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Dear Ms Curtis,

**Ausgrid submission to AEMC's Unlocking CER benefits through flexible trading
Consultation Paper (Consultation Paper)**

Ausgrid is pleased to provide this submission to the Australian Energy Market Commission (**AEMC**) in response to the Australian Energy Market Operator's (**AEMO**) rule change proposal: Unlocking Customer Energy Resources (**CER**) benefits through flexible trading, also referred to as Flexible Trading Arrangements (**FTA**). Ausgrid is a distribution system operator (**DSO**) which operates the shared electricity network that powers the homes and businesses of more than 4 million Australians living and working in an area that covers over 22,000 square kilometres from the Sydney CBD to the Upper Hunter.

DSO is an evolution of our role as a distribution network service provider (**DNSP**), marking a greater focus on the end-to-end energy system and facilitating active customer participation in markets to reduce costs for everyone. With more active customer and network energy resources connected to distribution networks, DSOs can dynamically manage and optimise network capacity. This allows distribution networks to support the clean energy transition at a lower cost and facilitate more efficiencies than would otherwise occur.

The electricity network industry's DSO vision recognises the vital role for flexible CER in energy markets to ensure an affordable net zero energy system. Ausgrid supports initiatives that aim to increase CER participation, customer choice and retail market competition. Project Edith¹ is one example of how Ausgrid is leading with this ambition. We are making it easier for customers with CER to be rewarded for providing network support and are removing barriers to their efficient participation in markets.

We understand that the policy intent for this rule change is to increase flexible trading and further unlock value by enabling residential and business consumers to segregate out their flexible resources. We support the rule change's policy intent and the proposed rule change shows that the AEMO and AEMC share the electricity network industry's DSO vision to increase competition and remove barriers to CER participation. While this submission outlines why we are not convinced that the approach proposed in the rule change is the best way to achieve this ambition, we look forward to working constructively with the AEMC and its stakeholders on alternative options to deliver an affordable net-zero-emissions energy system.

¹ Project Edith is a rapid demonstration that aims to showcase how the grid can facilitate technology and green energy solutions (like Virtual Power Plants (VPPs)) to participate in energy markets while staying within distribution network capacity limits – see <https://www.ausgrid.com.au/About-Us/Future-Grid/Project-Edith>

Our primary interest is to ensure that CER can access network value as well as market value. We are concerned that the network pricing proposal in the rule change may hinder this. While we are willing to explore alternative network pricing solutions to support flexible trading, we anticipate significant complexity and cost to upgrade systems to manage this. We are not yet convinced that the benefit unlocked by the proposed solution will justify these costs.

Given the many changes to the regulatory framework, systems and process that will be required to facilitate the clean energy transition, we recommend that the AEMC's consider aligning synergistic projects and reviews. For example, the AEMC's Review into the metering framework (**Metering review**) will accelerate smart meter rollout and the Energy Security Board (**ESB**) is pursuing reforms to make data easier to access for all, which in turn increases the opportunity for new trading arrangements and understanding its benefits in the National Electricity Market (**NEM**). Another example could be to conduct regulatory sandboxes to trial CER and FTA adoption where there are greater barriers to access such as at multiple occupancy sites.

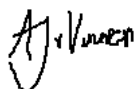
Attachment A outlines our key feedback in response to the Consultation Paper and are summarised as follows:

1. The AEMC should seek further evidence to back the claims of benefits for customers and aggregators of multiple retailer settlement points.
2. Customers should have the ability to access cost-reflective network pricing for flexible CER, supporting efficient investment and market participation by signalling the costs of using the network.
3. The proposal limits the opportunity for CER participation in network support and retains barriers to market participation, impacting its ability to achieve its policy intent to unlock CER benefits.
4. The party with the most control over flexible CER should have the responsibility for adhering to operating envelopes.
5. Applying network pricing and operating envelopes to secondary financially responsible market participants (**FRMP**) will add costs and complexity to industry operations which will affect customer affordability.
6. We support government, market body and industry trials of minor flow energy meters to test the benefits and challenges of integrating minor energy flow meters into the existing framework.
7. We support greater innovation in flexible trading with a single FRMP.

Attachment B provides our responses to selected consultation questions.

We welcome the opportunity to discuss alternative solutions to that proposed in this rule change with the AEMC and AEMO that seeks to meet the policy intent. Please contact Jonathon Dore, DSO Services Lead at jonathon.dore@ausgrid.com.au.

Regards,



Alida Jansen van Vuuren
Head of DSO

Attachment A: Key response to AEMC Consultation Paper

1. **The AEMC should seek further evidence to back the claims of benefits for customers and aggregators of multiple retailer settlement points**

We recommend that if the AEMC chooses to proceed with a secondary FRMP approach that it should conduct research with customers to confirm that they would, in significant numbers, take up multiple offers from multiple retailers. Our understanding is that our customers value simplicity. We acknowledge that it is difficult to obtain direct evidence of customer behaviour in a future energy system. Instead, we must project the values of today's customers onto the opportunities of tomorrow.

The Consultation Paper notes the lack of examples of participation under the current arrangements, for example, through aggregator partnering with retailers or becoming the FRMP for the whole connection. This is likely due to the nascent aggregated services industry and the limited value currently available. We expect this opportunity will improve over time and may be better supported through a single-FRMP model (see **Item 7** below). We note that the submissions from aggregators may provide more evidence on this point.

2. **Customers should have the ability to access cost-reflective network pricing for flexible CER, supporting efficient investment and market participation by signalling the costs of using the network**

The rule change's proposal for network pricing to apply only to the primary settlement point challenges recent work to embed cost-reflective pricing within the NEM. Our engagement with customers for our 2024-29 regulatory reset showed some customers supported the need to unlock barriers to and prioritise cost-reflective pricing as a tool to enable greater CER investment within the NEM. Cost-reflective pricing enables DSOs to manage network costs by encouraging customer flexibility. Networks are rapidly moving towards cost-reflective pricing structures, such as time-of-use or demand tariffs, on an opt-out basis, and why Ausgrid is developing dynamic network pricing in Project Edith.

Where there is a single FRMP with control over a customer's flexible devices, it may control those devices in a way that reduces network charges. Savings can be shared between the FRMP and the customer, depending on their retail agreement. With the flexible trading proposal, if network pricing is applied to the primary FRMP, but a secondary FRMP has control over the flexible devices, then the latter will have limited incentive to respond to network pricing. This could result in higher costs for the customer, due poor optimisation with respect to network signals, and a less-efficient network.

The Consultation Paper notes that it is the customer who pays either way. We understand this means that a customer could be motivated to engage a secondary FRMP who offers to manage network costs applied to the primary FRMP. We note that this would require real-time visibility of primary meter data as well as sharing of the primary FRMP pricing plan. The secondary FRMP would then need to make the customer aware of the impact they have made on the primary FRMP bill so that the customer knows they are getting value from this arrangement. The high level of engagement and customer education required to understand this value will, in our view, limit it to a niche segment of customers.

3. The proposal limits the opportunity for CER participation in network support and retains barriers to market participation, impacting its ability to achieve its policy intent to unlock CER benefits.

A key part of the electricity networks' DSO vision is to ensure flexible CER are incentivised to and rewarded for using the distribution network efficiently. Cost-reflective network pricing is a significant enabler for this – including negative prices for network support; i.e., paying customers to either consume or export energy when and where it helps to avoid or defer network augmentation. Ausgrid is currently demonstrating an advanced version of this approach and how it aids market participation in Project Edith. As discussed above, if flexible CER is not exposed to network pricing, then aggregators managing those devices will not have easy access to network support opportunities signalled through pricing. This would result in a lost revenue opportunity for participating customers, and a more expensive network for everyone, due to the need for alternative demand management or network augmentation projects.

Project Edith also facilitates market participation by removing pricing barriers. While typical static network pricing requires averaging over time and place, dynamic network pricing can represent actual capacity availability for a connection. This can result in low prices much of the time, allowing customers (through aggregators) to increase their participation in energy markets. If network pricing is only applied at the primary settlement point, as proposed under a multi-FRMP model, the secondary FRMP will be hindered from participating in dynamic network pricing. Less cost-reflective, static network pricing will then remain as a barrier to market participation.

4. The party with the most control over flexible CER should have the responsibility for adhering to operating envelopes

The proposal for operating envelopes (static or dynamic) to apply at the connection point, administered through the primary settlement point, could cause the primary FRMP to have all responsibility but negligible ability to meet the requirements.

Export limits, for example, are aimed at maximising overall exports within the hosting capacity of the network, while maintaining a fair allocation across customers. Flexible CER allows customers to respond by maximising their self-consumption of generated electricity, thus minimising curtailment and energy costs. The ability to respond optimally to export limits is therefore in the hands of the secondary FRMP and they must also be made responsible for this.

If the AEMC decides to pursue a multi-FRMP model, it may require a mechanism to enable a secondary FRMP to assume responsibility for operating envelope requirements on behalf of the customer. In the case of multiple secondary FRMPs, co-ordinating CER to adhere to operating envelopes will become complicated. It is likely that a master device would be needed, over which only one FRMP will have control. A suitable compliance, enforcement and reporting framework would be required for this as well.

5. Applying network pricing and operating envelopes to secondary FRMPs will add costs and complexity to industry operations which will affect customer affordability.

If the AEMC determines to proceed with the multi-FRMP model, it will add costs to industry operations which will in turn further affect customer affordability. These costs include systems changes so that DSOs can apply pricing and DOEs to the secondary settlement point. One way to do this would be for all primary and secondary NMI to be represented in our systems and data provided to us with appropriate adjustments applied.

We would need to carry out further analysis before we could propose a workable architecture for our systems, and their integration with the rest of the industry, including energy retailers.

While these changes are possible, the cost and time required for implementing them is expected to be significant. Additionally, since these costs may be recovered from all customers, those who do not participate in flexible trading multiple settlement points may have to pay for capabilities required only for the few who do.

We recommend that AEMC staff consider submissions received from its Metering Review to understand the costs to customers and coordination and cost challenges for industry with regard to metering installation.

6. We support government, market body and industry trials of minor flow energy meters to test the benefits and challenges of integrating minor energy flow meters into the existing framework.

Ausgrid supports the proposed rule change's intent reduce of the cost, size and requirements of energy meters in some circumstances. For example, we agree that a display may be redundant where the customers have alternative access to data such as through a smart phone application. Therefore, we support investigating a new category of meter, ideally as a separate trial project. This could occur through exemptions or applying for a regulatory innovation sandbox, to validate the value and cost assumptions prior to making a rule change.

We note that currently unmetered connections for applications such as streetlighting present an opportunity for energy efficiency and innovation. However, there is potentially significant cost and complexity involved in applying minor flow energy meters to these connections including, installation, connections processes, pricing, compliance, data management, aggregation to virtual NEMs. We recommend conducting trials to better understand an appropriate model for such applications before assessing the cost and benefit of this approach. We look forward to working with the AEMC and stakeholders to explore this opportunity.

7. We support greater innovation in flexible trading with a single FRMP.

We agree that some customers may be more willing to take up innovative retail products if they apply only to some devices. While the multiple-FRMP model proposed in the Consultation Paper has some elegance, it unfortunately adds too much complexity when much of the value may already be able to be captured in a single-FRMP model. This would resolve many of the concerns we have raised in the items above.

Ausgrid is also exploring how we can evolve controlled-load tariffs towards flexible load pricing that allows for greater co-optimisation between customer needs, retailer/aggregator needs and network needs. This is similar to the multi-element metering model outlined in the Consultation Paper, except that there is only one settlement point and one FRMP.

We note that electric vehicle charging requires a new paradigm as a mobile load. It also presents new opportunities for participation in markets and in network support due to its size, storage capacity and flexibility. We look forward to working the AEMO, the AEMC and stakeholders to explore further ideas to make the most of this opportunity while to delivering a simple but valuable experience for customers.

Attachment B: Brief answers to selected consultation questions

Question	Sub-question	Response
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?	While most of the value today is behind the meter, we see increasing value of market participation and network support. More cost-reflective network pricing is needed to remove barriers to market participation and to enable efficient network support at scale. We are demonstrating this through Project Edith.
	Would flexible trading enable consumers to optimise their CER in ways that align with their motivations and preferences?	No. We think customers (and service providers such as solar retailers/installers) will not accept the level of complexity that is required for the flexible trading proposal.
	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?	We think that further innovation in pricing and optimisation could be pursued in a single-FRMP model.
QUESTION 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?	We expect the complexity will limit the uptake of such products and therefore limit the innovation by service providers.
QUESTION 3: BARRIERS TO ACCESSING CER VALUE	Does having one connection and settlement point prevent consumers from accessing the full value of their CER?	Having a single settlement point does limit value to some extent. If the benefit of additional settlement points were to overcome the additional cost and complexity <i>and</i> ensure that cost-reflective pricing and operating envelopes are applied to flexible CER, then we would be supportive, but we do not think this is possible.
QUESTION 4: OPPORTUNITIES FOR MULTIPLE SETTLEMENT POINTS WITH ONE FRMP	Could retailers provide greater value to consumers by adding extra settlement points at premises?	As capabilities grow and market conditions add opportunity for flexible CER, we expect that more aggregators and retailers will partner to realise this value for customers.
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?	We do not expect that the benefit of multiple-FRMP relationships will outweigh the cost and do not see evidence that customers want this.

Question	Sub-question	Response
QUESTION 6: MODELS FOR FLEXIBLE TRADING	How significant are the challenges to establishing an additional connection point, and are there regulatory changes that could be made to overcome them?	<p>Apart from regulatory barriers, there are several reasons why multiple connection points or not preferred. These include:</p> <ul style="list-style-type: none"> • Safety – confusion over whether a premises has been isolated or not • Cost – duplication of service lines, fusing • Multi-occupancy sites – may lack the room or require additional approvals and coordination • Data and billing systems – Adjustments to accommodate multiple NMIs per customer as discussed in Item 5 of Attachment A.
	Would parallel settlement points behind a single connection point be an efficient option? If so, what factors have changed since the Commission’s decision on this in 2016?	This would likely be better than multiple connection points as it avoids unnecessary physical duplication, however it would otherwise retain most of the complexity discussed in Attachment A . In addition, rewiring would be required if a customer chose to consolidate their loads, so it is likely more problematic than the subtractive metering approach.
	What changes would be required to allow multi-element metering for multiple FRMPs, and what would be the benefits?	Currently, network charges are billed to FRMPs based on a NMI. Taking a single register and applying it to a different FRMP would result in duplicate NMIs in our systems or require a dummy NMI to represent the secondary loads. This would require several changes, as discussed in Item 5 of Attachment A .
	How does AEMO’s secondary settlement point proposal compare to the other potential options?	While Ausgrid does not support the potential options, of the four models presented, the secondary settlement proposal our preferred option. However, this option would need to be adapted to ensure cost-reflective pricing and operating envelopes are applied to devices behind the secondary settlement point. We note that this option would still incur excessive cost and complexity.
	Are there any other models for the Commission to consider?	The commission should consider further innovation in single-FRMP models and work closely with the AEMC’s team working on the review of the regulatory framework for metering services to find alignment and opportunities under the single-FRMP model via accelerated smart meter rollout, including considering alternative approaches proposed in the submissions to the Draft Report.
	What implementation costs need to be considered when examining these models?	Customer and industry education and information awareness raising campaigns, additional customer protections, training for service providers, billing systems upgrades for networks and retailers, resources for handling data with integrity

Question	Sub-question	Response
		issues, disputes, compliance and enforcement, updates of various standards and guidelines, metering costs, resources to manage with additional customer queries
QUESTION 7: ASSESSMENT CRITERIA	Do you agree with the proposed assessment framework?	Yes
QUESTION 9: ALLOCATING NETWORK COSTS	How should network costs be allocated for premises with secondary settlement points?	The NER pricing principles should guide allocation of network costs. Cost-reflective pricing must be passed through to any secondary settlement point and compliance, enforcement and reporting should be considered to ensure retailers pass on these tariffs to customers.
QUESTION 10: INFORMATION AND COMMUNICATION REQUIREMENTS FOR SECONDARY SETTLEMENT POINTS	<p>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:</p> <ul style="list-style-type: none"> • DNSP and the FRMP for the secondary settlement points (e.g about network support for safety requirements, including those related to jurisdictional network safety), and/or • 'primary' and 'secondary' FRMPs? 	Network support is best facilitated through locational dynamic pricing as demonstrated in Project Edith. Applying network pricing to flexible CER ensures that the resources that can best respond to network needs are exposed to the value for doing so.
QUESTION 15: MINOR ENERGY FLOW METERS FOR USE AT SECONDARY SETTLEMENT POINTS	Are there other changes to requirements for type 4 metering installations that should also be considered for a minor energy flow metering installation?	Consideration of minor energy flow meters should be considered within a separate workstream and informed by trials to best address the requirements for type 4 metering installation. This could occur through existing or dedicated workshops.