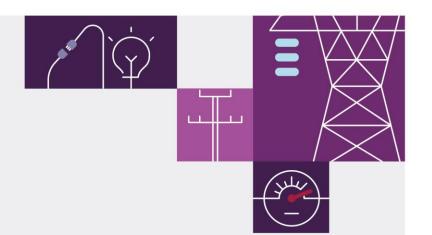


Frequency Performance Payments – Financial Operations (8 June 2025) March 2025

Industry Go-live Plan







## Important notice

### **Purpose**

This document describes the go-live approach for upgrading AEMO's wholesale systems for the Financial Operations (FO) release of the Frequency Performance Payments (FPP) initiative 8 June 2025.

### **Disclaimer**

This document may be subsequently updated or amended. It is intended to provide general information and guidance, which is only current as at the date of its last publication. It does not constitute legal or business advice and should not be relied on as a substitute for obtaining detailed advice about the National Electricity Law, the National Electricity Rules, or any other applicable laws, procedures, or policies. AEMO has made every reasonable effort to ensure the quality of the information in this document but cannot guarantee its accuracy or completeness.

Accordingly, to the maximum extent permitted by law, AEMO and its officers, employees and consultants involved in the preparation of this document:

- make no representation or warranty, express or implied, as to the currency, accuracy, reliability, or completeness of the information in this document; and
- are not liable (whether by reason of negligence or otherwise) for any statements or representations in this document, or any omissions from it, or for any use or reliance on the information in it.

Copyright

© 2024 Australian Energy Market Operator Limited. The material in this publication may be used in accordance with the copyright permissions on AEMO's website.

#### Version control

Version	Release date	Changes
0.1	14 March 2025	Draft for Industry Review

## **Executive summary**

On 8th June 2025, AEMO will implement the "FPP-FO" software release across its Wholesale systems under the NEM Reform Program.

The release introduces full financial operations and rule commencement of Frequency Performance Payments. Non-financial operations of FPP commenced in Dec 2024 to give impacted participants – scheduled and semi-scheduled generators and loads - an opportunity to observe how different patterns of operation would result in penalties or payments, based on actual performance and in real time. Full financial operations introduces the settlement of these penalties and payments.

The new FPP solution will have been running in parallel with the legacy system, Causer Pays, for 6 months from commencement of non-financial operations. Causer Pays will cease to be available upon successful go-live of this release on 8<sup>th</sup> June.

AEMO has a key coordination role, through collaboration with its industry working groups, to ready Industry and itself for the various system and market "go-live" dates.

At a high level, the go-live responsibilities are set out below:

- AEMO to facilitate a Market Trial for the FPP-FO release.
- AEMO to enable the market software to commence operations in line with requirements.
- Participants are encouraged to complete their preparations in readiness for the FPP-FO release.

## **Contents**

Execu	tive summary	3
1. 1.1	Introduction FPP-FO release	5 5
1.1.1	Frequency Performance Payments rule change	5
1.1.2	EMMS Data model 5.5	6
1.2	Document purpose & approach	6
2. 2.1	Go-live Plan framework Scope	6 6
2.2	Principles	6
3. 3.1	June 2025 release Industry Go-live Plan  Market Trial	7 7
3.2	EMMS Data Model v5.5 release	7
3.3	Go-live plan	7
3.4	Go-live criteria and readiness decision	8
3.4.1	Participant readiness	8
3.4.2	Final Causer Pays run	8
3.4.3	First Frequency Performance Payments run	8
3.5	Communications	9
3.6	Go-live schedule	9
3.7	Deployment Contingency	13
4.	Participant Support Arrangements	13
Glossa	ary	14

## **Tables**

Table 1	FPP-FO Release Go-Live Plan development timeline	6
Table 2	FPP-FO Go-live Schedule	10

### 1. Introduction

This chapter describes the implementation of the Australian Energy Market Operator's (AEMO) NEM Reform Frequency Performance Payments – Financial Operations (FPP-FO) June 2025 release.

This document provides information to Participants and their IT staff that will be impacted by the functional and technical changes being implemented with the FPP-FO release and to confirm activities and timeframes associated with go-live planning.

### 1.1 FPP-FO release

The first release for the FPP project (9 December 2024) included changes associated with the introduction of new FPP calculations and reporting based on unhelpful or helpful behaviour in maintaining system frequency within normal operating bands. This second and final release introduces changes for financial settlements (penalties or payments) made to participants based on these calculations. It covers the procedural, IT system and market readiness arrangements needed to implement the June Go-Live Plan using the following workstreams:

- Procedures defines and implements the required changes to market procedures
- Systems designs, develops, tests, and implements changes to AEMO's market systems
- Readiness coordinates, assists, and prepares AEMO and participants to transition to the FPP-FO changes
   AEMO's FPP-FO Release has entered the implementation planning phase.

### 1.1.1 Frequency Performance Payments rule change

On 8 September 2022, the Australian Energy Market Commission (AEMC) published a final determination and a final rule to amend the existing provisions for the allocation of costs (often referred to as 'Causer Pays') relating to regulating raise services and regulating lower services as well as implementing a new incentive framework for the provision of Primary Frequency Response (PFR).

AEMO uses Regulation Frequency Control and Ancillary Services (FCAS), to make relatively small adjustments to the supply and demand balance in the electricity system. Under the current Causer Pays framework, electricity generators are assessed based on the relative unhelpfulness of their impact on the power system frequency. Causer Pays recovers Regulation FCAS costs from those electricity generators who have an overall negative impact on the power system, while those who do not have a negative impact avoid paying any costs.

The new rule creates a system of positive and negative Frequency Performance Payments (FPP), which will give market participants information on their frequency performance and its dollar value (or cost). Under the new arrangements, generation units' performance and five-minute Contribution Factors (CF) calculated for FPP will be used to allocate the recovery of Regulation FCAS costs.

#### 1.1.2 EMMS Data model 5.5

Changes to the EMMS Data Model are required to support FPP-FO. These changes are documented in the EMMS Technical Specification<sup>1</sup>.

### 1.2 Document purpose & approach

This document describes the go-live approach for the FPP-FO Release with respect to the deployment of Wholesale System enhancements.

The FPP-FO Release Industry Go-Live plan is developed in consultation with industry through the Implementation Forum. Table 1 below illustrates AEMO's engagement approach and timeline for developing the plan.

Table 1 FPP-FO Release Go-Live Plan development timeline

Milestone	Date
Publish draft for industry feedback	14 March 2025
Deadline for industry feedback	11 April 2025
Publish final plan	30 April 2025

### 2. Go-live Plan framework

### 2.1 Scope

- In scope
  - o Deployment of wholesale system changes to support the implementation of FPP-FO
  - o EMMS Data Model v5.5 changes to support FPP changes to billing, settlements and market reports
  - o Communications during deployment
  - o Support arrangements during the go-Live period
- Out of scope
  - o Participant contingency plans.

### 2.2 Principles

The industry transition and go-live strategy principles apply to June 2025 release changes. These are:

<sup>&</sup>lt;sup>1</sup> https://aemo.com.au/en/energy-systems/market-portals-directory/tech-specs

- The changes within this release are mandated via Procedure changes commencement date 8th June should be met.
- 2. NEM operations should be uninterrupted during periods of transition and go-live.
- 3. Market system go-live risks should be minimised.
- 4. Participants should be provided with implementation flexibility where possible.
- 5. Participants and AEMO are each responsible for their own go-live planning.

## 3. June 2025 release Industry Go-live Plan

#### 3.1 Market Trial

Industry Testing is optional for Participants and provides the opportunity to prove their market systems against AEMO's market systems in the pro-production environment. A Market Trial will provide a coordinated multi-party end-to-end testing of business process scenarios. For further details including testing scope inclusions refer to the Market Trial Strategy<sup>2</sup> and Market Trial Test Plan<sup>3</sup>.

A refresh of the Pre-Production environment took place from 24<sup>th</sup> to 28<sup>th</sup> February 2025 from snapshots taken of Production Wholesale and Retail systems on 17 February and 24 February respectively.

### 3.2 EMMS Data Model v5.5 release

EMMS Data Model v5.5 will be released to pre-production on 25<sup>th</sup> March 2025 and production on 29<sup>th</sup> April 2025 to allow participants to install/upgrade prior to Market Trial start and go-live respectively.

Data model v5.5 release provides two scripts to participants, one to create the data model from scratch and the other to update from a previous version. This step is a pre-requisite for any participant to be able to perform their testing.

Data will be populated in Preproduction from Market Trial start (2<sup>nd</sup> April) and in Production from 8th June Go-live.

For further information - AEMO | NEMweb Help

### 3.3 Go-live plan

The June 2025 release contains a single release for Wholesale Systems which includes both the FPP-FO systems changes and the EMMS Data Model v5.5 release.

<sup>&</sup>lt;sup>2</sup> FPP-FO Market Trial Strategy

<sup>3</sup> FPP-FO Market Trial Test Plan

The production deployment for the June 2025 release is scheduled for Wednesday 4 June during the standard maintenance window. Participants are advised to install/upgrade to EMMS Data Model v5.5 by Sunday 8 June 2025 Rule commencement.

### 3.4 Go-live criteria and readiness decision

Solution Go Live Criteria	Description
Solution readiness	AEMO solution tested in-line with requirements. System Changes required to meet initiative requirements and ongoing stability of existing systems.
AEMO business readiness	AEMO business ready to support release changes

Service Commencement Criteria	Description
Market readiness	Whilst there are no formal Market Readiness requirements, Participants must ensure that they are able to generate and accept the relevant changes.

A checkpoint decision will be made on 9 May to determine initiative readiness for Production go-live and communicated, via the June Implementation Forum.

#### 3.4.1 Participant readiness

Participant readiness activities, including participation in the Market Trial, are not a pre-requisite for AEMO to confirm technical readiness to go-live. As such, the release will not require formalised participant readiness reporting.

AEMO encourages Participants to engage in the Market Trial during April/May 2025.

#### 3.4.2 Final Causer Pays run

The final Causer Pays Factors will be published on 24<sup>th</sup> April 2025, where the factors will be applied for 11<sup>th</sup> May 2025 to 7<sup>th</sup> June 2025 prior to commencement of Financial Operations on 8<sup>th</sup> June 2025.

#### 3.4.3 First Frequency Performance Payments run

The billing period for Frequency Performance Payments commences on Sunday 8<sup>th</sup> June. The first Preliminary settlement run will be Friday 20 June and the first Final settlement run will be Wednesday 9<sup>th</sup> July.

### 3.5 Communications

Correspondence regarding the go-live will be released through AEMO Support Hub bulletins and the <u>NEM Reform</u> <u>mailbox</u>. AEMO will provide the following forms of updates to participants during the AEMO cutover:

- General updates provide participants with information about the status of the AEMO cutover process.
   These will be communicated via the NEM Reform mailbox to NEM Reform Implementation Forum (IF) members.
- Support Hub Notices provides information to the market on cutovers activities that may impact participant processes, e.g. stopping B2M batch handlers. This will be communicated through AEMO's established Market Notices mailing list.
- Issues should any issues arise or deviations from the previously communicated processes, participants will be notified through the NEM Reform mailbox. If the issue or deviation is in relation to a notice previously sent through AEMO's Support Hub Notices, participants will receive a communication through this channel in addition to the NEM Reform mailbox.

### 3.6 Go-live schedule

The wholesale system's production deployment for FPP-FO is scheduled for Wednesday 4<sup>th</sup> June 2024. No interruption to production is expected.

The steps for the implementation of AEMO market system changes and associated communications are outlined in Table 2.

Table 2 FPP-FO Go-live Schedule

Ref ID	Date	AEMO Action	Participant Impact/Action	Communication Channel
		Pre-Production		
1	25 Mar 2025	EMMS Data Model 5.5 release to Preproduction including scripts to install/upgrade the data model.	No outage required Impacted Participants can upgrade their systems to EMMS Data Model v5.5 Existing Participants are auto-subscribed to new files when they upgrade with the following exceptions to be manually subscribed:  NEXT_DAY_FPP NEXT_DAY_FPPMW NEXT_DAY_FPPMW2 FPP_UNIT_MW (optional due to large volume) SETTLEMENTS_INIT BILLING_INITIAL For existing files, Participants need to subscribe to latest versions via the Data Model Mgr. Check that all FPP reports are set to 'active' in PDR Monitor to consume these reports.	Support Hub Notification     Email to NEM Reform Implementation Forum members
2	2 Apr 2025	AEMO email notification that supported Industry Test period has commenced and EMMS Data Model v5.5 FPP-FO tables are publishing	Participants can participate in Industry     Testing     ITWG Q&A support sessions will be held each     weekday for the initial 3 weeks, then twice     weekly for the remainder of the Market Trial.	Email to Implementation Forum members
3	20 May 2025	AEMO email notification that supported industry test period has concluded	Communication only	Email to Implementation Forum members at completion

Ref ID	Date	AEMO Action	Participant Impact/Action	Communication Channel
		Prior to Production Go-live 8	June 2025	
4	29 Apr 2025	EMMS Data Model 5.5 release to Production including scripts to install/upgrade the data model.	No outage required. Impacted Participants can upgrade their systems to EMMS Data Model v5.5. Existing Participants are auto-subscribed to new files when they upgrade with the following exceptions:  NEXT_DAY_FPP  NEXT_DAY_FPPMW  NEXT_DAY_FPPMW2  FPP_UNIT_MW (large volume)  SETTLEMENTS_INIT  BILLING_INITIAL  For existing files, Participants need to subscribe to latest versions via the Data Model Mgr.  Check that all reports are set to 'active' in PDRMonitor.	Support Hub Notification     Email to NEM Reform     Implementation Forum     members
5	4 Jun 2025	Deployment of FPP-FO release to Production including market reports	Check that all reports are set to 'active' in PDRMonitor.	Email to NEM Reform Implementation Forum members
		FPP Rule commencement date	8 June 2025	
6	8 June 2025	AEMO notification that implementation of FPP is complete and FPP billing period commences.  Noting:  - Settlements data for 8 June (using estimated meter data) will be published to settlement data model tables for the first time from 1am Monday 9 June 2025 and available daily.  - New tables, such as default calculations, required under certain circumstances only, will not be populated immediately  - First Preliminary FPP Settlement Run Friday 20 June 2025	Communication only	Email notification to NEM Reform Implementation Forum members

### FPP-FO June 2025 Go Live Plan

Ref ID	Date	AEMO Action	Participant Impact/Action	Communication Channel
		- First Final FPP Settlement run <b>Wednesday 9 July</b> 2025		

### 3.7 Deployment Contingency

The FPP-FO release is comprised of updates to current AEMO systems.

Where a task/deployment has a participant impact, AEMO will provide communication confirming the successful deployment.

Where an issue arises that impacts the Readiness and Go-live Criteria, participants will be notified and a path forward will be communicated. This may involve consultation and will be assessed if/when required.

### 4. Participant Support Arrangements

All production issues should be raised via the Support Hub and managed through the current wholesale system support processes.

AEMO will run Hypercare for the FPP-FO changes for one month from 8<sup>th</sup> June 2024. There will be heightened SME availability to support participants during this time along with:

- · Issue Tracking:
  - Publication of identified Issues Log
  - Q&A Sessions as required
  - Participants are requested to follow BAU process and log issues via the AEMO Support Hub
- Communications:
  - Market communications will be used for the notification of any impacts to processing
  - The AEMO FPP project will organise post-go-live open Q&A sessions as required
  - Q&A session to discuss any issues or queries

# Glossary

Term	Definition
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
BAU	Business as Usual
Cutover	System or process implementation event
FO	Financial Operations
IF	Implementation Forum
Industry testing	Informal, uncoordinated testing by participants in AEMO's IT environments. Self-testing of functionality such as connectivity, and/or coordinated multi-party testing of functional scenarios.
Market Trial	Coordinated, multi-party, end-to-end testing of AEMO Software changes and the respective business process scenarios.
ITWG	Industry Testing Working Group
NEM	National Electricity Market
NER	National Electricity Rules
FO	Financial Operations
PDRMonitor	Participant Data Replication Monitor
SME	Subject Matter Expert
Q&A	Question and Answer