



6 August 2021

Australian Energy Market Operator

Submitted by email: mass.consultation@aemo.com.au

Dear Sir/Madam,

Amendment of the Market Ancillary Service Specification – DER & General Consultation Draft Determination

Origin Energy Limited (Origin) welcomes the opportunity to provide comments on the draft determination of the Amendment of the Market Ancillary Service Specification (MASS) – DER & General Consultation.

Origin views the integration of distributed energy resources (DER) as a key long-term reform. While Origin did not directly participate in the ARENA backed VPP trials which included examination of Frequency Control and Ancillary Services (FCAS), we have developed our own proprietary VPP platform to enable the coordination of behind the meter DER. The platform enrolls and connects to a range of DER, including solar, battery storage, controlled load (e.g. electric hot water, electric vehicles and pool pumps) and large appliances (e.g. air conditioning). The platform uses AI to learn and predict the behaviour of energy consumers and optimises each of the assets based on this learned behaviour. Over 159 MW of demand response, across about 79,000 services, is connected through our platform.

We have participated in a significant VPP trial in Victoria which looks to maximise the wholesale and retail benefits of solar and battery systems. We are also exploring larger battery systems in the 1-2 MW range which may include the ability to participate in FCAS markets. Generally, we would be interested in participating in the FCAS market in the future, for both residential and larger battery systems. We believe it is important that a competitive retail VPP market is allowed to develop which can offer a range of services to customers and the market more broadly.

On balance, Origin understands why AEMO has decided that the MASS settings for DER should be retained. Our observations on the two key issues for DER is contained below. However, we also suggest that the current ARENA led VPP trials could be used to test the risks raised in the draft determination and potentially identify mitigation strategies that may provide benefits for all stakeholders.

Regarding the two key DER related issues from the consultation process, we note:

- *measurement time* – we understand the risks raised by AEMO and why this should remain unchanged at 50ms (i.e. Option 1). Our expectation is that hardware providers will be able to provide reasonably priced devices in the coming years that can meet this standard. We do not believe it is worth discounting system security if suitable products are made available in a reasonable timeframe. However, we understand there may be a need for transitional arrangements or if such products do not eventuate in a timely or reasonably priced manner.
- *measurement point* – again, we understand the concerns raised about the measurement point and understand that AEMO needs to rely on robust data. However, there may be circumstances when relying on device level data is sufficient and this should not be precluded as the market

develops. One option would be to allow device level measurement when only one device is being orchestrated behind the meter. We would suggest that AEMO test verification at both the metering and device level as part of ongoing trials.

We also understand that some market participants have made significant investments in the ARENA VPP trials and believe that some form of transitional arrangements should be supported. We would encourage AEMO to work with stakeholders to provide for a smooth transition and facilitate the residential market to participate in FCAS provision through aggregation.

One suggestion is to defer a decision on the current determination and allow further market testing through the current ARENA led VPP trials. This could provide a better understanding of the identified risks and any potential mitigation strategies.

If you wish to discuss any aspect of this submission further, please contact Matthew Kaspura at matthew.kaspura@originenergy.com.au or on 02 9503 5178.

Yours sincerely,



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