

# MASS Review Consultation Stakeholder Forum

8 November 2021



**We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past, present and emerging.**



*Please note that this forum will be recorded for the purposes of summarising the discussion for publication on AEMO's MASS consultation webpage.*

- AEMO ask that attendees reserve questions for the Q&A sections.
- Questions can be asked using the chat box or by raising a hand and waiting to be called on to ask the question 🙋
- Please remain on mute unless speaking to reduce background noise.
- A summary of the discussion will be published to the consultation webpage, however, AEMO requests that stakeholders provide formal feedback via written submission.

# Agenda

Time	Topic	Presenter
15:00 – 15:05	Welcome and Housekeeping	Richard Owens
15:05 – 15:15	Introduction	James Lindley
15:15 – 15:35	Sampling rate	Akeesh Kusrutzing
15:35 – 15:55	Measurement point	Akeesh Kusrutzing
15:55 – 16:10	VPP Transitional Arrangements and Other DER related Issues	Akeesh Kusrutzing
16:10 – 16:20	General MASS Review - Overview and Discussion	John Deere
16:20 – 16:30	Next Steps	James Lindley & Scott Chapman
16:30	Close	Richard Owens



# 1. Introduction

MASS Consultation  
DER Review

This forum provides an opportunity for stakeholders to:

- Gain a brief overview of AEMO's second draft determination.
- Raise questions they have with regards to the second draft determination and draft MASS.

It is expected that stakeholders have read the relevant sections of the second draft determination and familiarised themselves with the information provided prior to this forum.

- Considered the feedback provided to the first Draft Determination.
  - Significant feedback suggesting further analysis needed to be undertaken.
- AEMO conducted further analysis and investigation on:
  - Sampling rate requirements
  - Error introduced at slow sampling rates
  - The requirements for measurement location
  - Transitional arrangement requirements



# 2. Measurement sampling rate

DER Review

## Key Matters under consideration:

- Detection of under-damped oscillatory behaviour at different sampling rates
- Verification error associated with 100ms, 200ms and 1s
- Discount applied during the transitional arrangement period
- Identification of inertial component with 200ms data

## Draft Determination position:

- $\leq 200$  ms sampling rate to participate in fast FCAS markets (5% discount if number of sites is less than 200)

# Questions on Notice

Stakeholder	Question
Shell Energy	If an existing site is already participating in slow and delayed FCAS markets, and a battery system is added in order to participate in fast FCAS markets, is 200ms metering sufficient for the entire site?
Reposit Power (summarised)	<p>Can AEMO provide some further detail on the 1000 site dataset used as part of the UoM analysis including:</p> <ul style="list-style-type: none"><li>- Whether it was actual metered connection point data</li><li>- What are the devices represented in the data set</li><li>- Whether this data is representative of the DER VPP market</li></ul> <p>Did AEMO seek out alternative/additional datasets as input to this round of analysis?</p> <p>Is AEMO confident that results would be similar for alternative 1000 site datasets and would AEMO consider repeating the analysis with alternative source data?</p> <p>What is AEMO's reasoning for believing that oscillatory responses from DER inverters are limited to a period of 1Hz - 0.3Hz, or in fact any particular range, and why was the 6Hz oscillatory response data provided in Reposit's first submission not been considered?</p>

# 3. Measurement Point

DER Review

## Key Matters under consideration:

- Specifying the location of the FCAS meter depending on number of controllable BTM devices
- Ensuring proper orchestration of mixed DER sites after initial FCAS registration process
- Maintaining ability to detect if FCAS response is negated when BTM devices are not orchestrated in the manner intended by an FCAS provider

## Draft Determination position:

- Measurements of power to be captured 'at or close' to the connection point
- Asset level measurements will be considered during investigation into potential FCAS non-compliances ((for example if grid/net flow shows potential FCAS non-compliance due to PV systems tripping)

# Questions on Notice

Stakeholder	Question
Evergen	For frequency specifically, will measurement at the responsive device (e.g., a battery inverter) be considered 'close' to the connection point?

# 4. VPP Transitional Arrangements and Other DER related issues

DER Review

## Draft Determination position:

- 5% discount to apply on measured Fast FCAS delivered during transitional period based on the number of sites within each VPP and their respective FCAS capacity
- No increases to capacity under the Transitional arrangements
- Transitional arrangements to end in June 2023



## Draft Determination position:

- To be addressed outside the MASS framework
- Indicative roadmap schedule included in the draft determination

# Questions on Notice

Stakeholder	Question
Evergen	Will VPP/aggregator FCAS participants be provided with templates to guide the use of the RoCoF method for FDT estimation and time alignment of all device-level measurements for the purposes of aggregation?
Tesla	Are site, load and solar measurements still required, or only battery measurements?
	When does the VPP transition period start: 30 days after the publication of the final determination, or on the date when the VPP Demonstration was closed (30 June 2021)? Would AEMO consider using the 30 June 2021 given that VPP Demonstration participants may have seen a number of customer churn since that date and have not been able to update their portfolio over the 6-month period between end of VPP Demonstration and MASS commencement?

# 5. General MASS related Issues

General Review

## Matters that have been determined:

1. Further additions to improve readability and clarity in re-worked MASS.
2. Further clarification of MASS references to FOS.
3. Requirements for non-frequency responsive facilities clarified.
4. Improved guidance on the co-ordination of different FCAS and Primary Frequency Response (PFR).
5. No change to clarification of relationship between the MASS and other instruments and institutions.
6. Further refinements to guidance for Regulation FCAS providers.
7. No change to deferring changes to Delayed FCAS requirements.
8. No material change regarding issues associated with pending rule changes.

## Matters requiring further work:

1. General limits on FCAS response types.
2. Proposed changes to Delayed FCAS.

MASS determination has proposed the formation of working group(s) to assist AEMO in some of these tasks and upcoming tasks such as FFR specifications.

# Questions on Notice

Stakeholder	Question
CS Energy	Given inertial response is subtracted from 6 and 60 second contingency FCAS response, will it also be subtracted from the new 2 second fast frequency response service? Or is it the case that we have to wait for some decision on an Inertia market before we finally see inertial response being properly valued and paid for?

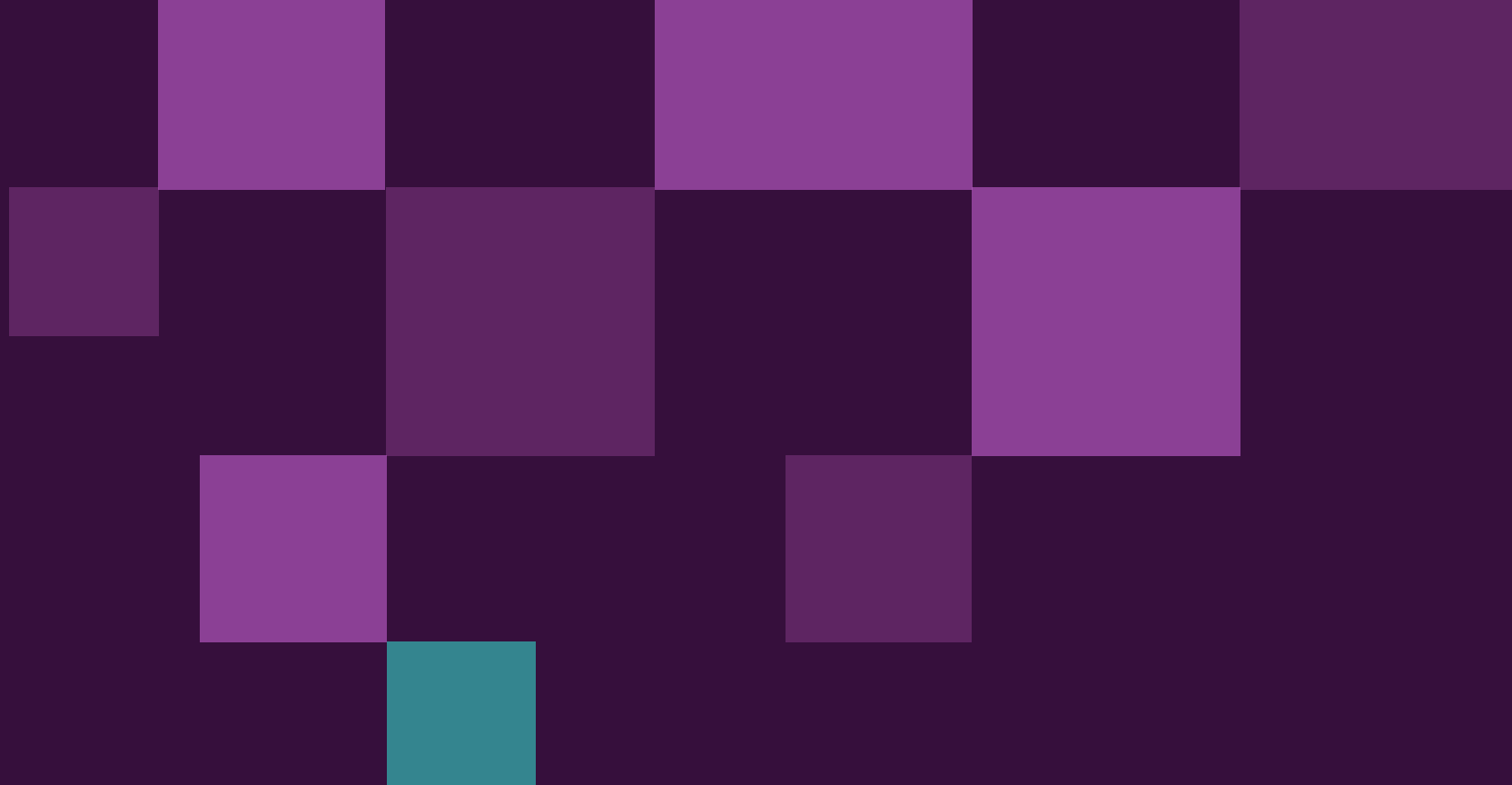
# 6. Next steps & Close

- Frequency control
- DER Update
  
- A summary of the key issues and areas of feedback from today's forum will be published on AEMO's consultation webpage
- Formal feedback should be provided in written submissions by 18 November
- Final Determination due 22 December



# Indicative consultation timeline

Process	Indicative Date	Status
<b>First Stage</b>		
Issues Paper and Notice of First Stage of Consultation	Tuesday, 19 January 2021	Complete
Submissions Close	Thursday, 11 March 2021	Complete
<b>Second Stage</b>		
Draft MASS and Notice of Second Stage of Consultation	Monday, 14 June 2021	Complete
Submissions close	Tuesday, 6 August 2021	Complete
<b>Third Stage</b>		
Second Draft MASS and Notice of Third Stage of Consultation	Thursday, 28 October 2021	Complete
Submissions close	Thursday, 18 November 2021	To be commenced
Final MASS determination published	Wednesday, 22 December 2021	To be commenced



*For more information*  
please visit [www.aemo.com.au](http://www.aemo.com.au)

