16 February 2023

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# Submission on Unlocking CER Benefits through Flexible Trading

## Introduction

1. This is Vector Limited's (Vector)[1] submission on the Australian Energy Market Commission's (AEMC) consultation paper on proposed changes to the *National Electricity Rules* and the *National Energy Retail Rules* on *Unlocking CER Benefits through Flexible Trading* (the Consultation Paper), dated December 2022. We acknowledge the AEMC's engagement with stakeholders on this consultation via Zoom on 6 February 2023.

2. Vector believes that a regulatory framework that will help ensure an orderly, rather than a disruptive, energy transition is one that unlocks and optimises the value of customer energy resources (CER) in a cost-effective manner and in the long-term interest of consumers.

3. There are multiple ways of unlocking and optimising the value of CER. This is evidenced by the multiple ongoing CER trials and emerging services in Australia's National Electricity Market (NEM), some of which are identified in the Consultation Paper, and in overseas jurisdictions. The Consultation Paper explores four models that are intended to enable "flexible trading arrangements" (FTA), which it posits could potentially be one way of realising the value of CER.

4. We understand from the 6 February stakeholder forum that the AEMC intends to undertake a cost-benefit analysis of introducing FTA from both a consumer's and an industry-wide perspective. We strongly support this proposal and recommend that a cost-benefit analysis (akin to the one the AEMC commissioned in 2016 for "multiple trading relationships" – MTR, a form of FTA) must be a pre-requisite before any FTA model(s) are progressed.

5. In our response to consultation Question 6 (*Models for Flexible Trading*), we identify some of the challenges and opportunities of the four FTA models explored in the Consultation Paper – at a high level. This is mainly intended to help inform the AEMC's proposed cost-benefit analysis and ongoing FTA discussions.

6. We note that the AEMC's cost-benefit analysis in 2016 found that the proposed MTR rule change was likely to have delivered some benefit to only a small number of consumers. We do not believe the situation has materially changed since then. We discuss our views on this further in our response to Question 1.

[1] Vector's Australian and New Zealand advanced metering business – Vector Metering – is an accredited Metering Provider and Metering Data Provider, and a registered Metering Coordinator, in Australia's National Electricity Market and the equivalent in New Zealand. Vector Metering provides a cost-effective end-to-end suite of energy metering and control services to energy retailers, distributors, and consumers.

In December 2022, Vector announced that it has selected QIC Private Capital Pty Limited as preferred partner for Vector Metering joint venture, following conclusion of a strategic review. Vector has entered into a conditional agreement with QIC, under which the parties expect to finalise arrangements in the first quarter of 2023 for the sale of a 50% interest in Vector Metering to investment vehicles managed and advised by QIC.

7. We note that this consultation links the issue of a new meter type for minor energy flows with the issue of FTA. In our view, these two issues are not necessarily related and should be considered separately. The need for a new meter type may be found to be valid, reflecting the changes in technology for both measurement devices and consumer appliances, but the case for FTA at a premise may not be compelling or may fail. Should that be the case, these two issues should be split into separate consultations, and rule changes to introduce a new meter type should be progressed.

8. We set out below our responses to the AEMC's consultation questions and provide a few suggestions – for the AEMC's consideration.

## Responses to the consultation questions

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

9. The Consultation Paper indicates that a primary driver for market changes to support multiple service providers at a customer's premises is to allow customers to benefit from their investment in CER "…while not needing to change their behaviour for their everyday energy use".[2]

10. In the Australian context, the most significant CER benefit to consumers, which we believe will remain so for the foreseeable future, is increasing self-consumption – i.e. using the energy they generate from their CER systems to reduce the amount of electricity they purchase from their retailer. Other benefits (for example, through shifting electric vehicle charging or other flexible load) will emerge in time. For consumers to choose not to take advantage of increasing self-consumption in this manner would require the introduction of services that will provide financial benefit to consumers beyond the value of their electricity usage reduction. It is difficult to see how service providers can develop products that will generate value of this magnitude (or exceed it), especially at a time when the cost of electricity in the retail market continues to rise. We note a report by the Institute for Energy Economics and Financial Analysis (IEEFA) which finds that:

> …the average household bill saving from VPP [*virtual power plant*] participation, that is unlimited aggregator access to a battery, is of the order of $200/year, far less than the savings from this battery storing BTM [*behind the meter*] solar generation.[3]

11. The above finding implies that benefits available to consumers today from some CER services are far less than they would otherwise realise from taking other paths, e.g. utilising their own generated energy. We estimate that the value of current products on offer to consumers from new CER services would need to increase 10-fold before they would take these services ahead of using their own generation. We also note the emergence of new 'barriers' to using CER services, such as the Australian Energy Regulator's (AER) recent decision to allow distribution network service providers (DNSPs) to charge consumers for

[2] Consultation paper, page i

[3] https://ieefa.org/resources/what-state-virtual-power-plants-australia

exporting their generation,[4] which makes the development of CER products that are attractive to consumers even more challenging.

12. It should also be recognised that, for consumers contemplating investment in new CER, no net benefits will accrue to them from their CER until they have recovered the cost of their capital investment, which takes a number of years. For a typical PV installation (without batteries), the payback period is between five and 10 years, depending on the size of the system and the cost of electricity in the retail market. For installations that have household batteries installed, the time required to recover the costs is likely to double and, in some cases, that additional investment may never be recovered. This is because, in general:

    - The initial investment required to establish a battery system is higher and requires a larger PV system that generates at a rate that exceeds the consumer's load, in order for excess generation to be produced and stored.

    - The periods where consumers are consuming the energy stored in the battery (evening and overnight) is only a portion of their energy bill and will not result in material savings at a rate that covers the cost of the batteries before they need to be replaced.

13. Splitting loads and settlement within a premise, enabled by FTA, is intended to allow consumers to benefit from CER without changing their behaviour. However, we believe that many CER owners are happy to change their behaviour, when convenient, and where this will maximise the benefit to them (return of their investment). Consumers with CER routinely schedule tasks where they have some discretion around timing, e.g. running washing machines, dishwashers, pool pumps, etc while their systems are generating electricity (during the day) so they avoid paying retail charges for their consumption. Increasingly, third parties will manage devices on behalf of consumers to enable these benefits to accrue without the consumers themselves having to change their behaviour.

14. It is reasonable to expect consumers not to be pleased when reforms require them to make changes to their behaviour and penalise them for not doing so (e.g. in the form of increased costs). This is especially the case where it is simply impractical for consumers to make these changes. For example, many consumers who are forced onto time-of-use tariffs face higher bills if they do not change their consumption patterns. We believe this is the primary reason behind the slow consumer uptake of time-of-use tariffs.

15. The Consultation Paper notes the AEMC's decision in 2016 not to make a rule change to introduce MTR (which would have allowed consumers to contract with multiple retailers) for the following reasons:[5]

    - the final determination included another expert report that demonstrated it was "far more economical for customers to engage multiple retailers through a second connection point than initially thought"

    - implementing the rule change may deliver some costs savings to a small number of customers but would not reduce costs in general, being unlikely to drive demand for new energy service providers or stimulate service innovation and competition

    - the costs to retailers and distributors to modify their IT systems and operational processes would be significant and these costs would pass to consumers in higher electricity prices

[4] https://www.aer.gov.au/system/files/AER%20-%20Export%20Tariff%20Guidelines%20explanatory%20statement%20-%20May%202022.pdf

[5] Consultation paper, page 26

- it was likely consumer protection mechanisms would need to be reviewed and significantly amended if the proposal was implemented.

> However…both the costs and potential opportunities may have changed significantly since the Commission considered the MTR rule change request. We are interested to hear from stakeholders if this would now be an efficient option for flexible trading.

16. As such, we strongly support the AEMC undertaking work to:

    - quantify the size of demand from consumers for the flexibility to have multiple service providers at their premises; and

    - establish a cost-benefit case of introducing FTA from both a consumer's and an industry-wide perspective, including a quantitative analysis similar to the MTR cost-benefit analysis the AEMC commissioned in 2016. This will provide useful information on whether costs have significantly changed since then and in the context of increasing CER uptake. It will also help ascertain whether obtaining value from CER via FTA is likely to deliver consumer benefits – both to individual consumers, and to consumers in aggregate – that can significantly override the costs of implementing FTA.

***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?*

17. The introduction of FTA and its perceived benefits need to be balanced with the costs of implementing it, noting that there are other ways of unlocking and optimising CER value. This is evidenced by the multiple CER trials being undertaken, and emerging services being rolled out, in the NEM and overseas for this purpose.

18. The AEMC's proposed assessment criteria includes the question: *Will the change give consumers a more direct connection to price incentives in a way that allows them to get more value out of their CER?* Our initial inclination would be to say no. At this stage of market development, we believe the proposed FTA is unlikely to create incentives that benefit consumers in a material way, i.e. increase the return from their CER investment. It will lead to complications which consumers are likely to be avoid. We consider it more likely that customers will 'shop' for the best product offered by retailers and switch their entire load and generation capability to other retailers with more attractive offerings, rather than split their consumption and generation between a number of service providers.

19. In an issues paper on updating the regulatory settings for distribution networks, released in December 2022, New Zealand's Electricity Authority states that:

> There is a risk that if consumer uptake [*of MTR*] is slow, the benefits might not materialise or could be outweighed by the implementation costs, which would be recovered from consumers.
>
> While more competition should drive down the costs of flexibility services being offered to distributors (and other buyers of flexibility), the impact on monthly consumer electricity bills of having more than one retailer is not yet clear."[6]

[6] https://www.ea.govt.nz/assets/dms-assets/31/Issues-paper_-Updating-the-regulatory-settings-for-distribution-networks.pdf, page 56

20. We therefore suggest that the AEMC's proposed cost-benefit analysis include use cases that can provide compelling evidence whether FTA is worth pursuing at this stage. It was mentioned at the 6 February stakeholder forum on FTA that we are talking about five to 10 years into the future. It is therefore important that the industry 'gets things right' now so its participants and consumers can pursue the pathway(s) that would enable them to obtain significant net benefits from their 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?*

21. The number of connection or settlement points is only one factor affecting the level to which consumers can access/optimise the value of their CER. In some cases, having a secondary connection point may only add to the total energy costs of particular consumers (for example, due to the additional infrastructure cost) without overriding benefits. To a significant extent, the value of a secondary connection/settlement point would depend on a consumer's unique circumstances and the services available to that consumer. This is where use cases can provide helpful insights on the potential value of FTA and specific FTA models.

22. We suggest that the AEMC's proposed cost-benefit analysis include use cases capturing the opportunities and challenges of FTA for particular CER services and/or particular types of consumers.

***QUESTION 4: OPPORTUNITIES FOR MULTIPLE SETTLEMENT POINTS WITH ONE FRMP***

- *Could retailers provide greater value to consumers by adding extra settlement points at premises?*
- *Are there other regulatory barriers preventing these offers?*

23. Retailers and their customers are best placed to make an assessment whether adding extra settlement points at premises would be of significant value to them. In our response to Question 6, we provide initial assessments of the opportunities and challenges associated with having multiple settlement points, informed by our experience as a metering service provider in the NEM and in New Zealand.

24. As indicated in our responses to Questions 1–3 and Question 5, a robust cost-benefit analysis is necessary to help inform whether multiple settlement points are likely to be of significant value to retailers/new service providers, and importantly, to consumers.

***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?*
- *Are there additional benefits or ways in which consumers could receive value through contracting with multiple FRMPs?*
- *Of the challenges identified, would any benefit from a regulatory solution? If so, what are the potential options?*
- *Are there any additional challenges presented by having multiple FRMPs at one site?*

25. We do not believe the case has yet been made to allow multiple financially responsible market participants (FRMPs) at a premise, at present. In our view, consumers who wish to take advantage of new services enabled by their CER are most likely to find a retailer that provides those services and will switch their entire loads to that retailer. We believe that once retailers (or other service providers) can make a viable business case from these new services, then competition between retailers will ensure that consumers have choice between providers. This view is supported by the IEEFA report which states that "[w]e would go far as to suggest that in future, retailers without VPP capabilities will struggle to be profitable".

26. We believe that, even if having multiple suppliers at a premise was supported, it would be difficult for service providers who are only interested in the load from the secondary settlement point to compete with retailers who can bundle the services for the entire premise. We would expect that retailers providing the general lighting and power will bundle value across all the services for both the primary and secondary settlement points for the premise. This will be more attractive to consumers than the value that can be provided by service providers who are just focused on CER-based services at secondary settlement points. We are already seeing retailers offering new CER-related behind-the-meter services bundled with customers' traditional services without the need for secondary settlements points.

27. We are also seeing a trend for consumers to consolidate their bills across multiple household services so that electricity, gas, mobile phone and broadband services are all provided by a single retailer and bundled into a single monthly bill. We question the view that consumers have a desire to go in the opposite direction of splitting their power bill into separate components and having to deal with multiple retailers/service providers.

28. We therefore strongly support the AEMC's intention to undertake a cost-benefit analysis to better inform its decisions on FTA, provide greater certainty to industry participants and consumers, and enable them to make more informed CER investment and related decisions.

***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?*
- *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?*
- *What changes would be required to allow multi-element metering for multiple FRMPs, and what would be the benefits?*
- *How does AEMO's secondary settlement point proposal compare to the other potential options?*
- *Are there any other models for the Commission to consider?*
- *What implementation costs need to be considered when examining these models?*

29. To inform the AEMC's proposed cost-benefit analysis, we set out below our initial, high-level assessments of the opportunities and challenges associated with each of the FTA model presented in the Consultation Paper. While these assessments are by no means exhaustive, we identify issues with each model (Tables 1 to 4) and common issues across the models – for further consideration by the AEMC as it progresses the FTA workstream.

30. Our initial assessments are informed by our experience as a Metering Provider (MP), Metering Data Provider, and Metering Coordinator in the NEM, and as a metering service provider in New Zealand. More broadly, it is our desire that the sector 'gets it right' so participants can navigate the shift to more renewable generation, and energy affordability is ensured during this transition.

31. **Table 1** provides a high-level assessment of the **existing arrangements** that can be extended to enable FTA. It involves the establishment of a secondary connection point to trade electricity exports into the market.

| **Table 1. Current arrangements - extension** | | |
|---|---|---|
| **Pros** | **Cons** | **Potential customer impact** |
| • No change in market arrangements – just contractual arrangements between the customer, retailer, and CER agent/supplier<br>• Different propositions from CER agents can easily be trialled<br>• CER providers can partner with the FRMP, if required (occurs routinely today).<br>• Least cost to implement (no change). | • Retailers may have to implement some billing changes<br>• No market visibility of behind-the-meter arrangements. | • Customer who contracts with the retailer can also contract separately with the CER supplier for off-market services<br>• Retailer billing would have a sub-section for CER supplier fees or rebate<br>• Unbundled billing<br>• It is clear who the retailer responsible for the metering installation is. |

32. **Table 2** provides a high-level assessment of the **parallel metering** model – the MTR rule change model. This model has one connection point in front of parallel settlement points.

| **Table 2. Parallel metering** | | |
|---|---|---|
| **Pros** | **Cons** | **Impact on customer** |
| • Appears straightforward to implement<br>• Mostly isolated interaction required between the parties in settlement point 1 and settlement point 2<br>• Clear responsibilities for each FRMP – each NMI has its own metering roles, i.e. two meters, two MPs, and two NMIs<br>• Industry data model meets this requirement<br>• Each NMI can be separated; data services can be independently provided or removed without impacting the other | • System complexity with shared ownership of the connection point - may complicate network operations<br>• Requires metering to be co-located<br>• No synergy in terms of possible metering installation – each FRMP is responsible for each NMI's metering<br>• Each FRMP will always have its own metering arrangement that will be paid for<br>• There is potential duplication of infrastructure – this arrangement could possibly | • Each customer gets a bill from each FRMP (retailer and CER agent) – or if the retailer is the same for both FRMPs, the retailer can aggregate both connection points<br>• Provides the ultimate flexibility, i.e. the customer can choose different providers<br>• Suits multiple customers in a single site, e.g. tenanted property<br>• May require additional wiring at the customer premise<br>• Likely to create confusion regarding which FRMP to |

| | | |
|---|---|---|
| • Network charges can be split more equitably between FRMPs compared to the subtractive metering option. | be simplified by a multi-element meter<br><br>• More metering real estate is required to accommodate extra devices. Customers could be required to upgrade their panel and infrastructure before the secondary metering can be established. | contact if there is a problem. |

33. **Table 3** provides an initial high-level assessment of the **subtractive metering** model – AEMO's recommended FTA model. This model allows energy resources to be separated within a customer's electrical installation 'behind' their current meter or primary connection point by installing a secondary settlement point.

| **Table 3. Subtractive metering (AEMO's recommended model)** | | |
|---|---|---|
| **Pros** | **Cons** | **Impact on customer** |
| • Total energy use from generation into LV network is measured for the premise<br><br>• May reduce physical wiring costs for the customer<br><br>• Secondary point can be remote from the primary point<br><br>• Allows for secondary settlement to be de-activated in the market if the FRMP is the same across both points. | • Overall responsibility of the metering installation is unclear. Does the primary FRMP have obligations to protect the interest of the secondary FRMP?<br><br>• Cost and complexity of extending the metering system architectures to support NMI subsidiary relationships and FRMP relationships for a connection point<br><br>• Requires the primary retailer to receive readings from the secondary retailer for retail billing and AEMO invoice for reconciliation purposes<br><br>• Dealing with network charges is more complex. The AEMO proposal that these charges go to the primary FRMP is not equitable where there are different customers at the primary and secondary settlement points – a situation that is not uncommon (e.g. tenant/landlord scenario)<br><br>• Secondary point is remote from the primary point and is likely to have more difficult access arrangements for maintenance and inspection | • Customer gets a bill from each FRMP (retailer and CER agent)<br><br>• Customer will pay for two meters<br><br>• Likely to create confusion on which FRMP to contact if there is a problem<br><br>• May avoid additional wiring at the customer's premise (in a minority of situations). |

| | | |
|---|---|---|
| | • Settlement calculation by AEMO and settlement reconciliation by retailers is more complex<br>• Measurement and settlement equation may not work if the customer installs generation capability to the primary settlement point<br>• New processes required so that the MP for the secondary settlement point is made aware of activities on the primary settlement point that impact their service, e.g. MP2 is told that the loss of supply is related to an outage at the primary point and not because of a truck roll. | |

34. **Table 4** provides a high-level assessment of the **multi-element metering** model. In this model, the multi-element meter could separate different parts of a customer's resources to provide independent control, data monitoring, and customer device level information, and opens the option to have multiple FRMPs.

**Table 4. Multi-element metering**

| Pros | Cons | Impact on customer |
|---|---|---|
| • Lower infrastructure cost and footprint – the metering point is on the same meter board<br>• Avoids meter panel upgrades<br>• Logical extension of parallel metering<br>• Some existing meters in the NEM already support multi-element metering, e.g. 2- to 3-element meters, but new features may be required, e.g. remote re-energisation/ de-energisation at the element level<br>• Network charges can be split more equitably between FRMPs compared to the subtractive metering option. | • Potentially costs more for market participants to implement to allow a single meter to exist on multiple NMIs simultaneously (avoided where separate metering assets exist)<br>• Metering roles need to be the same across settlement points (not an issue when there are separate physical assets)<br>• Some functionalities may not be available for the secondary settlement point, e.g. re-energisation and de-energisation, or changes may be needed to current metering features to support this<br>• Limitation of the multi-element solution to cater for all scenarios | • Customer gets a bill from each FRMP (retailer and CER agent)<br>• May require additional wiring at the customer's premise<br>• Reduced metering costs to the customer because of the lower number of physical assets that need to be deployed. This model reduces the number of installations that will be required for customers to upgrade their meter panel to accommodate an additional asset. This will, in turn, reduce the delay in commissioning the CER/FTA arrangement. |

| | | |
|---|---|---|
| | • Metering relationships between FRMPs likely to be complex<br><br>• There may be additional costs to the customer for wiring back to the primary metering point. | |

**Potential common issues across the FTA models**

35. There are further issues that could potentially apply to more than one FTA model. These could include, among others:

    - Dispute resolution – e.g. how are the wiring mistakes of one party to be addressed for both/all parties?
    - Contact persons/parties for outages – which could depend on the FTA model
    - The impact of increasing EV uptake on each of the models, and the increasing application of dynamic operating envelopes by DNSPs which are designed to apply just to a consumer's 'flexible' load
    - Whether different models are suitable (or more suitable) for different consumers or consumer types, i.e. should future metering options be left open, at this stage?

36. We suggest that the AEMC consider the above assessments and comments in undertaking its proposed FTA cost-benefit analysis.

***QUESTION 7: ASSESSMENT CRITERIA***

- *Do you agree with the proposed assessment framework?*
- *Are there additional principles that the Commission should consider as we make our decision, or principles included here that are less relevant?*

37. Vector generally agrees with the assessment criteria set out in the Consultation Paper.

38. We suggest adding the principle that any proposed rule changes be supported by robust cost-benefit analysis, including quantitative analysis. The analysis must show that the preferred FTA model(s) will likely deliver significant net benefits to consumers.

39. We expect the proposed cost-benefit analysis to shed some light on whether costs have significantly declined since the AEMC commissioned a similar cost-benefit analysis in 2016.

40. As indicated in the introduction of this submission, this consultation links the issue of a new meter type for minor energy flows with the issue of FTA. We do not consider these two issues to be necessarily related. The case for a new meter type may be valid and could be progressed, but a compelling case for FTA at this stage remains to be established. We therefore recommend that these two issues be split into separate consultations/workstreams.

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

41. It is possible that an FRMP (FRMP1) could be subject to the 'hollowing out' effect described in the Consultation Paper where another FRMP (FRMP2) provides some of the services that FRMP1 could have provided or is able to provide. The IEEFA report suggests that "in future, retailers without VPP capabilities will struggle to be profitable".[7]

42. We suggest that the AEMC's proposed cost-benefit analysis consider the likely occurrence of the 'hollowing out' effect and its implications on retail market competition, innovation, and consumer choice.

***QUESTION 9: ALLOCATING NETWORK COSTS***

- *How should network costs be allocated for premises with secondary settlement points?*

43. We suggest that any preferred option for allocating network charges, should FTA be introduced, incorporate a mechanism that ensures there is no over-recovery or under-recovery by an FRMP, or that any such occurrences are automatically cleared. This would ensure that each FRMP at a premise is 'kept whole' for billing purposes.

***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?*

44. We tend to agree with AEMO's view that many of the existing requirements and processes for connection points would apply to secondary settlement points, including those relating to safety requirements.

45. Should the AEMC decide to make rule changes to implement FTA, we suggest that it convene an industry working group to consider information and communication requirements for secondary settlement points. We further suggest that any recommendations made by that working group be subject to stakeholder/public consultation.

***QUESTION 11: POTENTIAL FOR LIMITATIONS APPLIED AT SECONDARY SETTLEMENT POINTS***

- *Is there a need for limitations at the secondary settlement point?*
- *If so, how could these be applied? What are your views on doing so using requirements for the metering coordinator as proposed by AEMO?*

46. In our view, a compelling case remains to be made for the establishment of secondary settlement points at this stage of market development. We therefore strongly support the AEMC's proposal to undertake a cost-benefit analysis which would capture, among others,

[7] https://ieefa.org/resources/what-state-virtual-power-plants-australia

the opportunities and challenges of establishing secondary settlement points for the individual consumer and from an industry-wide perspective.

***QUESTION 12: IMPLEMENTATION ISSUES FOR SECONDARY SETTLEMENT POINTS***

- *How should the NMI for a secondary settlement point be established?*
- *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?*
- *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?*
- *Should the rules forbid the use of embedded networks to establish secondary settlement points within an end user's electrical installation?*

47. The answers to the above questions would depend to a significant extent on the FTA model that will be adopted, should the AEMC decide to implement FTA.

48. As in our response to Question 10, we suggest that the AEMC convene an industry working group to consider multiple implementation issues for secondary settlement points. We further suggest that any recommendations made by that working group be subject to stakeholder/public consultation.

***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?*

49. Consumer protections should not be diminished under AEMO's proposal for secondary settlement points, or in any other FTA models. While the consumption characteristics at the secondary settlement point may be small (e.g. only to power inverters and other equipment), it could also be much larger in situations where consumers are charging their EV during off-peak periods. It cannot be assumed that the FRMP at the settlement point is not selling electricity to the consumer. Therefore, it is logical that parties providing services at secondary settlement points should be required to obtain a retail licence and – like retailers – be subject to the consumer protection framework.

50. At a minimum, a consumer protection framework for any future secondary settlement points should ensure that consumers do not face significantly higher metering costs than without FTA. They should also not pay for the same service twice and/or pay for features or services they do not need.

51. 'Unbundling' services at the premise level via FTA, should it be implemented, would be a significant change for consumers who take up services provided at secondary settlement points. It is important to bring consumers along this journey and for consumers to fully understand the implications of these changes, e.g. how many bills they receive, or who bills them for particular services.

***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?*
- *If changes are needed, what of the following minimum requirements need to be set in the NER for market participation and settlement at secondary settlement points?:*
    - *A physical display at the metering point*
    - *Minimum service specifications*
    - *Remote communications*
    - *Accuracy and data requirements*
- *Are there any other service or technical requirements that need to be specified for metering installations at secondary settlement points in the NER?*
- *Should changes be made to the accreditation and registration of metering providers and metering data providers for secondary settlement points?*

52. At first glance, there may be some savings in altering the metering specification requirements at secondary settlement points. It would be cheaper for consumers not to pay for metering functionalities or services they do not need. However, we believe that a reduction in the cost of just the asset itself will not deliver significant overall cost reduction to consumers.

53. For example, the cost of a meter or device with reduced specification may be reduced from $150 to $100; however, the costs of the installation of a meter by a qualified technician will remain the same. We believe the meter at secondary connection/settlement points would still need to be 'revenue grade'. The cost saving may not be that much for MPs and consumers in the bigger scheme of things as the metering device is but one part of the total cost of providing metering services. There are other ongoing and one-off costs to providing metering services, including installation, remote reading, etc.

54. The introduction of FTA would 'unbundle' services at the premise level. However, some consumers may prefer the convenience of their electricity service being bundled with other services (energy or otherwise, e.g. broadband) for a discount – which are already being offered in the market. Also see our response to Question 5.

55. In the case of subtractive metering, the secondary meter is likely to be remote from the primary point. This would require additional space which may not be available for some consumers.

56. There may also be cases where retailers/providers at secondary connection/settlement points 'lock in' consumers for a certain period as part of their offering, e.g. leasing of equipment or EV, which has implications for competition and consumer choice. This would also deprive those consumers of the protection of having the ability to switch providers or 'shop with their feet'.

57. A further consideration in the FTA discussions, and possibly in the proposed FTA cost-benefit analysis, would be the impact of the increasing uptake of EVs on the different FTA models.

58. We suggest that the cost-benefit analysis accounts for the above considerations and situations to ensure consumer choice and protection are not compromised. This is where use cases, as part of the cost-benefit analysis, can provide useful insights on the cost-effectiveness of the different models for service providers and consumers.

***QUESTION 15: MINOR ENERGY FLOW METERS FOR USE AT 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?*
- *Are there other changes to requirements for type 4 metering installations that should also be considered for a minor energy flow metering installation?*
- *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?*
- *What would be an appropriate inspection and testing regime for minor energy flow metering installations?*

59. At this stage of market development, where technical solutions for CER-related services are still being trialled or emerging, our preference is for regulators to set out desired outcomes rather than identify preferred technical solutions or functionalities. For the various reasons stated in this submission, we do not consider that specifying the best metering model for any proposed FTA arrangements would be in consumers' best interest, at least at this stage.

60. However, we agree that the current type 4 metering requirements on accuracy, minimum functionality, and testing and inspection may be too onerous for this class of device (at the secondary connection point) and that a new meter type may be required that relaxes some of the type 4 requirements. Should a new meter type be required, limitations on the use of these devices will need to be defined in the regulations to avoid its inappropriate use.

61. We would not support the introduction of a meter type that is read manually. That would require the reintroduction of a meter-reading workforce and would, in our view, be a retrograde step. We also believe that every meter requires a method of allowing a customer to verify that data retrieved has actually been sourced from the physical device, and not from some other meter. This is an important feature that gives confidence to consumers that they are being charged correctly. Typically, this is done via a comparison of the data value remotely retrieved from the meter with the value on the meter display, i.e. the Index read. Unless there is some other way of supporting this feature, we believe all meters require a display of some sort.

62. The right technical solution could depend on each individual consumer or segments of the market. It may be possible that different FTA models or other technical solutions suit different types of consumers in the future, depending on their unique circumstances.

***QUESTION 16: MINOR ENERGY FLOW METERS FOR STREET FURNITURE***

- *Should minor energy flow meters be able to be used for street furniture?*
- *If so, should DNSPs be allowed to act as metering coordinator, metering provider, and metering data provider for street furniture under certain circumstances?*
- *Would any other changes to the rules be required in relation to metering for street furniture?*

63. Vector does not see any reason why 'minor energy flow meters', as described/defined in the Consultation Paper, could not be used for street furniture.

64. We encourage the AEMC to preserve optionality around the provision of metering services for street furniture so as not to stifle innovation while these services are emerging, e.g. automated streetlight dimming technology. This is particularly in relation to the parties who will be allowed to provide these services (i.e. not just DNSPs) or the roles that various parties can play to enable the delivery of these services. For example, MPs or other accredited parties could be allowed to supply metering devices for street furniture to, or install metering devices on behalf of, DNSPs.

## Concluding comments

65. We are happy to discuss with the AEMC any aspects of our submission or provide information/insights to further inform its proposed FTA cost-benefit analysis. Please contact Paul Greenwood (Industry Development Australia, Vector Metering) at 0404 046 613 or Paul.Greenwood@vectormetering.com in the first instance.

66. No part of this submission is confidential, and we are happy for the AEMC to publish it in its entirety.

Yours sincerely



**Neil Williams**
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