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Australian Energy Market Commission
60 Castlereagh Street
Sydney NSW 2000

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Integrating price-responsive resources into the NEM – consultation paper

CitiPower, Powercor and United Energy welcome the opportunity to respond to Australian Energy Market Commission (AEMC) consultation on the rule change request to integrate non-scheduled price-responsive resources into NEM market scheduling processes.

It is important that the introduction of Scheduled Lite operate in a complementary manner to efforts already being undertaken by distributors to deliver solutions at scale and provide system operations benefits.

Consideration should be given to ensure that:

- hot water load control scheduling is managed by distributors
- community batteries owned by distributors are out scope
- traders comply with any site level flexible export limit (FEL)
- distributors must be able to engage with customer energy resources (CER) through a Low Voltage Distributed Energy Resource Management System (LV DERMS)
- a detailed costs and benefits analysis is undertaken to understand the impact the introduction this mechanism will have on customer bills.

These measures are discussed further in the appendix below.

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Yours sincerely,

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Appendix

1. Hot water load control scheduling must be managed by distributors

CitiPower, Powercor and United Energy are currently trialling hot water load control capabilities. Load controlled hot water services are a valuable tool for distributors as it will provide the ability to schedule the load shifting of hot water units to the most beneficial time for the network and resultantly:

- reduce peak demand by shifting some of the hot water usage to off-peak hours
- improve the reliability of the electricity grid as the grid is less likely to be overloaded during peak demand periods
- save money for both distributors and customers by avoiding the need to build new infrastructure to meet peak demand and shifting usage to off-peak hours, when electricity rates are lower.

If hot water load control services were to subject to Scheduled Lite, the certainty distributors would have around when this load will be on the network would be eroded and so too would the potential benefits.

2. Community batteries owned by distributors must be out of scope

Community batteries owned by distributors should not be subject to Scheduled Lite. Scheduled Lite would impose unnecessary costs and complexity on community batteries as:

- it would make difficult for community batteries to provide services to their local communities, such as providing backup power during outages, if the energy has already been bid into the market
- would reduce the flexibility of community batteries, which could limit their ability to provide ancillary services to the grid.

Currently, a distributor can remotely switch the battery on or off or change its charging and discharging rates. This allows distributors to provide various network support services such as peak shaving, frequency regulation, voltage support and demand management.

Were distributor owned community batteries included within the Scheduled Lite mechanism then:

- to participate aggregators/traders would need to invest in additional equipment and software at a significant upfront cost
- aggregators/traders may need to hire additional staff to manage their participation in Scheduled Lite.

There are already significant cost barriers to rolling out community batteries. Scheduled Lite would add another layer of complexity and cost which is likely to be passed on to customers who would be unlikely to see any benefit.

3. Distributors must be able to engage with CER through LV DERMS

Distributors are developing LV DERMS capability which will provide greater ability to manage the increasing CER connected to the low voltage network.

LV DERMS allows distributors to communicate and control CER devices for certain customers, including:

- scheduling charge or discharge at times when it is most beneficial to the grid
- controlling to reduce voltage fluctuations or congestion
- providing demand response services, such as asking customers to reduce their electricity consumption during peak demand periods.

The introduction of Scheduled Lite will have an impact on the way LV DERMS is used, and require updates to take into account the new market mechanism. Distributors will also need to work with CER owners and operators to ensure that they are able to participate.

This will come at a cost to distributors which must be included in a cost benefit analysis for Scheduled Lite.

4. Traders must comply with any site level flexible export limit

Consideration is needed on how distributors are expected to share any site level flexible export limit with aggregators/traders and their compliance with this limit.

Our submission to the AEMC on unlocking CER benefits through flexible trading touches on these issues and in particular the limited incentive aggregators/traders will have to comply with any dynamic operating envelope (DOE) set by a distributor.[1]

In communicating these limits, a contractual arrangement is needed between a distributor and an aggregator and/or energy management service operator.

An aggregator will have the ability to turn devices on and off remotely, and this could interfere with a distributors' obligations to maintain system security in the National Electricity Market (NEM). They may also place customers inadvertently in contravention of their own contractual agreements with their distributor.

Therefore, we believe a relationship with these new energy service providers is necessary to enable clear and transparent communication, and compliance with, any requirements necessary to protect the security of the network.

5. A detailed costs and benefits analysis is undertaken to understand the impact the introduction this mechanism will have on customer bills

Scheduled Lite may disproportionately benefit aggregators/traders at the expense of customers and we encourage the AEMC to fully analyse the costs and benefits. Disadvantages may include:

- the cost of participation could be passed on to customers, either directly or indirectly. For example, if CER owners are required to pay a fee to participate in the system, this cost could be passed on through higher electricity prices
- customers may have less control over their electricity consumption. For example, if they are required to shift their consumption to certain times of the day, this could disrupt their daily routines
- customers who participate may face increased uncertainty about their electricity bills. This is because the price of electricity can fluctuate depending on the supply and demand of the system
- there is a potential for discrimination against certain groups of customers under the Scheduled Lite policy. For example, customers who are unable to participate in the system, such as those who live in remote areas, may be at a disadvantage.

The AEMC must similarly consider the added costs to implement data exchange with traders/aggregators for sharing of operational data.

[1] Submission to the AEMC - Unlocking CER benefits through flexible trading, 14 September 2023.