

Industry test approach

Fast Frequency Response Initiative
30 May 2023



Purpose

This document has been prepared to support participant planning, should participants wish to engage in industry testing prior to commencement of the Very Fast FCAS markets.

- ❖ The contents of this document were presented at AEMO's [NEM Reform Implementation Forum](#) on 30 May 2023.
- ❖ This document may be updated as needed in the lead up to the Industry Testing period for FFR.
- ❖ An industry test plan is scheduled for release on 31st July 2023.

FFR: high-level impacts

The information presented here is general in nature. AEMO encourages industry participants to undertake their own due diligence to assess energy market reform impacts on their respective organisations.

| AFFECTED MARKET SYSTEMS & PROCESSES | INDICATIVE PARTICIPANT CHANGE IMPACTS | AFFECTED PARTICIPANTS (TBC) | | | | | | | | | | | | | |
|-------------------------------------|---|-----------------------------|-----------|-----|-----|--------------------|------|------|----|-----|----|-----|------|---------|--|
| | | Generator | Sch. Load | SGA | IRP | FRMP (Market Cust) | TNSP | DNSP | MC | MDP | MP | ENM | MSRP | Vendors | |
| REGISTRATION | <p>LOW for those:</p> <ul style="list-style-type: none"> New contingency FCAS providers Existing contingency FCAS providers | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | |
| BIDDING & DISPATCH | <p>LOW level of process impact, including:</p> <ul style="list-style-type: none"> Extending current bidding system to support Very Fast FCAS services New terms/info on constraint equations and dispatch outcomes | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | |
| RETAIL & METERING | NONE | | | | | | | | | | | | | | |
| SETTLEMENTS | <p>LOW with:</p> <ul style="list-style-type: none"> Extending to display new columns for invoicing reports 'Ancillary services' line item on billing PDF to include new services Impacts to all participants that consume settlement data | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | | |

| | |
|------------------|-------------------------------|
| Generator | Generators |
| Sch. Load | Scheduled loads |
| SGA | Small generation aggregators |
| IRP | Integrated resource providers |

| | |
|-------------|--|
| FRMP | Financially responsible market participant |
| TNSP | Transmission network service provider |
| DNSP | Distribution network service provider |
| MC | Metering coordinator |

| | |
|-------------|-------------------------------|
| MDP | Metering data provider |
| MP | Metering provider |
| ENM | Embedded network manager |
| MSRP | Market SAPS resource provider |

Approach for Industry Test

Objectives

To optionally provide participants the opportunity to:

- prove their updated systems against AEMO's market systems.
- test end-to-end scenarios of updated processes and procedures.
- to contribute to their assessment of overall industry readiness for Rule commencement.

Approach

Industry test allows industry participants to further test their system with AEMO's.

In particular to:

- perform pre-prod demonstration of ability to submit bids for Very Fast FCAS as part of the Registration process to provide the new very fast FCAS services. (Applicants are established in pre-prod to perform this demonstration.) Submit and verify FCAS bids via the FTP, API, or Markets Portal 'Energy & FCAS 5min Bids' capability.
- ingest pre-dispatch and dispatch instructions, FFR enhancements to Wholesale Data Interchange MMS Data Model (DISPATCH, P5MIN, PREDISPATCH, TRADING_DATA, FORCE_MAJEURE packages).
- regression test bid, dispatch, and Wholesale Data Interchange functionality (participating and non-participating providers for the new services).
- test bidding processes and ensure automated energy/FCAS trading tools are working correctly.
- ingest Settlement changes for generators and load market customers showing recovery calculations for the new service i.e., Settlement reports and data model via Wholesale Data Interchange (Settlement and Billing packages) and download via Settlements Direct (Markets Portal application).

Fast Frequency Response test timeframes

| Item | Timing |
|--|--|
| FFR Services registration commences (production) | 9 th August |
| Pre-dispatch to include FFR offers (pre-prod) | 28 th August |
| 5min Pre-dispatch to include FFR Offers (pre-prod) | 3 rd Sept |
| FFR Offers included in Dispatch Instructions (pre-prod) | 4 th Sept |
| Settlement run(s) in pre-prod (data approach and settlement week 36 TBC) | 15 th / 18 th Sept |

Dates
indicative

- EMMS Data Model 5.2 currently available in pre-prod supports FFR.
 - Data population commences as per dates above



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