# Clean Energy Council submission to AEMO

# Consultation Paper on NEM VPP Demonstrations Program

The Clean Energy Council (CEC) welcomes the opportunity to provide feedback on the Australian Energy Market Operator (AEMO) Consultation Paper on the NEM Virtual Power Plant (VPP) demonstrations program.

The CEC is the peak body for the clean energy industry in Australia. We represent and work with hundreds of leading businesses operating in solar, wind, hydro, bioenergy, marine and geothermal energy, energy storage and energy efficiency along with more than 5,800 solar installers. We are committed to accelerating the transformation of Australia's energy system to one that is smarter and cleaner.

We welcome AEMO's intention to establish a framework to allow VPPs to demonstrate their capability to deliver services in energy and Frequency Control Ancillary Services (FCAS) markets. To assist with the success of VPPs in future, the CEC urges AEMO to:

- Avoid 'rail gauge' issues by encouraging collaboration between all relevant participants,
- Draw upon widely adopted international standards wherever possible,
- Utilise a voluntary approach as a precursor to mandatory standards,
- Clarify the opportunities for participation in FCAS markets,
- Estimate the costs of participation and clarify who is expected to pay, and
- Ensure confidentiality of data, including security and privacy provisions for customer data.

These issues are explored in greater detail below.

We would be very happy to discuss these issues in further detail. We look forward to contributing further to this important area for program and policy development.

### Avoid ‘rail gauge’ issues

The CEC is aware of multiple initiatives in relation to VPPs, inverter standards, grid communications protocols, grid connection rules and other closely related matters. Some organisations involved are state and territory governments (including South Australia, NSW and Victoria), SA Power Networks and other distribution network service providers (DNSPs), Energy Networks Australia (ENA), AEMO and the CEC.

The CEC commends these organisations for their initiatives in support of VPPs. However, it would be regrettable if a lack of coordination led to multiple standards and platforms. AEMO has an important role to play in supporting collaboration between key stakeholders.

We support the work being undertaken to develop a definition of ‘VPP-capable’ that draws on the international standard, IEEE 2030.5. We encourage AEMO to work through established processes where possible and avoid establishing parallel processes that could lead to multiple standards and protocols.

In developing the IT solution, we would urge AEMO to be mindful of the lack of a standard industry-wide communications protocol and the cost involved for aggregators that might be required to integrate multiple technologies into their control platform.

### Draw upon widely adopted international standards

Australia represents a relatively small share of the global inverter market. We should not expect equipment manufacturers to cater to bespoke Australian standards. Wherever possible, AEMO and other decision makers that are setting standards should draw upon widely adopted international standards.

### Utilise a voluntary approach as a precursor to mandatory standards

The CEC maintains records of the capability of inverters and other solar products, some of which is publicly available on the CEC web site. The CEC also provides regular updates on products to members with a demonstrated need for the information, such as the Clean Energy Regulator (CER), DNSPs and REC agents. Maintaining and distributing databases about mandatory and optional elements of equipment standards enables rebate programs (such as those under development in South Australia and Victoria) to be linked to optional standards. This has proven to be a more agile approach compared to the Standards Australia process.

### Clarify FCAS opportunities

With reference to AEMO's intent to explore 'value stacking' from VPP assets, the CEC would be interested to understand the emergence of very-fast-response FCAS contingency services, the possibility of VPP assets to contribute to new and existing FCAS markets and the according impact of VPP uptake on revenue distribution among new and incumbent FCAS providers. We are keen to understand how a fair distribution of such revenues may be provided to best encourage and drive uptake for large and small VPP assets.

### Estimate the costs of participation and clarify who is expected to pay

The AEMO program will add costs to VPPs beyond what is currently required. Some CEC members have expressed concern that the additional cost could be significant and it is unclear how those costs are expected to be borne and by whom. For example, the expectation of metering on the grid side of the billing meter could be very costly, especially if this necessitates retrofits and changes to customer distribution boards.

We also note concerns that the requirement for an aggregated data set to be delivered via an API might not be justified on a cost benefit analysis. The additional costs could present a barrier to entry for smaller market participants.

We urge AEMO to calculate the costs that its requirements will place on VPP trials and outline the proposed funding mechanism or cost sharing approach.

**Ensure confidentiality of data**

Confidentiality of customer data will be essential to maintaining confidence of customers participating in VPP trials. The 'capture' of consumer insights needs to be balanced with respect for security and privacy of information about customers and their energy usage. In addition, confidentiality of commercial data should be respected. It is unclear whether, and to what extent, data will be made available to DNSPs. It would be helpful for AEMO to outline the approach it will take to guarantee confidentiality of commercial and customer data and how data sharing arrangements might be integrated with the proposed implementation of the Consumer Data Right in the energy sector.