AEMO DER MASS consultation response by Members Energy

11 March 2021

Introduction:

Members Energy commends AEMO for this consultation and for the VPP demonstration project preceding it. We believe this visionary yet practical work is required to facilitate the energy transition with a minimum of consumer disruption.

Members Energy co-founders, David Rogers and Leon Siebel, chair, Rod Woolley, and VPP strategic planner, Geoff Lamb, have extensive experience in this industry.

- From 2009-2014 Leon Siebel was a founding member and the key sales growth strategist behind Australia's largest residential PV solar company, True Value Solar. These results eventually converted to a full acquisition of True Value Solar by the German powerhouse M+W Group. He is the current co-founder and Head of Communications at Solar SG and Members Energy.
- David Rogers operated Australia's largest solar PV installation contracting company and was an exclusive internal installation service provider to True Value Solar managing over 100 PV Solar installers nationally, at peak installing over 150 systems per day. He is the current co-founder and Head of Operations at Solar SG and Members Energy.
- Rod Woolley has over 30 years' experience in senior roles, with the past 15 years being in energy efficiency and renewable energy management and policy. He is the current chair of Solar SG and related companies.
- Geoff Lamb has over 40 years' experience spanning heavy industry, electricity generator maintenance, government policy and program delivery, and energy efficiency scheme regulation and delivery.
- Members Energy currently employs 18 full time equivalent staff and its sister company, Solar SG, employs over 90 full time equivalent staff.

The Members Energy VPP currently has over 2800 customers across the NEM (excluding the Ergon region), including around 900 currently enrolled in the AEMO VPP demonstration project across NSW and Vic - equating to 1 MW of capacity in each state.

This will be doubled to 2 MW in each state in the coming weeks. We continue to enrol new customers at the rate of 400-500 per month nationally. We currently have two battery technology brands enrolled in the AEMO VPP demonstration and will add several more when the demonstration concludes (allowing enrolment of additional technologies).

We believe our VPP model is an excellent example of the way this industry will grow. With multiple enrolments across the most populous states, multiple battery technologies (with plans to add more DER), and an organisation structure including multiple consortium

partners rather than a single organisation, we believe we embody a low risk, sustainable, diverse, competition rich model for the future VPP industry.

This submission is for the DER MASS review component of the consultation only.

Responses to consultation questions:

1. Which option for the ongoing measurement requirements for DER described in Section 2.3 do you want AEMO to implement and why? Should any other options be considered?

We recommend implementing a hybrid of options 1 and 2, as follows:

- Implement option 2 for a defined period of time, between 1 and 2 years.
- Implement option 1 after the option 2 period expires. This will allow time for the industry to develop cost effective technologies to provide the increased accuracy required to ensure future growth of VPPs to fulfill a greater role in the power system.

Why?

We consider that option 2 in the short term will catalyse market competition and consumer uptake of VPP offerings. This time will allow technological development to reduce more accurate metering costs, while also allowing VPPs time to expand and play a larger role in power system security to the point where more accurate metering is required.

2. Which option do you think is more consistent with the NEO, and why?

We consider the above hybrid approach is most consistent with the NEO.

3. Should AEMO consider any principles other than those described in Section 2.4 to guide its assessment?

No.

4. What is the difference in implementation costs, such as updating the communication links or installing additional equipment, for capturing data at a resolution of either 50 ms or 1 second for every NMI for different VPP facility types? Do you consider the cost difference to be prohibitive for participating in the Contingency FCAS markets? Please provide examples or analysis if possible.

- We are still determining accurate metering costs with our partners, but contend that, given the suggested one to two year delay before mandating this level of accuracy, technology costs and communication requirements can be managed.

- In the case of changing the metering point to the connection rather than the inverter/battery, we consider that costs would be significantly higher, including labour costs of site visits to install the equipment. Given the technical requirements can be adequately dealt with using the inverter/battery approach, we would affirm the connection point approach is not warranted, and would actually reduce the number of market entrants and competition, and therefore likely increase costs to consumers unnecessarily. We have formed this view after considerable experience of our market offering in NSW and Vic (compared to SA) and the current and anticipated future cost of connection point technologies.

5. Do you think that either of the options presented will result in more or less competition in the Contingency FCAS markets?

We consider option 1 will result in less competition in the FCAS market, as the initial cost hurdle will drastically reduce the likelihood of new entrants to the market at the worst possible time. This is why our hybrid recommendation seeks to achieve the best of both worlds, with a lower cost requirement in the short term to encourage market participation while VPPs are still maturing. This to be followed in the medium term with a higher technology cost requirement, by which time the market will be more mature and the need for the increased technology cost can be absorbed by market participants as the size of VPPs grows.

6. Are there any technical risks that you envisage if the Option 2 measurement requirements are allowed? How material do you consider those risks and how could they be efficiently mitigated?

Nothing beyond what is already being addressed in the VPP demonstration. We consider those risks are very manageable in the short to medium term, during which VPPs will not be large enough to increase this risk.

7. Does the sampling rate of one second rather than 50 ms for Fast Contingency FCAS under Option 2 and the determination of the FCAS delivery at the inverter/controllable device level create market distortion or negatively impact the FCAS markets?

We contend the AEMO demonstration has shown that option 2 at the inverter is adequate for fast contingency markets for the present and near future. Our hybrid suggestion allows time for increased metering precision to be developed for future, larger VPPs, including with additional revenue stacks for demand response, etc, with the metering point remaining at the inverter. Our hybrid suggestion will not impact the existing FCAS markets detrimentally and will facilitate increased competition by allowing newer aggregator style market entrants to engage. We believe this will enhance the FCAS market, rather than ‘distorting’ it.

8. If Option 2 was adopted, should the changes to the measurement requirements of the MASS be limited to small-scale DER (under 1 MW per NMI), or should a different threshold apply, such as 5 MW? For example, what do you see as the risks and benefits of expanding these measurement requirements to other FCAS providers and in what circumstances might that be appropriate?

We don’t have a view on this.

We are happy to discuss any aspect of our submission at your convenience.

Kind regards,

David Rogers

Co-founder and Director of Operations