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Dear Commissioners

Draft determination – National Electricity Amendment (unlocking CER benefits through flexible trading) Rule

EnergyAustralia is one of Australia's largest energy companies with around 2.4 million electricity and gas accounts in NSW, Victoria, Queensland, South Australia, and the Australian Capital Territory, of which around 22k customers are supported under our hardship program (EnergyAssist). EnergyAustralia owns, contracts, and operates a diversified energy generation portfolio that includes coal, gas, battery storage, demand response, solar, and wind assets. Combined, these assets comprise 4,500MW of generation capacity.

EnergyAustralia appreciates the opportunity to participate in the AEMC's consultation on the draft determination for the Unlocking Consumer Energy Resources Benefits through Flexible Trading rule change (Draft). We appreciate the consideration the AEMC has provided on stakeholder's views and we believe that the draft reflects this in the removal of the multiple retailer proposal for residential and small business customers. EnergyAustralia is supportive of change that promotes innovation and increases customer benefit, and while we understand the intent of the remaining elements of the rule change is to achieve this; we have significant concerns that the desired benefits may not be realised or could be achieved via a less costly alternative.

At a high level, our views are:

- The concept of multiple energy service providers for Large Customers creates unreasonable risks for the Primary Retailer in relation to network costs and hedging wholesale cost, which are not resolved by the AEMC's *Draft*. Further, having multiple service providers may in reality leave the customer in a financially worse position. The most effective energy solutions will be offered by a single provider that can compare and optimise between exporting energy from CER to the grid versus using it for self-consumption, and use both in a way that maximises value to the customer. In order of preference, our position is:

- for CER under 5MWh, the embedded network framework with appropriate modifications be used instead of pursuing multiple retailers for Large Customers. There is no compelling reason for this not to be pursued.

- A mirror of the proposal for small customers (one retailer but opt in for secondary/multiple NMI/s).

- As a last resort only, we would be open to further consultation on the creation of a standard contract between the Primary and Secondary Retailer, and an obligation to enter that contract. This would still not resolve all our concerns, but the contract could cover: allocation of network tariffs, exchange of meter data for the Secondary NMI (although the preference is that this should be delivered via the market), and notification requirements.

- The benefit of establishing a framework for a secondary settlement point for small customers depends on decisions that will be considered in other future reforms, mainly, the *Integrating Price-Responsive Resources in the NEM*[1] rule change which could enable small scale CER to be dispatched. EnergyAustralia requests the AEMC to consider delaying a final decision on this aspect of the rule change until it becomes clearer that those other reforms will proceed. The benefit for network support services will be realised through in-device metrology alone, there is no need for a second NMI.

- We have issues with Energeia's cost benefit analysis and suggest the *Draft proposal* be narrowed to mitigate these issues. The benefit for Small and Large Customers is almost completely reliant on the avoided cost of metering. This tends to support pursing only the in-device metrology part of the *Draft Proposal* for both Small and Large Customers, and discontinuing the second NMI and multiple retailer parts as the benefits are questionable and involve considerable establishment cost.

- With regard to establishment cost, the estimated cost for updating retailer systems is likely grossly understated in Energeia's analysis, compared to EnergyAustralia's own preliminary estimate of our implementation costs, and because it is based on AEMO's cost for an ARENA program (a single set of cost) as opposed to the cost of 43 retailers.

1. Multiple energy service providers at Large Customer premises

Draft Proposals create unreasonable risks

The concept of multiple energy service providers at Large Customer premises creates unacceptable risks for the Primary Retailer which are not resolved by the AEMC's Draft Proposals. It will entrench a non-level playing field to the detriment of competition, and place new risks on the Primary Retailer which are outside its control.

[1] Integrating price-responsive resources into the NEM | AEMC

Firstly, the AEMC's *Draft* sees distribution network tariffs levied on the Primary Retailer which presents an unacceptable risk. The Secondary Retailer has no incentive to operate the CER load in a way that aligns with network price signals (and therefore network needs). This will lead to inefficient use of the distribution networks and higher network costs. We disagree with the AEMC's view that the Secondary Retailer will have the incentive to optimise CER to minimise a customer's network tariffs, as the Secondary Retailer does not bear the credit risk for non-payment of the network charges and would therefore not be concerned with the magnitude of those charges.

Conversely, the Primary Retailer has no control over the CER. It has no ability to manage the risk around network costs attributable to the CER. These impacts are unreasonable. They will also be compounded where customers perceive higher prices from the Primary Retailer and then switch more load to the Secondary Retailer. It will also be exacerbated when the new distribution export charges are rolled out beyond trial more broadly.

To mitigate these risks to a reasonable level, the AEMC would need to change its *Draft decision* to mandate the allocation of network costs across both the Primary and Secondary Retailer. As the AEMC has decided this is unviable because the costs of this change will outweigh the benefits, EnergyAustralia believes the AEMC should not proceed with multiple retailers for Large Customers unless it can determine a way to address the fair and efficient allocation of network charges to the responsible party. It would contradict the design of a network tariff to have the price signal obfuscated by the *draft's* proposal.

Secondly, the Primary Retailer will not be able to effectively hedge the passive load at the Primary NMI, due to the unpredictability of the CER load which under the AEMC's model can be switched to supply the Primary NMI or draw from it, although as discussed below this switching concept is extremely unclear. The Primary Retailer will have a complete lack of control and transparency over how the CER will be operated and the impacts of this on the shape of its passive load, resulting again in the Primary Retailer being unable to manage this risk. The Primary Retailer will not even have access to historical metering data for the second settlement point to be able to predict how the CER will be operated. This will cause inefficient over/under-hedging by the Primary Retailer, and the related costs will be paid by the Primary Retailer's entire customer base. In this case, the only way to effectively mitigate the risk is to put the customer on a full spot pass through contract, which is a poor customer outcome as it would expose the customer to the full price volatility in the spot market.

Draft Proposals fail to resolve concerns

The AEMC's *Draft Proposal*s fail to resolve our concerns.

a) **Voluntary opt-in does not reduce cost across the market** - Making the arrangement voluntary for the customer to opt-in does little to reduce costs, as it will require system changes for AEMO and corresponding changes for all retailers to at least have visibility over these customers as they churn through the market. This applies regardless of whether a retailer's customer has opted in to have multiple retailers.

The AEMC clarified it would *'not progress the proposal to enable small customers (residential) to engage multiple FRMPs for a number of reasons; in particular, that it would require a range of changes to market participant and system processes and that the benefits of making these changes would accrue to only some consumers but the costs would be faced by all consumers'.* The same logic applies to Large Customers, so it is unclear why the AEMC has come to a different decision. In practice, the *Draft Proposal* will mean a Primary Retailer's general customer base is cross-subsidising the entry of new Secondary Retailers and the costs of individual customers that take up the second NMI option.

The cross-subsidisation also occurs where small customers are paying for system changes that benefit Large Customers who take up multiple retailers. This is basically recognised by Energeia:

"the rule change would still be cost effective if only applied to small customers, but it would not be cost effective if only applied to Large Customers…. there are too few flexible Large Customer devices to justify making changes to the entire system to accommodate for them".[2]

We discuss Energeia's draft cost benefit analysis in detail below.

b) **Proposed arrangements between FRMPs are unworkable** - The AEMC states the *Draft Rules*:
- would not require a contractual relationship between Primary and Secondary Retailers;
- the Commission does not consider that formal notification requirements are needed between Primary and Secondary Retailers;
- If either FRMP requires access to particular information, it could be acquired from the customer; and,
- Roles and responsibilities of FRMPs and the relationship between FRMPs would be governed by existing arrangements in the NER, NERR and NERL and by contractual arrangements between the customer and FRMPs.

The AEMC seems to assume that contractual agreements between a customer and their FRMP/s can correct any concerns but on closer analysis, this is unworkable:

- The AEMC refers to **contracts between the FRMPs and the customer, or obtaining information from the customer.** We consider that the Primary Retailer and Secondary Retailer (not the customer) are the parties that need to come to a commercial agreement. The proposition that information can be obtained from the customer is unrealistic. The customer will not have access to metering data or NMI standing data for the second NMI, which the Primary Retailer will need.

- The Primary Retailer does have an incentive to contract with the Secondary Retailer to pass on network costs, but the Secondary Retailer has no incentive to take these on. As a result, commercial agreement is highly unlikely to address the network cost issue.

[2] Energeia Cost Benefit Analysis pg 40

- In the **absence of formal notification requirements or access rights**:

    - To mitigate the risks around hedging, the Primary Retailer would require access to metering data for the second NMI, which it will be unable to obtain from the market systems (MSATS) or the customer. It could potentially obtain this metering data from the metering data provider or the Secondary Retailer but it would likely have to pay for it under a commercial agreement. This would result in the perverse outcome of the Primary Retailer effectively having to incur a cost to mitigate a risk which has been created by a regulatory change. At the very least, we strongly believe that the Primary Retailer should have the right to access metering data for the second NMI and that this data should be standardised and delivered via market systems so that it interfaces with retailer systems. Currently, data is only sent to one FRMP so this could require significant market system changes.

    - From an operational perspective, the absence of any market or B2B notifications between the Secondary and Primary Retailers also appears to be a problematic gap and out of step with general notifications within the market. For example, notifications between metering parties, retailers and distribution network service providers are the important way to communicate what is happening to a customer's electricity supply. The AEMC suggests obligations to notify about disconnection of the second NMI could be included in contractual arrangements between the customer and FRMPs. This raises issues with how that notification will occur, if it is outside market notifications such as email, then it will not interlink with retailer systems.

    - In a similar way, assuming Retailer failure arrangements (if the Secondary Retailer fails) can be agreed contractually between the Primary Retailer and the customer, so that the Primary Retailer becomes responsible for energy flows for the second NMI - is also out of step with the general market's regulated arrangements which provide important certainty. It also lacks recognition that AEMO will have to transfer loads from the Secondary NMI to the Primary Retailer (acting as ROLR) which would seem to require a market transaction and process.

a) The AEMC also considers that the **choice to switch the customers asset's supply** to the Primary NMI, and any risks posed by it, could be managed by contractual arrangements between the customer and retailers. i.e. this activity will not be regulated under the NER. The ability to switch remains an extremely unclear concept that requires further consideration:

    - Does it contemplate switching asset *supply* to supply the house?

    - Does it contemplate switching asset *load* to draw from the Primary Retailer's grid supply (hence the AEMC's original tariff arbitrage concerns)?

We consider there appears to be some incentives for the Primary and Secondary Retailer to contract on this. Mainly, there is no incentive for the Secondary Retailer to switch asset *supply* to supply the Primary NMI, unless they receive value for it under a contract. However, we have concerns with how competitive retailers will contract on a specific customer level (when today they do not). To counter any perverse incentives, the NER could encourage contractual resolution by including a rule which states that parties should negotiate in good faith for contracts regarding the ability for assets to switch. However, this rule will still be grossly inadequate to resolve the costs and complexities associated with managing the myriad number of bilateral contracts between retailers.

b) **Relationship with dynamic operating envelopes is unfeasible** – The AEMC needs to respond to DNSP concerns that issuing DOEs to a second FRMP or at asset level could be complex and costly, and fully consider whether it is viable. The AEMC needs to clarify whether it envisages that DOE compliance can be issued to the secondary NMI on a standalone basis or whether it will remain only at the Primary NMI. The AEMC notes that other reviews might canvas this issue, but this issue should be squarely addressed in this rule change given the rule change raises the issue to begin with. We have the following concerns:

- Similar to the hedging issue, if DOE compliance will only be issued at the Primary NMI, it is very difficult to see how the Primary Retailer will be able to comply effectively, given they'll have no control over the energy flows at the secondary NMI nor will they have visibility over it. This visibility/information exchange would have to be near real time, which is especially problematic. The Secondary Retailer may not have the incentive to contract with the Primary Retailer to coordinate DOE compliance. I.e. There may be greater financial benefit for the Secondary Retailer to disregard any DOE compliance (even if the Primary Retailer proposes to share DOE rewards with it).

- If DOE compliance can occur at the secondary NMI on a standalone basis, this seems unviable because the passing of the energy flows through the Primary NMI will change the response to DOE compliance. This could be a major impediment, unsolvable by contracts.

Benefits are questionable for the customer, and viable alternatives exist

In addition to the complexities and risks created by the *Draft Proposal*s discussed above, we also are sceptical that there are tangible benefits for Large Customers.

The *Draft Proposal* seeks to 'provide Large Customers with increased choice' under the premise that a Secondary Retailer at their site will allow innovation to flourish beyond what is achievable with a single retailer.

In our experience, large commercial and industrial customers install CER to reduce their load and exposure to peak price volatility and to ultimately reduce their energy costs. Energy is not their core business. They do not invest with the primary objective of selling ancillary services or energy back to the grid. With this in mind, the most effective energy solutions will be offered by a single provider that can compare and optimise

between exporting energy from CER to the grid versus using it for self-consumption, and use either in a way that maximises value to the customer

Further, having multiple service providers may in reality leave the customer in a financially worse position. The Secondary Retailer has the incentive to optimise and revenue maximise for their CER asset by exporting to the grid when prices are high, but it may be more beneficial for that export to be self-consumed instead to minimise their exposure to spot prices. For example, the customer's reward for exporting to the grid will likely be less than the spot price (due to the Secondary Retailer absorbing some of the value to make a profit margin), while the exposure to the spot price for their consumption at that time could easily be at the full spot price (spot pass through contracts are common for major C&I customers). In this scenario, the customer would be better off using electricity stored in CER rather than exporting it. This is further compounded because the Secondary Retailer will not have the visibility over the Primary Retailer's pricing for that customer.

We doubt that the Secondary Retailer has much commercial appeal, in the same way that having a separate wholesale demand response provider has not had much take up (there is still only one wholesale demand response provider registered). Again, large Customers generally want full energy solutions offered by a single provider.

That aside, should a customer wish to engage a Secondary Retailer to provide separate FCAS or dispatchable wholesale energy (when available) to the market, there are existing viable alternatives available today.

- Establishing a second connection remains a valid and fair alternative as it means network costs are appropriately levied on the retailer best placed to manage the risk. It will also allow the right network tariff to be levied for the actual network connection types the customer has. Establishing a second connection would be required anyway for dispatch over 5MWh because the integrating energy storage systems/Integrated Resource Provider rule change will apply, instead of unlocking CER benefits/integrating price-responsive resources. In this way the benefits of the Draft Proposal are limited to CER devices below 5MWh anyway. Further, for Large Customer accounts establishing a second connection is not a significant cost.

- The embedded network framework, with any enabling amendments. Energeia found that the *Draft Proposal* would provide the same or similar benefits as the existing use of the embedded network framework to allow multiple FRMPs but at a lower cost. This assumes that an additional meter is required today under the embedded network alternative, and this would be avoided under the rule change where in-device metrology is permitted. This strongly supports pursuing the in-device metrology change on a standalone basis, because this will avoid the establishment costs of the multiple retailer change.

- Behind the meter solutions, where CER is installed behind the connection point and operated for the benefit of the customer.

Our overall position, in order of preference is that:

- for CER under 5MWh, the embedded network framework with appropriate modifications be used instead of pursuing multiple retailers for Large Customers. There is no compelling reason for this not to be pursued.
- A mirror of the proposal for small customers (one retailer but opt in for secondary/multiple NMI/s)
- As a last resort only, we would be open to further consultation on the creation of a standard contract between the Primary and Secondary Retailer, and an obligation to enter that contract. This would still not resolve all the issues discussed above, but the contract could cover:
    - allocation of network tariffs,
    - exchange of meter data for the Secondary NMI (although our strong preference is that this should be delivered via the market to interlink with retailer systems, and again it is perverse that the Primary Retailer would have to pay for this)
    - notification requirements (although the preference is for formal market notifications which interlink with retailer systems).

2. Secondary settlement point/s at small customer premises

For small customers, the AEMC assumes greater competition is supported by allowing for more choice on products and service offerings for its flexible CER. That is, energy service providers will better participate in wholesale energy market scheduling processes. This assumes the scheduled lite dispatchability option will proceed. It's also assumed that visibility of sub-loads will help networks, and that there is a tangible benefit from the increased visibility (greater than the visibility over the gross load the networks currently have).

The AEMC describes the benefits predominantly in the access to information that the distribution networks or AEMO receives, thereby enabling a more efficient operation of either the distribution network or wholesale market. Customers will only consider the uptake of a secondary NMI if the value they receive exceeds a threshold, of the effort and time taken to participate. While this value is subjective to each customer, EnergyAustralia's experience with small customers is that incentivising their response, suggests that the value from a reduction in network costs or wholesale prices will not be enough to incentivise customer uptake of a secondary settlement point.

In EnergyAustralia's opinion the benefit of establishing a framework for a secondary settlement point for small customers is reliant on a market and regulatory framework that can value and incentivise the customers sale of energy (CER export or demand response). It is already possible for retailers to derive value from FCAS markets as a VPP aggregator for customer's CER where a MASS compliant meter is installed (and this rule change has not considered improved access to FCAS markets in its immediate benefit analysis). Therefore, the real benefit for a CER customer to benefit from a secondary NMI is reliant on the AEMC's *Integrating Price-Responsive Resources in the NEM*[3] rule change enabling the sale of energy in wholesale markets, or if AEMO/ Distribution Network Service Provider's establish markets that incentivise the operation or output of CER.

[3] Integrating price-responsive resources into the NEM | AEMC

As the development of these requirements is uncertain**, EnergyAustralia requests the AEMC to consider delaying a final decision on this aspect of the rule change until it becomes clearer that CER value enabling reforms are more certain.** This will ensure that implementation costs are not incurred until it is clearer that there is greater value for customers from these reforms, and the benefit of the rule change will be achieved.

We believe a delay in the final decision or the required implementation timeframe (where implementation is conditional on the enabling reforms proceeding) will provide additional time for the AEMC and industry to consider the implications of a Secondary NMI on existing reforms. For example, how the consumer protections framework (Payment Difficulty Framework, disconnection policies, regulated pricing, etc) apply to a customer participating with a Secondary NMI.

3. Issues with Energeia's draft cost benefit analysis

We appreciate the AEMC's effort in engaging Energeia for the draft cost benefit analysis. However, we have the following issues with Energeia's analysis (not identified by Energeia). These issues undermine the accuracy of the net benefit results, and suggest that the modelling be re-run or the Draft Proposal be narrowed to mitigate any accuracy issues:

- **Scenario assumptions around metering are questionable** - In the small customer scenarios, the *current* "Retailer VPP Providing Network services" – includes the cost of meter installation. This disregards that retailers can currently provide network services *using in-device metrology and avoid the cost of a meter today*. We are aware that in WA, trials have investigated CER participation using metrology agreed between the market operator and Network Operator, without the establishment of a separate NMI. The same question applies for Large Customers. As the rule change benefit is heavily reliant on the avoided meter cost, rather than wholesale or network revenue benefits, this assumption likely overstates the benefit.

- **Standardised data benefits are available from in-device metrology, no secondary NMI required** - In Energeia's analysis, the future rule change scenarios assume "standardised data access to authorised participants" and related benefits like greater uptake by the networks due to better visibility. **Again, we note that this benefit is available from the *Draft* via using in-device metrology alone, and does not require a second NMI to be established i.e. all that is required is a dedicated measurement point for CER.**

- **Retailer system costs are likely grossly understated and need to be checked** - Energeia states that retailers will need to upgrade their IT systems to account for additional streams from the second NMI. It assumes retailer costs will be equal to AEMO's cost of facilitating the distributed energy resource integration program ($5.2 m/year). This risks severely understating all 43 retailer costs[4], as it is based on AEMO's single set of costs only.

[4] 43 is the number of authorised retailers operational in the NEM i.e. NSW (Annual Retail Market Report 2022-23 - Charts and Data)

- The costs of $5.2m a year for all retailers (across 25 years) is also significantly below our estimated implementation costs for retailer systems.

- **Net benefit results are either negative, or too small to neutralise the model's sensitivities/inaccuracies -** For example:

    - For small customers, one out of two use cases (Rule Change VPP managing wholesale price exposure) "results in a net negative outcome".
    - For the Rule Change VPP providing network services, the rule change is not economical across all CER devices that were modelled. E.g. not economical for EV chargers and other small uni-directional loads for small customers (page 32)
    - For both Small and Large Customers, where there is a net benefit, it is only $7 per year. This is too low to account for sensitivities in assumptions, especially around the avoided cost of metering.

Given the multiple concerns above, it would be prudent for the AEMC to narrow the scope of the *Draft Proposal*. As the benefit for Small and Large Customers is almost completely reliant on the avoided cost of metering, then this would firmly support pursing only the in-device metrology part of the *Draft Proposal* for both Small and Large Customers. This would avoid the significant establishment cost and complexities of a second NMI and multiple retailers, while realising the main upside of the rule change.

4. Measuring energy flows from in-device metrology

Changes to metering requirements should apply to all metering types

EnergyAustralia's view is that the rule change is primarily a mechanism to incorporate increased metering capability within the national framework; thereby enabling greater access for market operators (AEMO or DNSPs) to understand the impact of CER and controllable load operation on their markets, and to provide aggregators and retailers the opportunity to tailor products specific to the separately metered controllable loads.

EnergyAustralia agrees with the AEMC's view that a reduction in the existing metering requirements will create benefits, as metering should be considered on its capacity to verify the required data for settlement or market interaction purposes (measuring energy flows, data storage, remote communications, and time of metered data for settlement in MSATS). However, we are disappointed the AEMC has not considered the benefit of expanding this consideration to all metering. Excluding changes to what is acceptable for a primary meter at a property will ensure that customers are locked in to a metering solution which is not lowest cost, and as the AEMC deliberates on an accelerated roll out, which is forecast to cost the industry $352 million[5] (this does not include the actual implementation costs to retailer/network IT systems and resourcing requirements, which would make the amount much higher), it is a decision that contradicts the AEMC's intent in this consultation to '*impose low costs on consumers and market participants*'.

[5] Oakley Greenwood - Cost and Benefits of Accelerating the Rollout of Smart Meters

EnergyAustralia requests the AEMC to consider that any changes to metering requirements for secondary settlement or minor energy flows should be extended to all metering types, as the *draft*'s outline of the requirements for metering is a reasonable objective for all metering. EnergyAustralia believes that the existing requirements for revenue grade metering are antiquated, with reading direct from the smart meter being a complicated and confusing process (compared with a basic meter equivalent), and that as the AEMC proposed for secondary settlement point meters, that customers are comfortable and prefer to receive their metering data information from a retailer app or equivalent source (*by some other means, made readily available to the customer with no delay*).

Furthermore, the *draft proposal* for measuring energy flows from in-built technology considered a volume limit of 750 MWh per annum, which exceeds the average consumption of many residential properties. We understand this threshold has been considered to include the potential output of the secondary connection assets (batteries) and for the connection of EV charging infrastructure. We believe this further substantiates that metering changes should be applicable to all connection types (as it is not a volume load restriction that is a deterrent).

The draft proposes a 2% error allowance required for the type 8/9 metering, it seems unjustifiable for the accuracy requirements to be less than is required for residential connections (metering types 4/5/6), considering the potential load (750 MWh per annum) of these devices exceeds the consumption of most residential connections. EnergyAustralia believes all metering should be required to maintain the same accuracy requirement unless the load is low enough (street lighting for example) to justify a reduced requirement. Similarly, the *draft* proposes a reduction in the testing requirements for metering types 8/9, EnergyAustralia suggests that only metering of low load devices (street lighting) should be provided this exemption; unless the testing for all metering is also reduced (noting the potential load threshold of the metering is comparable or exceeds that of the metering loads that require more stringent/regular testing).

If you would like to discuss this submission, please contact Selena Liu on 03 9060 0761 or Selena.liu@energyaustralia.com.au, or Travis Worsteling on 03 9060 1361 or Travis.Worsteling@energyaustralia.com.au.

Regards

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