

Program Consultative Forum

Meeting #3
14 December 2022



1. Welcome

We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture.

We pay respect to their Elders past, present and emerging.

Agenda

#	Time	Topic	Presenter(s)
1	1:00pm – 1:05pm	Welcome	Peter Carruthers (AEMO)
2	1:05pm – 1:10pm	Actions & Feedback from Previous Meeting	Peter Carruthers (AEMO)
3	1:10pm – 1:20pm	Program Update	Rowena Leung (AEMO)
4	1:20pm – 1:30pm	NEM2025 Forums Update	Ulrika Lindholm (AEMO)
5	1:30pm – 1:40pm	NEM Reform Implementation Roadmap Update	Lance Brooks (AEMO)
6	1:40pm – 2:45pm	Initiatives Update <ul style="list-style-type: none">• March: IESS• May: SAPS, CDR, B2B v.3.8, MS DR• October: FFR, MT PASA	Emily Brodie (AEMO) Meghan Bibby (AEMO) Chris Muffet (AEMO)
7	2:45pm – 2:50pm	Upcoming Engagements	Ulrika Lindholm (AEMO)
8	2:50pm – 3:00pm	General Questions and Other Business	Peter Carruthers (AEMO)

Appendix A: Competition law meeting protocol and AEMO forum expectations

Appendix B: Industry Testing Approaches

"Please note that this meeting will be recorded by AEMO and may be accessed and used by AEMO for the purpose of compiling minutes. By attending the meeting, you consent to AEMO recording the meeting and using the record for this purpose. No other recording of the meeting is permitted"

2. Actions & Feedback from Previous Meeting

Actions & Feedback from Previous Meeting

#	Topic	Action	Responsible	Status
2.1	Inflight Initiatives	AEMO to add to the 1 pager overviews of inflight initiatives and republish to PCF. <ul style="list-style-type: none"> Likely impacted stakeholders Anticipated Industry Testing Approach 	AEMO	Closed. V.2 of October PCF pack distributed to members.
2.2	NEM Reform Milestone Approach	AEMO to share worked example of milestone structure with PCF (5MS and Implementation forum examples).	AEMO	Closed. 5MS PCF 23 Meeting Pack
2.3	NEM2025 PCF Terms of Reference	AEMO to publish PCF ToR as final on AEMO's website.	AEMO	Closed. Available on PCF webpage.

The latest meeting minutes and materials are available on the [Program Consultative Forum](#) webpage.

3. Program Update

Program introduction and status

Program features

To deliver the reforms efficiently, AEMO has established an integrated program which incorporates:

- A dual sponsorship steering committee
- Accountability for end-to-end delivery of reform initiatives
- Deliberate focus on identifying and leveraging efficiencies including a consistent approach to delivery across projects
- Single interface to stakeholders
- Delivering common delivery services.

Key priorities

- Program Definition: Planning and definition work to set out program for delivery
- Program Delivery (Inflight projects): Delivery of the projects which have rule dates in the coming 12 months, bundled into 3 key releases, March, May and Oct 2023.
- Program Business case: Feasibility and analysis work for the completion of a business case for our next tranche of work (Stage gate 3: IDAM, IDX and Portal Consolidation*).

Status

Initiatives	Release dates					Impacted stakeholders
	Mar-23	May-23	Oct-23	Jun-24	Jun-25	
Integrating Energy Storage Systems [Initial release]	Go-live					Market Small Generation Aggregators
Integrating Energy Storage Systems				Go-live		NSPs, vendors, Metering service providers, FRMPs
SAPS, CDR, B2B v.3.8, MSDR	SAPS MSRP Registration	Go-live				DNSP, Retailers, MP/MDP
Fast Frequency Response			Go-live			Generators, Market Customers
Increased MT PASA Information			Go-live			Scheduled Generators
Frequency Performance payments					Go-live	Generators, Market customers

Program delivery and mobilisation remains largely on track towards end of calendar year. Some issues for resolution in Test strategy and Testing environments.

A detailed status on each project is covered under section 6 of this agenda.

4. NEM2025 Forums Update

NEM2025 Forums update

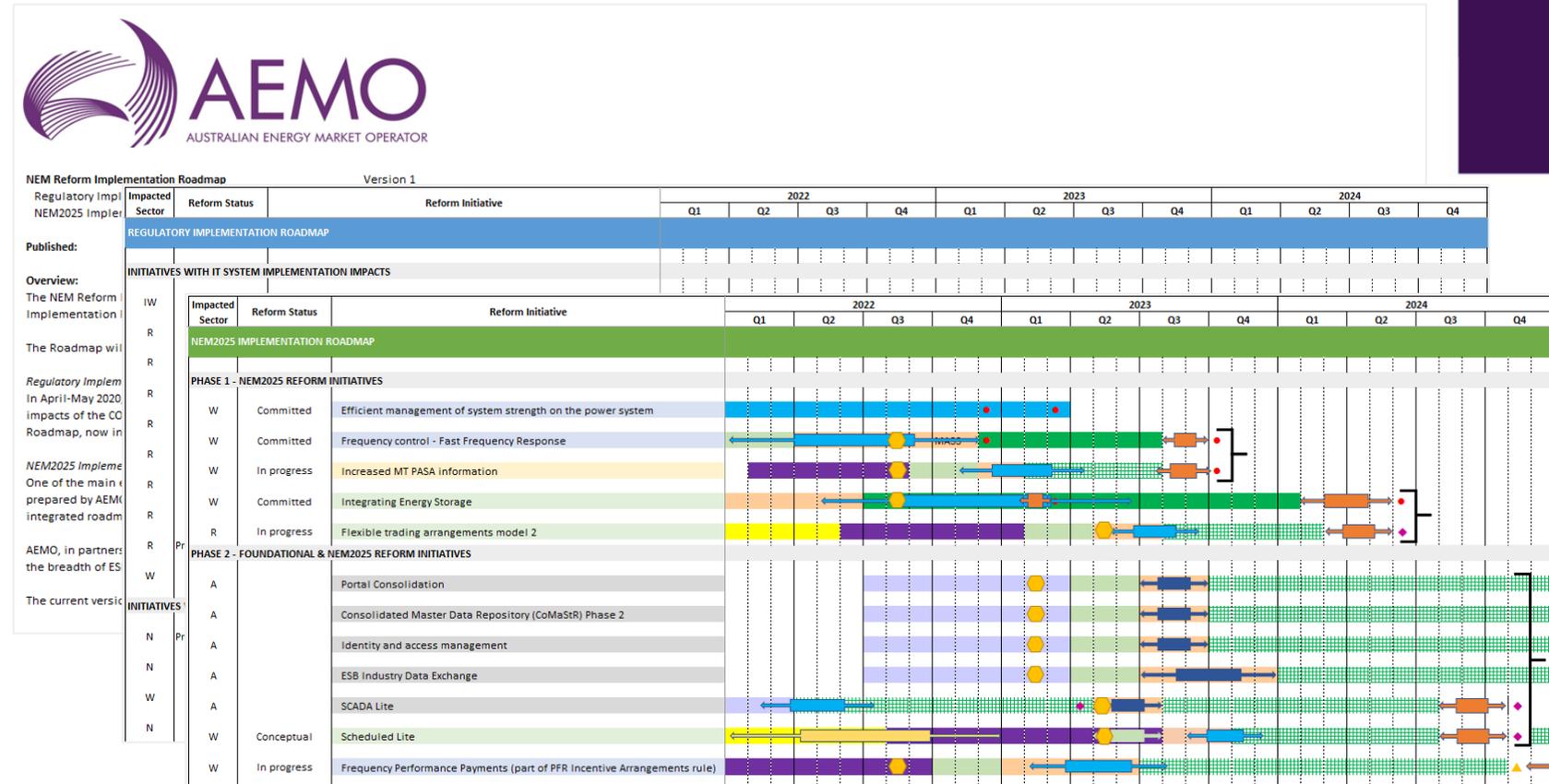
Channel	Current focus	Next meeting
Electricity <u>Retail</u> Consultative Forum (ERCF)	<ul style="list-style-type: none"> Ongoing procedural engagement across NEM2025 and other retail related procedure consultations 	30 January 2023
Implementation Forum	<ul style="list-style-type: none"> Has finalised the November Retail release and engaging on 2023 implementation activities involving plans for release of technical documentation, readiness and testing activity. ITWG will be meeting in January to progress Industry Testing approaches for IESS and May Reform initiatives in scope: <ul style="list-style-type: none"> March: IESS May: SAPS, CDR, B2B v.3.8, MSDR October: FFR, MT PASA 	31 January 2023
NEM2025 Program Consultative Forum (PCF)	<ul style="list-style-type: none"> Has explored indicative ways of working for overarching reform implementation coordination To establish baseline awareness of milestone plans and active issues for inflight initiatives 	7 February 2023
Electricity <u>Wholesale</u> Consultative Forum (EWCF)	<ul style="list-style-type: none"> Has established its Terms of Reference and an initial way of working on NEM2025 wholesale related procedure consultations for inflight reform initiatives 	22 February 2023
NEM2025 Executive Forum	<ul style="list-style-type: none"> Participant nominations 	To be established in Q2 2023
IESS Working Group	<ul style="list-style-type: none"> Last meeting held 30 November. Implementation matters transferred to NEM2025 program forums 	n/a

For description and meeting papers for each of the channels, please refer to the [NEM2025 program](#) website.

5. NEM Reform Implementation Roadmap Update

Keeping the NEM Reform Implementation Roadmap up to date

- The Roadmap will be revised periodically to reflect changes in scope or timelines as policy or designs are being finalised or as new rule determinations are made.
- Changes are made in accordance with a formal change management process in consultation with the Reform Delivery Committee.



Change Management Update

- A summary of upcoming and confirmed changes was produced for the RDC at the end of October and updated in December.
- Confirmed changes in bold

Initiative	Update	Proposed Action
Integrating Energy Storage	<p>IESS project team are working closely with AEMC to address IESS rule implementation matters. This will likely involve a rule change proposal from AEMO late this year. Additionally, the rule change proposal will include a request to include an obligation for integrated resource providers and bidirectional units to comply with primary frequency response requirements.</p> <p>Based on Industry feedback an alternative Aggregate Dispatch Conformance (ADC) approach will be implemented. This alternative will be delivered post 31 March – with confirmed timeframes currently under assessment</p>	No action. If required, amendments to Roadmap to reflect the outcomes of the work between the AEMC and AEMO are to be made once known.
Portal Consolidation	Likely change required to Stage Gate timing. AEMO is currently in the planning phase regarding this initiative.	Timing of proposed Stage Gate to be updated in the Roadmap following completion of planning phase.
Consolidated Master Data Repository (CoMaStR) Phase 2	As above	As above
Identity and access management	As above	As above
Industry Data Exchange	As above	As above
Flexible trading arrangements model 2	AEMC has published its proposed schedule including: Consultation Paper 8 December; Directions Paper (if required) May 2023; Draft Determination August 2023; Final Determination November 2023	Amendment to the Roadmap to reflect updated timelines.
Scheduled Lite	Change required to reflect timing of proposed rule change consultation. A rule change request has not been submitted at this time.	AEMO is engaging with market bodies and the ESB ahead of submitting rule change request. Amendment to the Roadmap to reflect the outcomes of this engagement once known.
Operating Reserves Market	Change required to reflect proposed timing of a final rule determination from December 2023 to September 2023 as notified by the AEMC.	No material issues identified with change in timing of final determination. Anticipated 'go-live' date to remain as is. Roadmap to be updated prior to next publication.

6. Initiatives Update

Context & proposed approach

- As the NEM2025 Program moves through its reform implementation, key milestones for each initiative will be defined. This will assist in providing certainty for participant development and a basis for monitoring/reporting status.
- Plan updates will be by exception and will focus on monitoring progress against milestones. Once the key Milestones are baselined, any changes to these milestones will be highlighted and discussed with PCF.
- AEMO welcomes feedback on this proposed approach, which can be shared in-meeting or through contacting us at NEM2025@aemo.com.au.

March 2023 release - updates

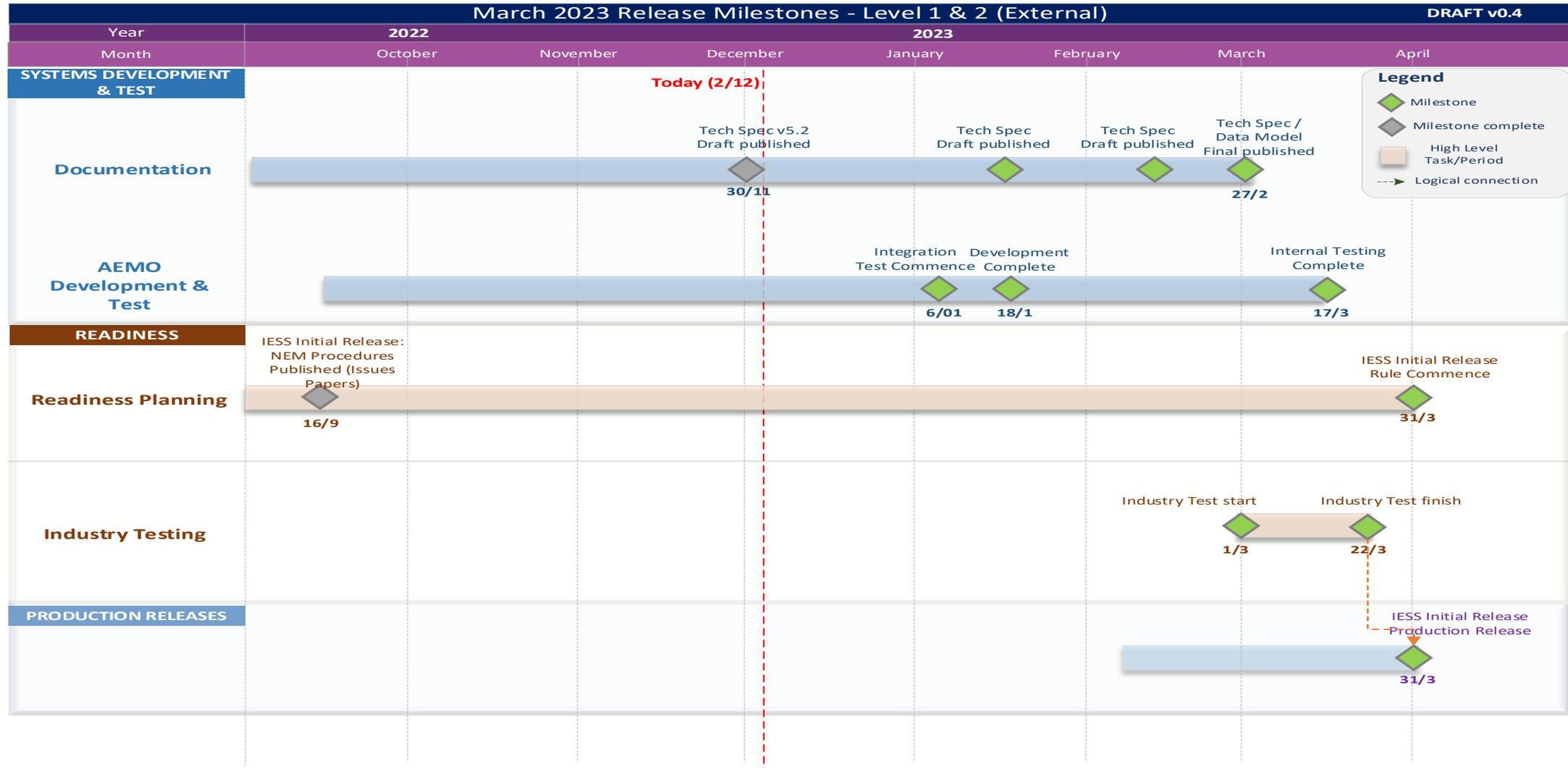
INTEGRATING ENERGY STORAGE SYSTEMS (IESS)

Key Date(s)	Initial Release 31 Mar 2023 [Go-live 03 Jun 2024; IRP registration grace period ends 03 Dec 2024]
Likely affected stakeholders	<ul style="list-style-type: none"> Market Small Generation Aggregators – optional to take up FCAS “Hybrid” facilities, connecting NSPs, control system vendors/developers – option to use aggregated dispatch conformance
Industry testing anticipated	Industry testing available

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> Dispatch procedure is being re-consulted to allow consideration of an alternative aggregated dispatch conformance solution. 	<ul style="list-style-type: none"> Wholesale EMMS technical specification released for stakeholder consideration with draft mark-ups for : <ol style="list-style-type: none"> Enabling SGAs to provide FCAS Introducing ADC Data Model 5.2 draft released. This release supports also supports updates for SAPS and FFR table changes MSUG sessions convened to discuss technical implementation of data model 	<ul style="list-style-type: none"> Development in progress, Minor delays to individual components results n development now not completing until 18/1 Integration test will commence on schedule and absorb development reschedule No impact to completion milestone anticipated 	<ul style="list-style-type: none"> No formal industry readiness or transition required. AEMO needs to be ready, however this is an optional initiative for SGAs. 	<ul style="list-style-type: none"> Industry testing will be available for those SGAs that choose to provide FCAS. Program support via ITWG and regular Q&A sessions 	<ul style="list-style-type: none"> A stakeholder proposed an alternative aggregated dispatch conformance (ADC) solution some time after AEMO had completed its ADC consultation. AEMO has assessed the proposal as being feasible and a better solution that will result in more participants using ADC. Industry has been consulted. AEMO believes it appropriate to implement the alternative ADC design as soon as possible, but this will be later than 31 March 2023.

Relevant links	
Integrating energy storage systems into the NEM AEMC	AEMO Indicative change program
AEMO Integrating Energy Storage Systems project	AEMO Integrating Energy Storage Systems Working Group

March 2023: Integrating Energy Storage Systems – Initial Release



May 2023 release - updates

SAPS, CDR, B2B v.3.8, MSDR

Key Date(s)	31 March SAPS MSRP Registration, 30 May Commencement
Likely impacted stakeholders	DNISP, Retailers, MP/MDP
Industry testing anticipated	Invitation Industry Testing for SAPS, Industry Testing for other components

Overall **On Track**, Confirmation of Release Scope with finalisation of Load Profiling Consultation

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> Load Profiling Draft report released <ul style="list-style-type: none"> - Responses due 20 Jan - Draft position to implement 5MLP solution 1 October 2023 and perform further analysis for NSLP CDR LCCD workshop scheduled for 13th December 	<ul style="list-style-type: none"> Draft aseXML r43 schema provided 2/12. This is ahead of advised milestone of 20/12 MSATS V49.0 tech spec planned for release 20/2. Will cover all changes included in May release 	<ul style="list-style-type: none"> Design & Development activities proceeding for all areas of May release, minor delays in commencing some ICF development. Planning for AEMO UAT and Integration testing has commenced Development and Testing milestone for completion remains on track 	<ul style="list-style-type: none"> Scoping of transition and go-live planning commenced, will include approach to transition of existing meter exemptions. No transitional activities required for CDR implementation of Last Customer Change Date 	<ul style="list-style-type: none"> ITWG to meet in January to progress March and May testing approaches Invitation Industry Testing to support SAPS implementation is expected Industry testing for other components will be supported 	<ul style="list-style-type: none"> SAPS MSRP registration to be supported from 31 March 2023 SAPS, CDR Phase 2, B2B go live 30 May 2023

Relevant links

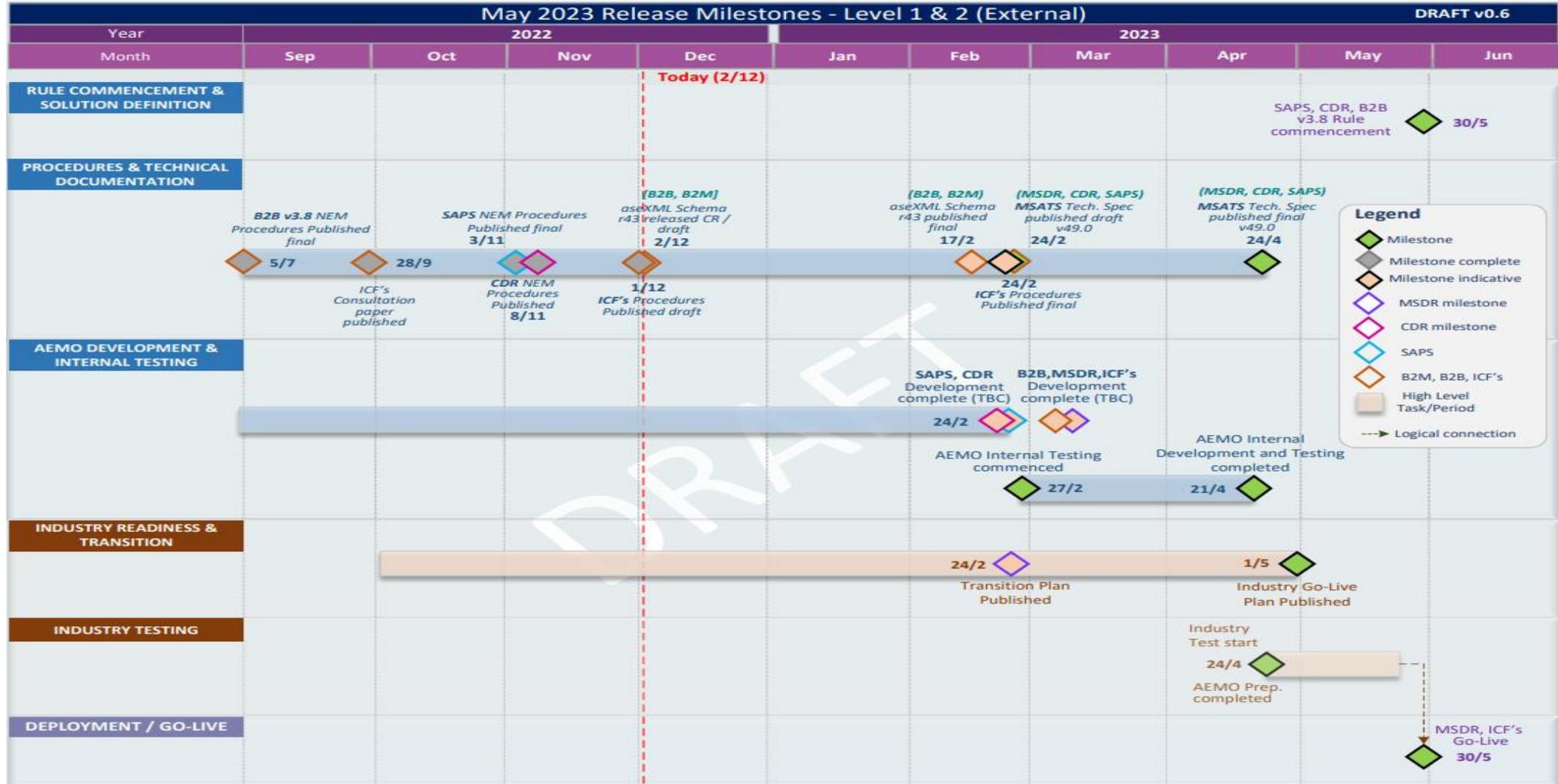
[AEMO | Consumer Data Rights MSATS Consultation](#)

[AEMO | Standalone Power Systems \(SAPS\) – Identifying a SAPS NMI in MSATS](#)

[AEMO | Load Profiling Methodologies Consultation](#)

[AEMO | B2B Procedures v3.8](#)

May 2023 – SAPS, CDR pt 2, MSDR meter Exemptions, B2Bv3.8, ICFs



October 2023 release

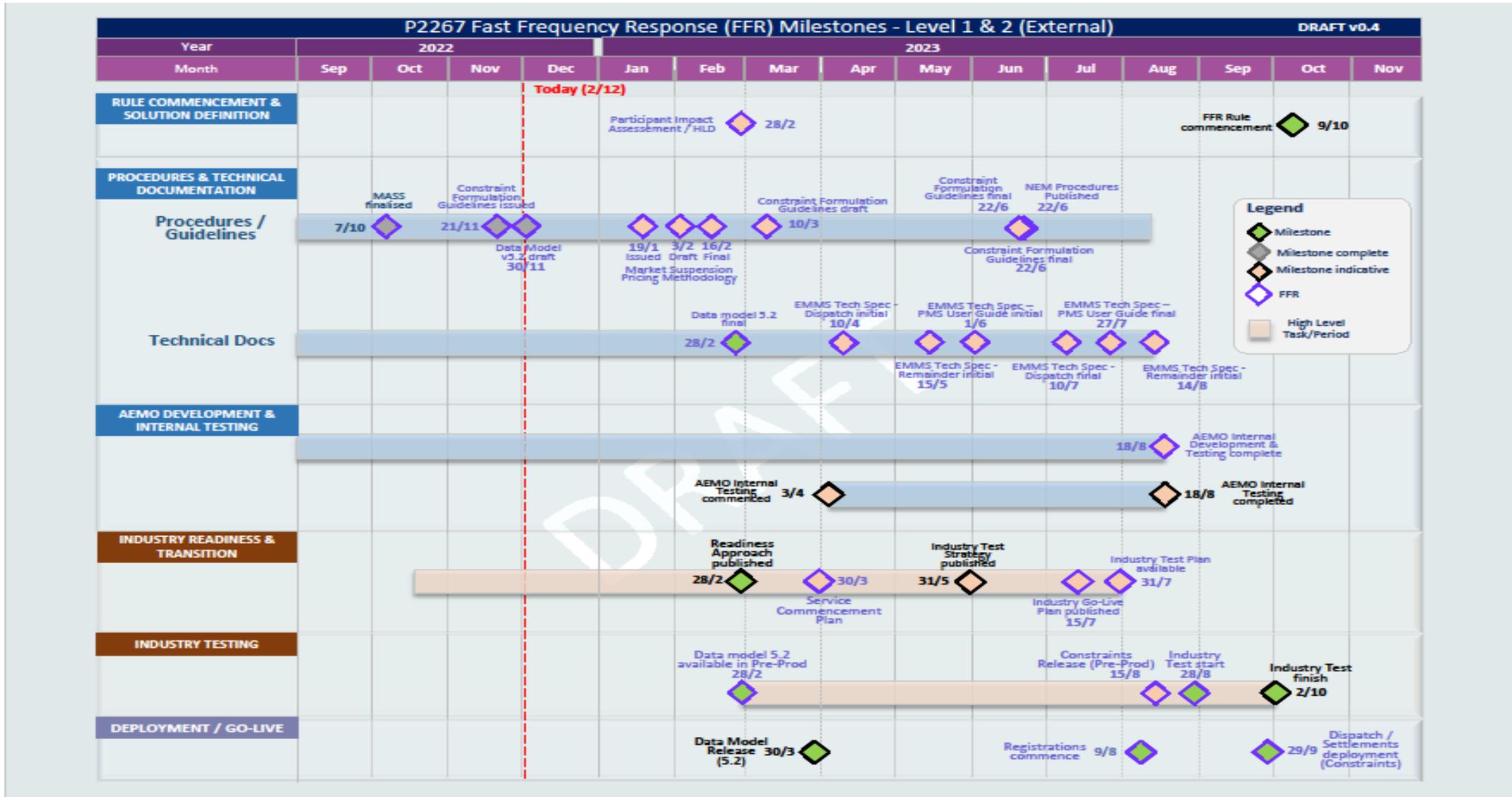
FAST FREQUENCY RESPONSE (FFR)

Key Date(s)	Go-live October 2023
Likely impacted stakeholders	Generators, Market Customers, Traders
Industry testing anticipated	Industry Testing (TBC) but will require AEMO co-ordination for settlement run production

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> • MASS finalised 7 October ahead of rule required date of 1/12/2022 • Constraint and formulation guidelines consultation in progress 	<ul style="list-style-type: none"> • Data Model changes will be released in v5.2 (March 2023). Tables to remain unpopulated until capability released • Changes to bidding, dispatch and settlement interfaces incorporated in EMMS Technical Spec updates 	<ul style="list-style-type: none"> • Development underway , interim development milestones to be confirmed to provide further transparency on AEMO progress • Overlap of development and integration testing reflects multiple deployments 	<ul style="list-style-type: none"> • Industry readiness to address both technical and service commencement criteria. • AEMO to engage on approach to FFR procurement as basis for service commencement 	<ul style="list-style-type: none"> • Testing Approach to agree structure and timing of Industry test • Should include co-ordinated settlement runs for NECR processes 	<ul style="list-style-type: none"> • Deployment planning to consider registration commencement and provision of bids in advance of rule commencement • Timings to be reflected in Industry Go-Live plans

Relevant links

Fast Frequency Response – October 2023



October 2023 release - updates

Increased MT PASA Information

Key Date(s)	Go-live October 2023
Likely impacted stakeholders	Scheduled Generators
Industry testing anticipated	Industry Testing (scope TBC) in same timeframe as FFR

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> RSIG and Energy Adequacy Assessment guidelines consultation in progress , due to complete 31/3/2023 	<ul style="list-style-type: none"> Data Model and Technical specification schedule dates being established Milestones to be confirmed by end Jan API interfaces to be provided to support transition from FTP delivery Feedback on feasibility of retiring FTP support requested 	<ul style="list-style-type: none"> AEMO development and testing schedule under development 	<ul style="list-style-type: none"> Readiness Approach to be available 28/2 for review with Implementation forum 	<ul style="list-style-type: none"> Industry Testing timeframes will overlap with FFR Industry Testing likely format for introduction 	<ul style="list-style-type: none"> Deployment dates to be confirmed , in line with rule commencement

Relevant links

[Enhancing information on generator availability in MT PASA | AEMC](#)

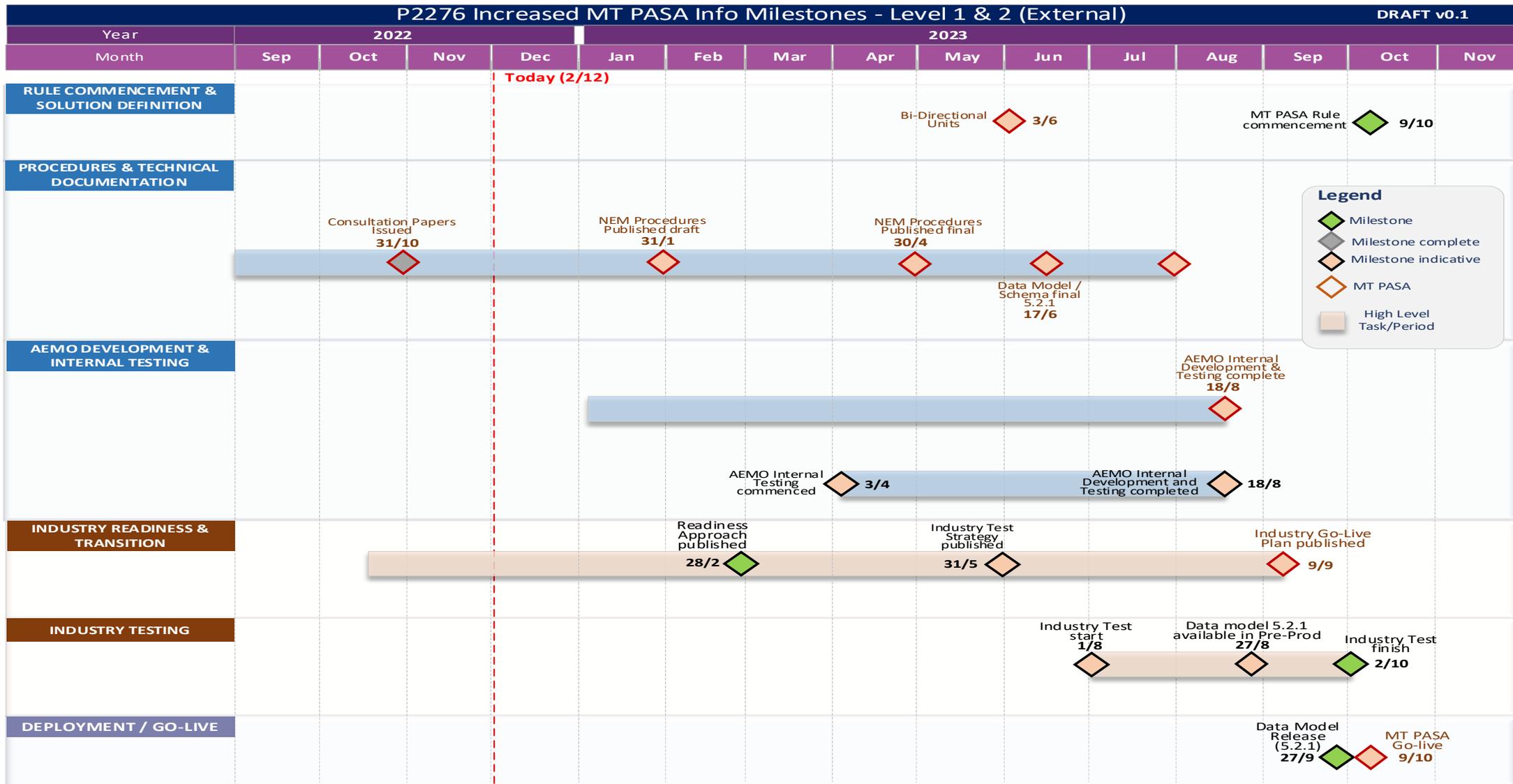
[AEMO | NEM Reliability Forecasting Guidelines and Methodology Consultation](#)

[AEMO | Integrating Energy Storage Systems project](#)

[AEMO | Amendment of the Market Ancillary Service Specification \(MASS\) – Very Fast FCAS](#)

MT PASA – October 2023

Draft - Update to be provided in PCF meeting



June 2024 release - updates

INTEGRATING ENERGY STORAGE SYSTEMS (IESS)

Key Date(s)	Go-live June 2024; End IRP registration grace period 3 December 2024
Likely affected stakeholders	<ul style="list-style-type: none"> Changes to non-energy cost recovery framework (NECR): Financially responsible market participants (FRMPs), metering service providers Introduction of IRP participant type and bi-directional unit (BDU) bidding, scheduling and participation: BDU participants, bidding system vendors/developers, metering service providers
Industry testing anticipated	Market Trial (TBC)

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> Procedure change program established and on track Mix of standard and minor/administrative changes over broad range of procedures <p>Current consultations:</p> <ul style="list-style-type: none"> Dispatch procedure Guide to generator exemptions and classification 	<p>Changes to:</p> <ul style="list-style-type: none"> MSATS technical specification EMMS technical specification MMS Data model aseXML schema (TBC) <ul style="list-style-type: none"> Milestones publication of tech spec releases to be confirmed 	<ul style="list-style-type: none"> In planning stages, schedule to be baselined. 	<ul style="list-style-type: none"> Q1 2023: Overarching Industry Readiness Approach to be developed in conjunction with industry Consequent industry readiness planning and implementation activities will occur from Q1 2023 to go-live. AEMO is planning an industry engagement for Q1 2023 focussing on IESS settlement changes affecting FRMPs 	<ul style="list-style-type: none"> Timing, duration and coverage of market trial TBC Program support via ITWG and regular Q&A sessions 	<ul style="list-style-type: none"> AEMO seeking feedback on its proposal to align the NECR go-live with a NEM billing week. This will significantly reduce time and cost for participants and AEMO by eliminating the need to design, build, test and implement a 'transitional week' (settlement week with mix of old and new calculations).

Relevant links

[Integrating energy storage systems into the NEM | AEMC](#)

[AEMO | Indicative change program](#)

[AEMO | Integrating Energy Storage Systems project](#)

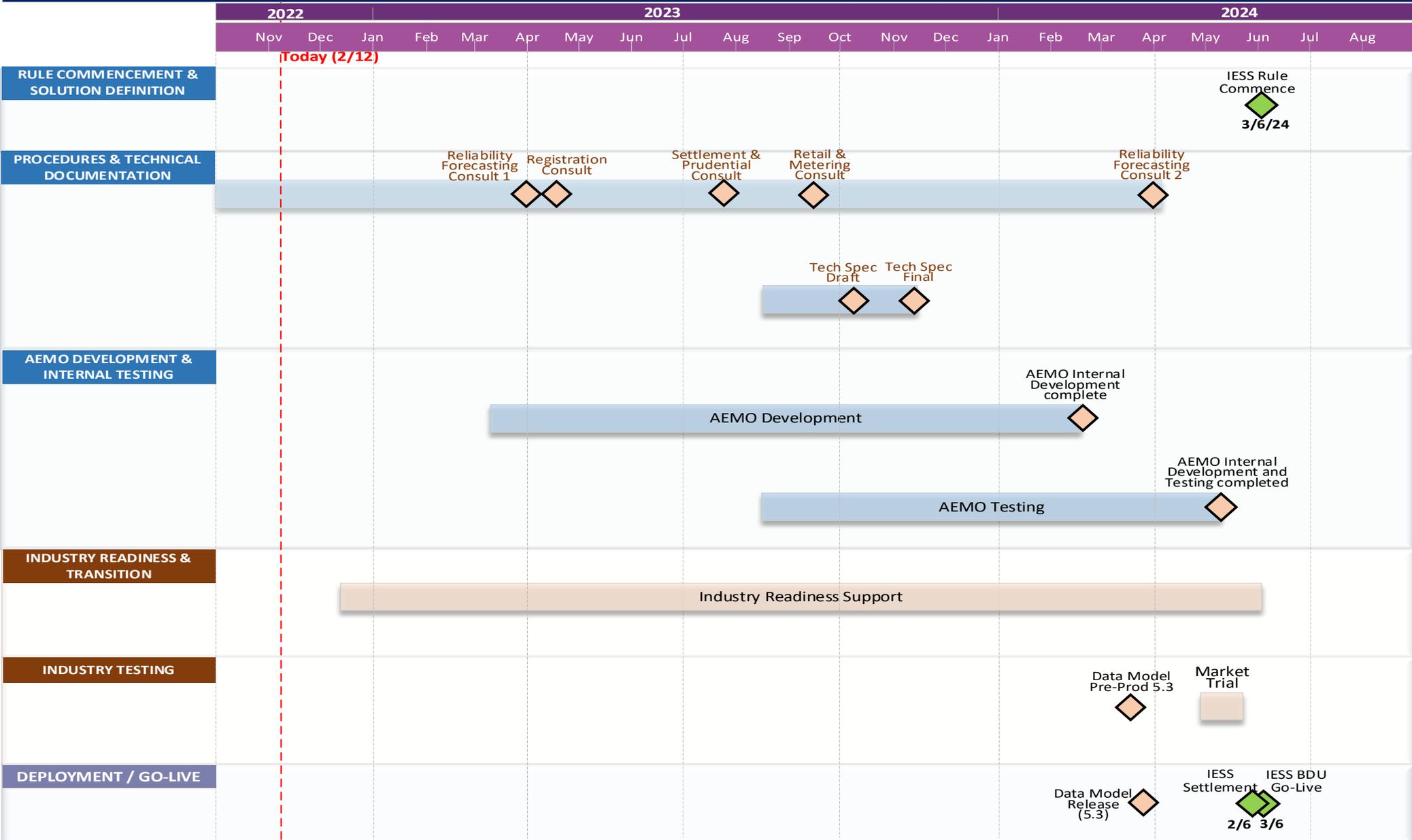
[AEMO | Integrating Energy Storage Systems Working Group](#)

IESS– June 2024



IESS June 2024 Release - Level 1 & 2 (External)

DRAFT v0.2



June 2025 release

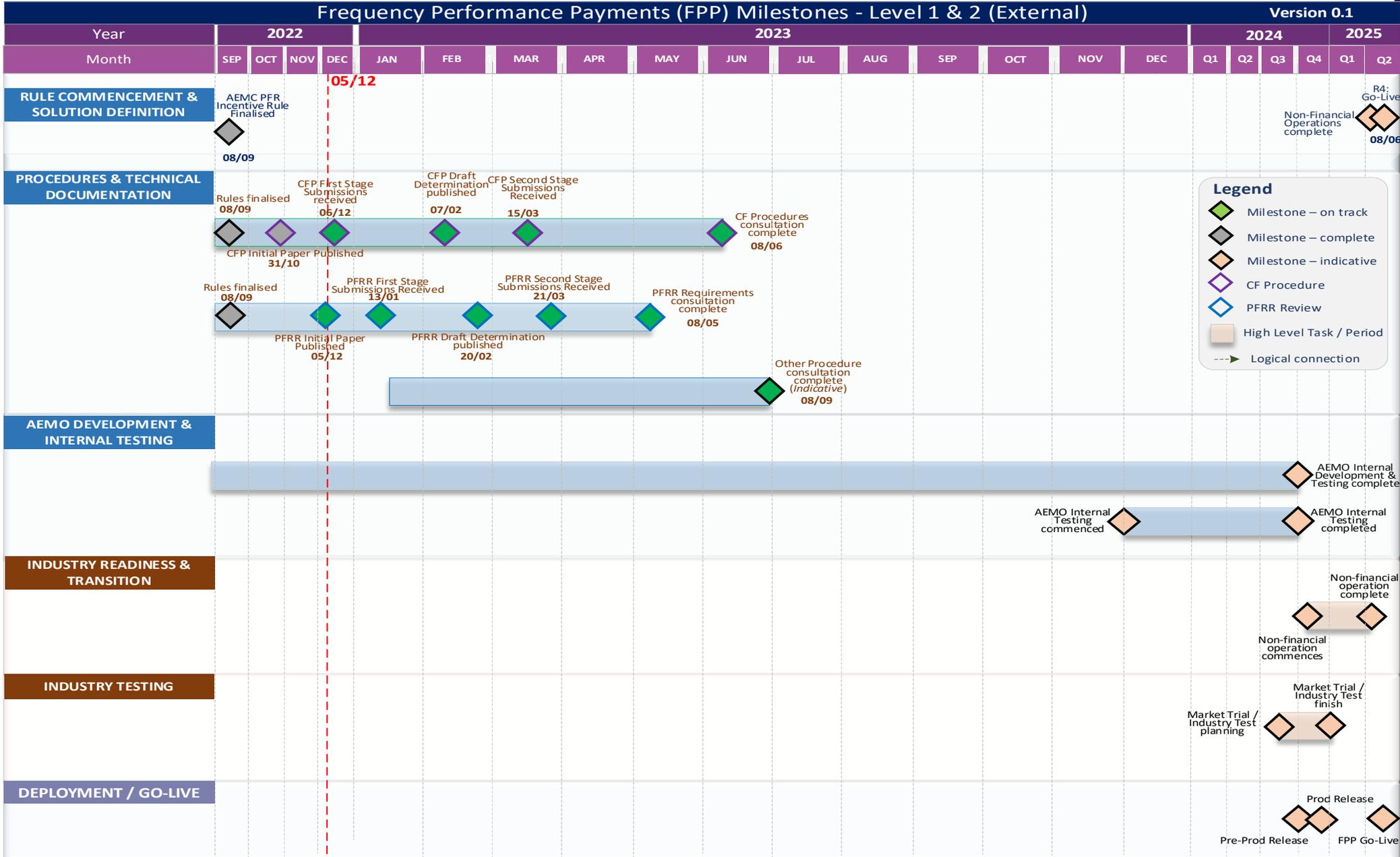
FREQUENCY PERFORMANCE PAYMENTS (FPP)

Key Date(s)	Go-live June 2025;
Likely impacted stakeholders	Generators, Market Customers
Industry testing anticipated	Extended period of non-financial operation for participant validation expected, Scope/ Approach of Industry testing TBC

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> Frequency Contribution Factor Procedure and Primary Frequency Response requirements consultation in progress 	<ul style="list-style-type: none"> Technical Specification and data model updates to be established 	<ul style="list-style-type: none"> Development and delivery approach being established 	<ul style="list-style-type: none"> Approach and detailed participant impacts to be established 	<ul style="list-style-type: none"> Plan to provide period of non-financial operation prior to rule 	<ul style="list-style-type: none"> Deployment approach to be confirmed during project execution

Relevant links
AEMO Frequency Performance Payments project

FPP- June 2025



7. Upcoming Engagements

Upcoming Engagements

See you again in the new year on 7 February



December						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

January						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Legend
Coordination forums
NEM2025 Program Consultative Forum
NEM2025 Executive Forum (Q2)
Reform Delivery Committee
Reform Delivery Committee - Collab W.
Implementation Forum
Electricity Wholesale Consultative Forum
Electricity Retail Consultative Forum
Other
National Public Holiday
State/Territory Public Holiday
AEMO offices xmas shutdown

To learn more about these events, please visit AEMO's [Industry meeting calendar](#) or contact the program at NEM2025@aemo.com.au.

8. General Questions and Other Business



NEM2025@aemo.com.au



[AEMO | Program Consultative Forum](#)



Appendix A: Competition law meeting protocol

AEMO Competition Law - Meeting Protocol

AEMO is committed to complying with all applicable laws, including the Competition and Consumer Act 2010 (CCA). In any dealings with AEMO regarding proposed reforms or other initiatives, all participants agree to adhere to the CCA at all times and to comply with this Protocol. Participants must arrange for their representatives to be briefed on competition law risks and obligations.

Participants in AEMO discussions **must**:

- Ensure that discussions are limited to the matters contemplated by the agenda for the discussion
- Make independent and unilateral decisions about their commercial positions and approach in relation to the matters under discussion with AEMO
- Immediately and clearly raise an objection with AEMO or the Chair of the meeting if a matter is discussed that the participant is concerned may give rise to competition law risks or a breach of this Protocol

Participants in AEMO meetings **must not** discuss or agree on the following topics:

- Which customers they will supply or market to
- The price or other terms at which Participants will supply
- Bids or tenders, including the nature of a bid that a Participant intends to make or whether the Participant will participate in the bid
- Which suppliers Participants will acquire from (or the price or other terms on which they acquire goods or services)
- Refusing to supply a person or company access to any products, services or inputs they require

Under no circumstances must Participants share Competitively Sensitive Information. Competitively Sensitive Information means confidential information relating to a Participant which if disclosed to a competitor could affect its current or future commercial strategies, such as pricing information, customer terms and conditions, supply terms and conditions, sales, marketing or procurement strategies, product development, margins, costs, capacity or production planning.

Appendix B: Industry Testing Approaches

Approaches to Industry Testing

AEMO provides opportunity for Industry participants to test their updated systems and processes prior to release of AEMO updates into production.

The approach to the level of co-ordination, integrated planning and scenario management that is provided is dependant on a number of factors including:

- Impact to end-to-end participant process flows
- Ability of impacted participants to successfully test changes without AEMO or other participant co-ordinated activity
- Number and range of participants impacted by release

The approaches to Industry testing are described as:

Type of market testing	Description	Example
Industry testing	Self-testing of functionality such as connectivity, and/or coordinated multi-party testing of functional scenarios	Testing a change request (CR) or processing a reallocation or bid submission
Invitation industry testing	Coordinated testing of business process scenarios with a select number or subset of participants with systems ready for testing.	Testing NMI transfer Process
Market trials	Coordinated multi-party end-to-end testing of business process scenarios	Meter exchange involving CRs, service orders and 5-minute meter reads

In all cases involvement in testing is voluntary on participants behalf.

Agreement on approach to the type of industry testing for a release is conducted through the Implementation forum and Industry Test Focus Group along with support arrangements during the test period.



For more information visit

aemo.com.au