexible trading arrangements rule change proposal does not proceed.

7. Consider the necessity and merits of flexible trading, assuming metering specifications are reformed and there is a pricing and access framework for local, real time meter data

The metering reforms under Power of Choice' have failed to deliver and it is understandable that industry and policy makers might look to 'workarounds' to make up for the policy's inadequacies. However, it would be preferable to address the inadequacies of the policy and regulatory framework for the primary meter first. If the AEMC review of the regulatory framework for metering services is unable to adequately address the inadequacies of the policy and regulatory framework then a 'workaround' policy like flexible trading arrangements might be a second-best option worthy of further consideration.

Problem Definition

The rule change proposal has not adequately defined the problem it is setting out to solve, the options for solving the problem(s) and why the flexible trading arrangements rule change would be the best of the available options.

The Consultation Paper seems to imply that a barrier to CER engaging in markets is that the electricity retailer or FRMP could be behaving in an anti-competitive manner to block demand-side initiatives by energy service providers. If this is one of the motivations for the rule change proposal, then the AEMC should:

- State explicitly that there are suspicions that anti-competitive behaviour is impeding the emergence of innovative business models,
- Establish whether there is evidence for anti-competitive behaviour of this nature,
- If established, consider the range of measure (including flexible trading arrangements) that could be taken to address the anti-competitive behaviour, and
- As sess which of the potential measures are preferred.

Responses to questions raised in the consultation paper

QUESTION 1: OPTIMISING AND OBTAINING VALUE FROM CER FOR CONSUMERS

What are stakeholders' views on the value that consumers could obtain from their CER, and what incentives may be needed for consumers to take up opportunities that are or may become available?

The absence of a market or price signal for flexibility servi ces is the most significant barrier to CER providing network services. Aggregators can provide services to the Australian Energy Market Operator (AEMO) such as Frequency Control Ancillary Services (FCAS) and Reliability and Emergency Reserve Trader (RERT),but there is no financial incentive for provision of network services. Adding multiple meters and multiple FRMPs will not address the absence of a flexibility services market. Without an incentive it is difficult to understand why customers would be motiv ated to provide flexibility beyond the minimum requirements set in grid connection rules.

The current regulatory framework for metering services inhibits the value consumers can obtain from CER. However, it would be a mistake to compare the potential benef its of the flexible trading arrangements proposal with the status quo for metering, because the status quo is under review and could change. The flexible trading arrangements proposal should be compared with the policy and regulatory situation at the completion of the AEMC review of metering services not with the status quo when we are midway through a review.

Would flexible trading enable consumers to optimise their CER in ways that align with their motivations and preferences?

Multiple meters *could* enable consumers to optimise their CER. However, reforms to the regulatory framework for the primary meter could also achieve the same result. The rule change proposal should consider the merits of addressing the issues with the metering framework by reforming the rules and requirements for the primary meter versus leaving the regulatory framework for the primary meter unchanged and allowing a second meter.

It is unclear whether the proposed arrangements would work in practice and, if they do, whether that would align with consumers' motivations to optimise their CER. For example, it is unclear how separate the controlled and uncontrolled resources are intended to be. If they are completely separate, then controlled resources will be unable to supply householdload. This would not align with the motivations and preferences of most consumers for whom self consumption is the primary financial motivator for CER. On the other hand, if the controlled and uncontrolled resources are not completely separate then the battery state of charge and setpoint will still be influenced by the local load. If use of multiple meters and multiple FRMPs comes at the cost of preventing self-consumption then it is unlikely to align with the motivations and preferences of the vast maj ority of CER owners. The review should therefore consider the costs and benefits of the proposal from the perspective of the individual customer and not just its system -wide costs and benefits.

Is there additional value for residential, small businesses, and C&I consumers that could be optimised by the introduction of some form of flexible trading, including the model proposed by AEMO?

Yes. For example, the flexible trading arrangements proposal could enable coordination of CER within a feeder in a distribution network. This currently requires sufficient volume from a single FRMP (typically a retailer) to be able to make an impact. In a competitive retailing environment there are so many retailers that creating volume at a sufficient level may not be feasi ble. Consequently, trials of coordinated CER optimisation are currently limited, for the most part, to precinct level coordination, where all assets can be controlled. The flexible trading arrangements proposal would allow the DNSP, or a third party on beh alf of the DNSP, to control CER on a particular feeder, giving much higher participation rates and allowing a significant impact to be made.

There could be additional benefits for customers if rapid (e.g., fiveminutely) switching between meters

is permitted. Will generation and load be locked in when signing up to a new provider, or would daily, hourly or five-minute switching be permitted?

OUESTION 2: EXISTING AND FUTURE CER PRODUCTS AND SERVICES

Could the introduction of flexible trading create an environment that fosters the development of more innovative products and services that support consumers to optimise and obtain value from their CER?

Yes, it could. However, the hoped-for results of the proposed reforms should not be compared to the current situation in which the regulatory framework for metering services is an inhibitor of innovation. There is an ongoing review of the regulatory framework for metering services. We should not proceed as though we are assuming that the review of metering will fail. We should work towards a successful review and only contemplate the flexible trading arrangements proposal if the results of the AEMC review of metering services fail to address the negative impacts of the metering regulations on consumers and their use of CER.

QUESTION 3: BARRIERS TO ACCESSING CER VALUE

Does having one connection and settlement point prevent consumers from accessing the full value of their CER?

The current regulatory framework for metering services, which includes having one connection and settlement point, inhibits consumers from accessing the full value of the CER. However, it would be a mistake to jump to the conclusion t hat because the current framework involves one meter and has failed, the solution is to allow multiple meters. Value from optimisation can also be achieved using a single meter if the regulatory framework for metering services and the minimum metering speification are reformed to enable customers to access local, realtime data from their meter.

There appears to have been a failure to consider the flexible trading arrangements proposal against other plausible alternatives.

QUESTION 4: OPPORTUNITIES FORULTIPLE SETTLEMENT POINTS WITH ONE FRMP

Could retailers provide greater value to consumers by adding extra settlement points at premises? Possibly, but the same outcome could be achieved with sensible reforms to the regulatory framework for the primary meter.

Are there other regulatory barriers preventing these offers?

The main regulatory barrier inhibiting consumers' use of CER is the regulatory framework for the primary meter and the absence of financial incentives or a market for flexibility services.

QUESTION 5: ENGAGING MULTIPLE FRMPS AT PREMISES

Should the rules be changed to make it easier for consumers to engage with multiple FRMPs at premises?

The case for multiple FRMPs has not been adequately made. While it is clear that the current registory framework for metering services is inadequate, it is unclear what the flexible trading relationships proposal would achieve that cannot be achieved by reforming the current regulatory framework for the primary meter.

Are there additional benefits or ways in which consumers could receive value through contracting with multiple FRMPs?

Contracting with multiple FRMPs could help to overcome some of the inadequacies of the current regulatory framework for metering services. However, it would be preferable to try to improve the

regulatory framework for the primary meter, rather than introducing a new policy of dubious merit to overcome the problems with the current policy.

Of the challenges identified, would any benefit from a regulatory solution? If so, what are the potential options?

Yes. The challenges would benefit from reform of the regulatory framework for the primary meter. This should occur before adding new layers of complex regulations for multiple meters.

Are there any additional challenges presented by having multiple FRMPs at one site?

If FRMPs are to be responsible for all network charges does this create a disconnect between the secondary party, operating the controllable portion, and the FRMP in the cases of:

- Time of Use (TOU) network charges, and
- Feed-in, TOU feed-in and future potential distribution level import/export tariffs?

It is unclear how export (from secondary meter) would be accounted for in relation to feed-in tariffs. Is the secondary meter party responsible for feed-in for all energy, or just the part that is exported to the grid through the primary meter (as some will cover local load)?

QUESTION 6: MODELS FOR FLEXIBLE TRADING

How significant are the challenges to establishing an additional con nection point, and are there regulatory changes that could be made to overcome them?

The most significant barrier is that some distribution networks do not allow multiple connection points. The Commission could clarify whether this is within the remit of distribution networks to decide upon and, if so, whether changes to regulations should be made to prevent DNSPs from doing so.

Would parallel settlement points behind a single connection point be an efficient option? If so, what factors have changed sincethe Commission's decision on this in 2016?

It would be helpful for the Commission to assess the costs, benefits and risks of all the options that appear to be available to overcome the inadequacies of the regulatory framework for metering services. These could include:

- Amending the regulations to address the inadequacies of the current regulatory framework,
- Leaving the current regulatory framework for the primary meters as it is and implementing the flexible trading arrangements proposal, and
- Leaving the current regulatory framework for the primary meter as it is, not implementing the flexible trading arrangements proposal, and address barriers to establishing an additional connection point,
- Amending the regulations to address the inadequacies of the current regulatory framework and then consider implementing a modified version of the flexible trading arrangements proposal in the context of perceived inadequacies remaining in the amended regulatory framework for metering services.

What changes would be required to allow multi-element metering for multiple FRMPs, and what would be the benefits?

It is unclear what benefits there would arise from the use of multi-element metering for multiple FRMPs. It would present a barrier to vehicle-to-home, for example, if the EV and its charger are placed on one element while the bulk of the load remains on a separate element. Self-consumption is one of the main financial benefits of generation and storage behind the meter. If the option of self-consumption were removed in the cause of making it simpler to participate in exports to the grid, the consumer may be worse off.

How does AEMO's secondary settlement point proposal compare to the other potential options?

A superior alternative to the options outlined in figure 3.1 would involve the following configuration:

- A market-aware, grid-aware home energy management system (HEMS) installed at the connection point,
- Local, real-time data from the smart meter available to the HEMS,
- Devices configured using the 'subtractive metering' configuration,
- Control at the device level, managed by the HEMS, and
- A single FRMP.

This approach would have the following advantages:

- Does not undermine or unnecessarily complicate other policy initiatives such as dynamic operating envelopes, allocation of network charges, export pricing, and demand-based tariffs,
- Allows AEMO or others to is sue curtailment instructions to devices,
- Allows optimisation of assets behind the meter for the greatest benefit to the customer,
- Avoids the complexity of multiple FRMPs,
- Avoids the need to separate the connection point from the settlement point(s),
- The only significant change required is to amend the National Electricity Rules to enable customers (and their authorised agents) to access data from the smart meter locally and in real-time and there is already an AEMC review considering this proposal.

Are there any other models for the Commission to consider?

Yes. A market-aware, grid-aware HEMS at the connection point with access to local, real time data from the smart meter can deliver the benefits of the flexible trading arrangements proposal without the complexity of introducing multiple settlement points with multiple FRMPs.

The Commission should continue with its review of the regulatory framework for metering services. It should use that review as an opportunity to address the shortcomings of the metering framework.

What implementation costs need to be considered when examining these models?

The opportunity costs for customers should be considered in the implementation costs. For example, the use of multi-element metering for multiple FRMPs could facilitate market participation by an EV or battery on the secondary circuit at the cost of preventing use of energy storage to supply local load. This could make the proposition unattractive for customers who extract the most value from local generation and storage through self-consumption.

QUESTION 7: ASSESSMENT CRITERIA

Do you agree with the proposed assessment framework?

The proposed assessment framework appears to be reasonable. In particular, we support the statements that the Commission will "consider the interaction of this rule change with other reforms already underway". The Consultation papers hould have elaborated on how the process to consider the proposed rule change would interact with the current review of the regulatory framework for metering services.

Are there additional principles that the Commission should consider as we make our decision, or principles included here that are less relevant?

Yes. The assessment framework should consider what is a logical sequencing for policy reform proposals. This should involve addressing the root cause of barriers created by inadequate policies as a first step prior to layering new regulations in an attempt to address problems with old regulations.

QUESTION 8: COMPETITION ISSUES WITH SECONDARY SETTLEMENT POINTS

What are stakeholders' views on whether the proposal would positively or negatively affect competition between FRMPs in this model (for example through a difference in regulatory costs), and could it cause anti-competitive behaviour?

The presence of multiple FRMPs and multiple meters per customer will provide fertile ground for disputes between FRMPs. This could be an example of anti-competitive behaviour or it could be the product of genuine disputes. The Commission should outline the d ispute resolution framework to address the disagreements that would inevitably result from this proposal.

Are there regulatory solutions that we should consider to minimise those risks?

Yes. There would need to be very clear guidance on the responsibilities of the multiple FRMPs serving a single customer. This would need to include a framework for dispute resolution when disputes between FRMPs inevitably arise.

QUESTION 9: ALLOCATING NETWORK COSTS

How should network costs be allocated for premises withsecondary settlement points?

If the primary FRMP is responsible for network charges, there would be a disconnect between the secondary FRMP, which operates the controllable generation and load, and the primary FRMP, which would transact network charges, feed-in tariffs and export charges.

The AEMC needs to explain how DOEs would apply. Would they apply at the primary settlement point? At the secondary settlement point? Would there potentially be different DOEs for each settlement point? Could those different DOEs come from different sources?

QUESTION 10: INFORMATION AND COMMUNICATION REQUIREMENTS FOR SECONDARY SETTLEMENT POINTS

What are stakeholders' views on the need to include provisions in the rules regarding explicit information or communication requirements for secondary settlement points? For example requirements for communication and information between the:

- DNSP and the FRMP for the secondary settlement points (e.g about network support or safety requirements, including those related to jurisdictional network safety),
- and/or 'primary' and 'secondary' FRMPs?

Would local, real time data from the primary meter be available to the secondary FRMP? Would local, real time data from the secondary FRMP also be available to the primary FRMP? If not, how would real time coordination of generation, consumption and storage behind the connection point occur? Would DOEs and demand-based tariffs continue to apply at the site level or is it envisaged that DOEs and demand-based tariffs would apply to each circuit separately?

QUESTION 11: POTENTIAL FOR LIMITATIONS APPLIED AT SECONDARY SETTLEMENT POINTS

Is there a need for limitations at the secondary settlement point?

The need for limitations would be influenced by how AEMO and others propose to use the secondary connection points in future. For example, if AEMO proposes to put a remote on / off switch on every secondary settlement point so that it can switch off all generation and storage when it needs to then it would be unwise to allow life support equipment to be connected to the secondary settlement point.

A limit on the capacity of CER on the secondary settlement point could help to address concerns that the secondary FRMP will "carve out" business opportunities for the primary FRMP, leaving them with the network costs.

If so, how could these be applied? What are your views on doing so using requirements for the metering coordinator as proposed by AEMO?

The proposal to require metering coordinators to seek authorisation for everything connected to the secondary settlement point would give AEMO an unprecedented level of regulatory control over how customers connect devices.

QUESTION 12: IMPLEMENTATION ISSUES FOR SECONDARY SETTLEMENT POINTS

How should the NMI for a secondary settlement point be established?

We should not establish NMIs for secondary settlement points. This is an unnecessary complication. A superior alternative is:

- A market-aware, grid-aware HEMS installed at the connection point,
- Local, real-time data from the smart meter available to the HEMS,
- Devices configured using the 'subtractive metering' configuration,
- Control at the device level, managed by the HEMS, and
- A single FRMP.

How could market settlement be best enabled for secondary settlement points? Would subtractive settlement lead to issues in practice, for either the primary or secondary FRMP?

If local, real time data from each FRMP's meter is not available to the other FRMP, there are likely to be complex disputes over subtractive settlement. Which meter will be the 'source of truth'? Will the secondary FRMP be required to always be subservient to the metering of the primary FRMP? How could this be challenged or verified in case of disputes? This could be particularly pertinent in the case of secondary FRMP participating in Frequency Control Ancillary Services (FCAS) markets. Would the response of the secondary FRMP be limited or mediated by the primary FRMP? If so, who would be responsible in the case of failure to deliver FCAS services?

Do stakeholders support AEMO's proposed approach to settlement for periods of grid isolation? Are both physical and regulatory restrictions required to address this issue?

It is reasonable to expect that customers would not be paid for energy supplied from the secondary settlement point to the site during times of grid is olation. However, it should not be necessary to prohibit flows from the secondary settlement point to the rest of the site during grid is olation in order to achieve this. Many customers purchase a battery specifically for backup during grid is olation. It would be regulatory overkill for AEMO to effectively ban battery backup as a solution to settlement anomalies.

Should the rules forbid the use of embedded networks to establish secondary settlement points within an end user's electrical installation?

If there are significant is sues with the current regulatory framework for embedded networks it would be preferable for them to be addressed through a review undertaken by the Commission.

QUESTION 13: CONSUMER PROTECTIONS

What are the potential consumer risks and protections required under AEMO's proposal for secondary settlement points, and should they be handled as proposed by AEMO?

Are there any other issues the Commission should consider in relation to protections under flexible trading?

The flexible trading arrangements proposal raises many complex is sues for consumer protection. We have already noted that multiple FRMPs and multiple meters per customer would create fertile ground for disputes between FRMPs. For example, how would consumer rights be protected if the FRMPs are in dispute and it is unclear which FRMP bears responsibility for addressing a consumer's issues? Will

the secondary FRMP be required to take into account the consumer's particular retail tariff and the primary FRMPs particular network tariff structure? What consumer protections would be put in place to prevent a secondary FRMP from maximising their revenue, at the detriment of the consumer? While metering is separated and subtracted from each other, if doesn't necessarily consider the change in cost to the customer due to:

- Time of use of consumption,
- Change in level of self-consumed energy vs feed-in due to active management of battery, and
- Demand-based tariffs

It would be helpful to understand how dynamic the switching between primary and secondary meter is intended to be. Is it expected to be just when signing up with a new provider, daily, or could it be as granular as every 5 minute interval or active control event?

QUESTION 14: METERING REQUIREMENTS FOR SECONDARY SETTLEMENT POINTS

Are current NEM metering installation requirements likely to limit the uptake of secondary settlement points and the associated benefits?

Yes

If changes are needed, what of the following minimum requirements need to be set in the NETRIFARMENT participation and settlement at secondary settlement points?:

- A physical display at the metering point
- Minimum service specifications
- Remote communications
- Accuracy and data requirements

The minimum service specifications would need to be reviewed to ensure that the multiple FRMPs can access data from each other's meter in real time.

Are there any other service or technical requirements that need to be specified for metering installations at secondary settlement points in the NER?

There could be additional requirements, depending on the markets in which the secondary FRMP intends to participate.

Should changes be made to the accreditation and registration of metering providers and metering data providers for secondary settlement points?

Local, real time data will need to be available from meters. There would need to be a review of who can undertake work involving meters. The current framework would add significant expense because of the need for staff of multiple metering providers and others to either be on site simultaneously or make multiple visits.

QUESTION 15: MINOR ENERGY FLOW METERS FOREUST SECONDARY SETTLEMENT POINTS

Should the requirements that apply to type 4 metering installations be amended to create a new minor energy flow metering installation, or are there more flexible regulatory approaches to enable market settlement for secondary settlement points?

There should be a review of minimum metering specifications following the completion of the AEMC review of the regulatory framework for metering services.

Are there other changes to requirements for type 4 metering installations that should also be cidesed for a minor energy flow metering installation?

Yes. Real time data from each FRMP should be available to the other to enable optimisation of generation, load and storage behind the meter and to assist with the avoidance of disputes between FRMPs.

What different obligations will need to be placed on metering providers and metering data providers for minor energy flow metering installations? Should these obligations be set out via AEMO's proposed approach of new categories in the NER?

Metering providers should be obliged to provide the customer (and their authorised agents) with access to local, real time data from the meter. If this requires employees of multiple companies to be on site simultaneously (or to make multiple visits) the costs of installation will be prohibitive.

What would be an appropriate inspection and testing regime for minor energy flow metering installations?

Policy makers should aim to drive the uptake of a digital compliance regime so that, wherever practicable, remote inspection and testing replaces the need for an imperson site inspection.

QUESTION 16: MINOR ENERGY FLOW METERS FOR STREET FURNITURE

Should minor energy flow meters be able to be used for street furniture?

Yes. There is a sound case for moving from zero mets to one meter for street lighting and other public infrastructure. The minimum meter specifications required for these applications should be considered as part of a broader review of minimum meter specifications.

If so, should DNSPs be allowed to act as metering coordinator, metering provider, and metering data provider for street furniture under certain circumstances?

Part of AEMO's argument for allowing street furniture to use minor energy flow meters is that it would enable access to competition. However, it is unclear whether this would occur if DNSPs are allowed to act as metering coordinator, metering provider, and metering data provider for street furniture. If the part of this rule change related to street furniture proceeds to the next stagethe AEMC should consider what would be the best governance framework to enable competition and the other benefits cited as arguments in favor of this reform.

Would any other changes to the rules be required in relation to metering for street furniture?

Implicit in this proposal is the need for a review of minimum metering specifications. The recommendations of the AEMC review of the regulatory framework for metering services might also necessitate a review of minimum metering specifications. The logical sequencing of the reforms would be:

- 1. Complete the AEMC review of the regulatory framework for metering services.
- 2. Assess whether the recommendations of the AEMC review of the regulatory framework for metering services necessitate a review of the minimum metering specifications.
- 3. Assess whether the recommendations of the AEMC review of the regulatory framework for metering services make the flexible trading arrangements rule change proposal redundant.
- 4. If the AEMC review of the regulatory framework for metering services does not render the flexible trading arrangements rule change proposal redundant, then proceed with the flexible trading arrangements rule change proposal.
- 5. Undertake a review of the minimum metering specification in the context of the recommendations of the AEMC review of the regulatory framework for metering services and the AEMC decision on the flexible tading arrangements rule change proposal.