

NEM Reform Program Consultative Forum

Meeting #19
12 June 2024



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 and present.**

1. Welcome

Agenda

#	Time	Topic	Presenter
1	1:00-1:05pm	Welcome	<ul style="list-style-type: none"> Chris Muffett
2	1:05-1:10pm	Actions & Feedback from Previous Meeting	<ul style="list-style-type: none"> Chris Muffett
3	1:10-1:25pm	Program & Release Update <ul style="list-style-type: none"> Program status 	<ul style="list-style-type: none"> Rowena Leung
4	1:25-1:45pm	Spotlight <ul style="list-style-type: none"> June 2024 - IESS Update 	<ul style="list-style-type: none"> Emily Brodie / Greg Minney
5	1:45-2:20pm	NEM Reform Initiative Updates <ul style="list-style-type: none"> June 2025 – FPP Retail Market Improvements September / November Release Enhanced Reserve Information (ERI) SCADA Lite Improving Security frameworks (ISF) Foundational & Strategic Initiatives - IDX IDAM PC Metering Services Review (MSR) 	<ul style="list-style-type: none"> Oliver Derum Blaine Miner Oliver Derum Luke Barlow Carla Ziser Andrew Bell Justin Stute

#	Time	Topic	Presenter
6	2:20-2:35pm	NEM Reform – Forward Plan <ul style="list-style-type: none"> Unlocking CER Benefits through Flexible Trading 	<ul style="list-style-type: none"> Greg Minney Justin Stute
7	2:20-2:40pm	HLIA Process	<ul style="list-style-type: none"> Dominic Mendonca
8	2:40-2:50pm	CER Data Exchange Industry Co-design Project	<ul style="list-style-type: none"> Nick Regan / Rachel Rodrigues McGown
9	2:50-2:55pm	NEM Reform Stakeholder Update <ul style="list-style-type: none"> Upcoming Engagements NEM Reform Program Stakeholder Briefing (Recap) 	<ul style="list-style-type: none"> For noting Ulrika Lindholm / David Reynolds
10	2:55-3:00pm	General Questions and Other Business	<ul style="list-style-type: none"> Chris Muffett

Appendix A:
Competition law meeting protocol

“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

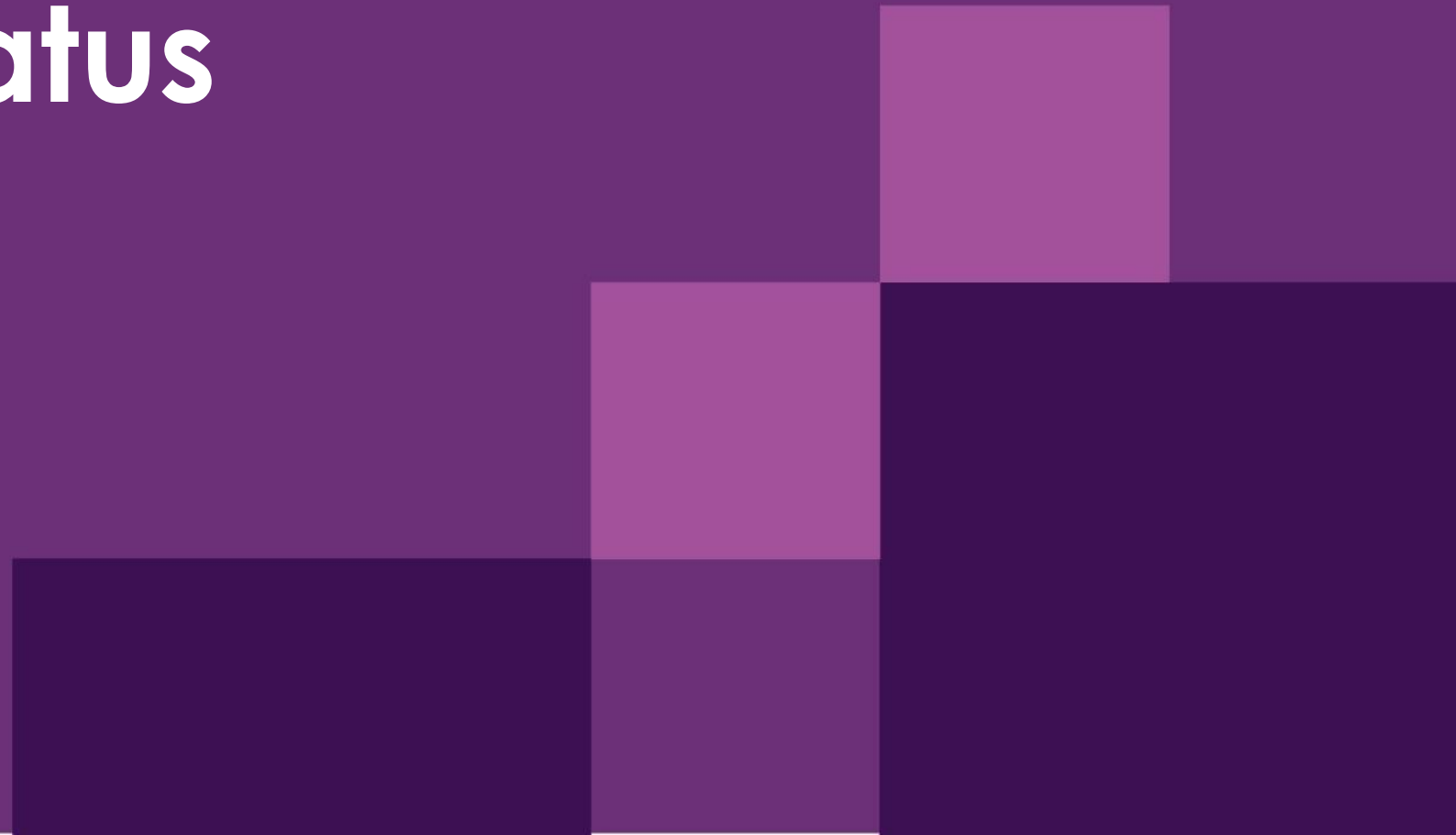
Actions

No Actions Recorded

3. Program & Release Update

Program Status

Rowena Leung



Program Update

Current progress:

- Overall program is progressing well.
- IESS Rule Commencements achieved.

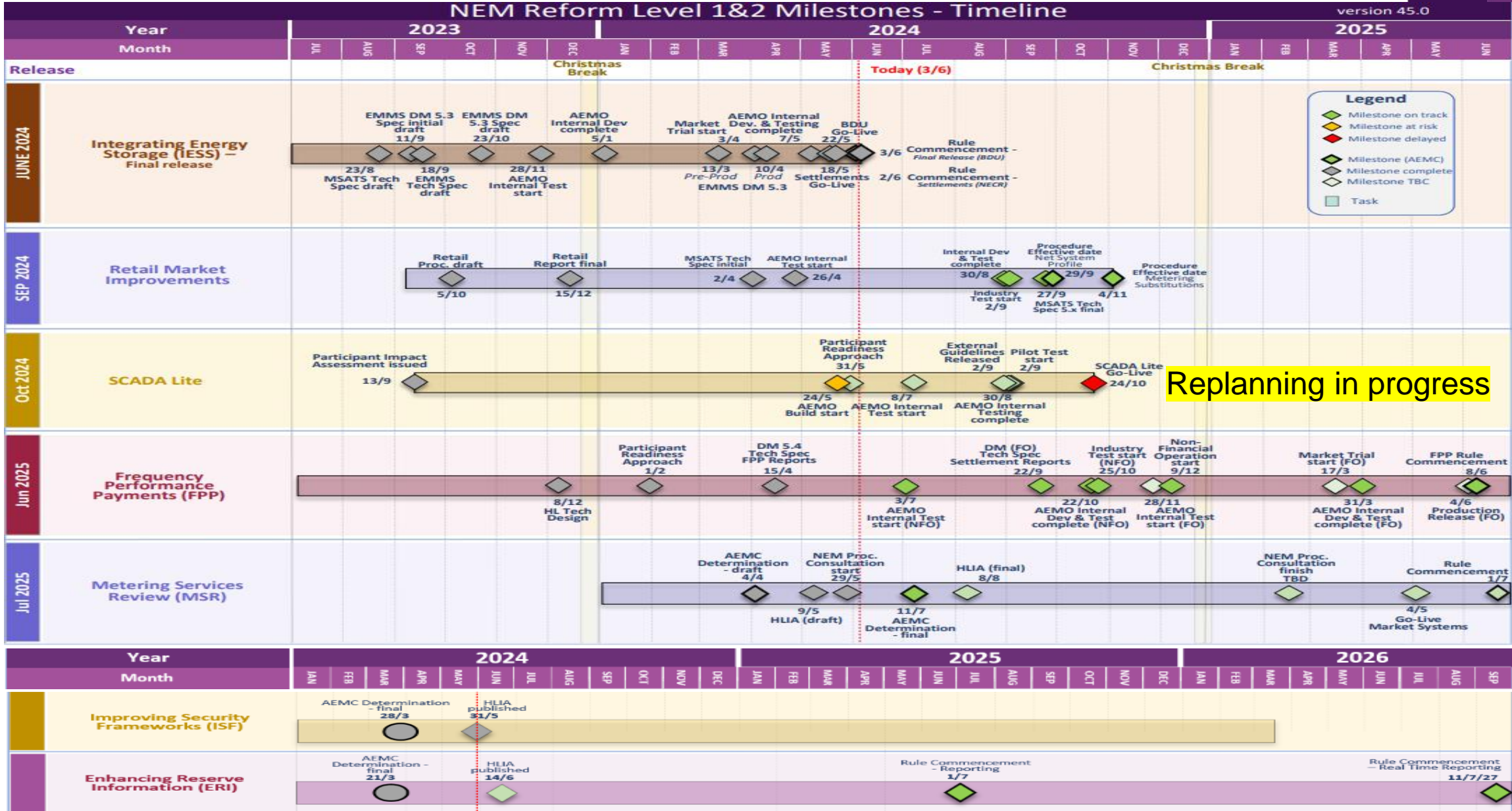
Key areas receiving management attention:

- **SCADA Lite:** Identification of additional requirements necessitate re-baseline planning.
- **FPP:** Identification of additional challenges necessitate internal re-planning.



Commencement	Initiatives	Previous Status	Current Status	Key Points	Impacted Stakeholders
JUN-24	Integrating Energy Storage Systems [Final]		Delivered	IESS Rule Commencements achieved. IRP transition processes successfully completed Hypercare processes in place to support initial period of IESS operation.	IRPs, NSPs, FRMP, MP/MDP, Vendors
OCT-24	SCADA Lite			Project Delivery timelines to be re-baselined to accommodate additional requirements identified during AEMO detailed design process.	DRSP
SEP-24 / NOV-24	Retail Market Improvements			Scope and Procedure effective dates associated to the NSLP change in methodology and changes to Metering Substitutions and Reason Code have been confirmed. Tech Specs update has been issued. Project remains on-track.	MC, MDP, FRMP, LNSP
DEC-24 & JUN-25	Frequency Performance Payments			AEMO have identified additional challenges in delivering internal operational functionality. AEMO undertaking a replanning exercise to replan our internal functionality which may require a change request. Schedule for industry test and NFO commencement remains on track.	Generators, Market Customers
TBC	Metering Service review (MSR)	N/A		Green status. AEMO have conducted the HLIA and commenced procedures consultation in line with delivery milestones. AEMO will review project status and overall delivery milestones following Final Rule Determination.	MC, MP, MDP, FRMP, DNSP
JUL-25	Enhanced Reserve information (ERI)	N/A		Project establishment and participant engagement planning underway for Enhanced Reserve Information.	Generators, grid-scale batteries
Multiple effective dates	Improving Security Frameworks (ISF)	N/A		Project establishment and participant engagement planning underway for Improving Security Frameworks. HLIA published 31 May.	Generators, Integrated Resource Providers, other security service providers
TBC	Foundational & Strategic Initiatives -IDX IDAM PC	N/A	N/A	The Foundational and Strategic (FaSI) draft Business Case has received internal approval from AEMO's Investment committee to proceed with planning for Foundation IDAM, IDX and PC Implementation. AEMO to develop Draft implementation approach(es) and participant engagement approach for industry input.	All current and intending Participants

NEM Reform Level 1&2 Milestones PoaP



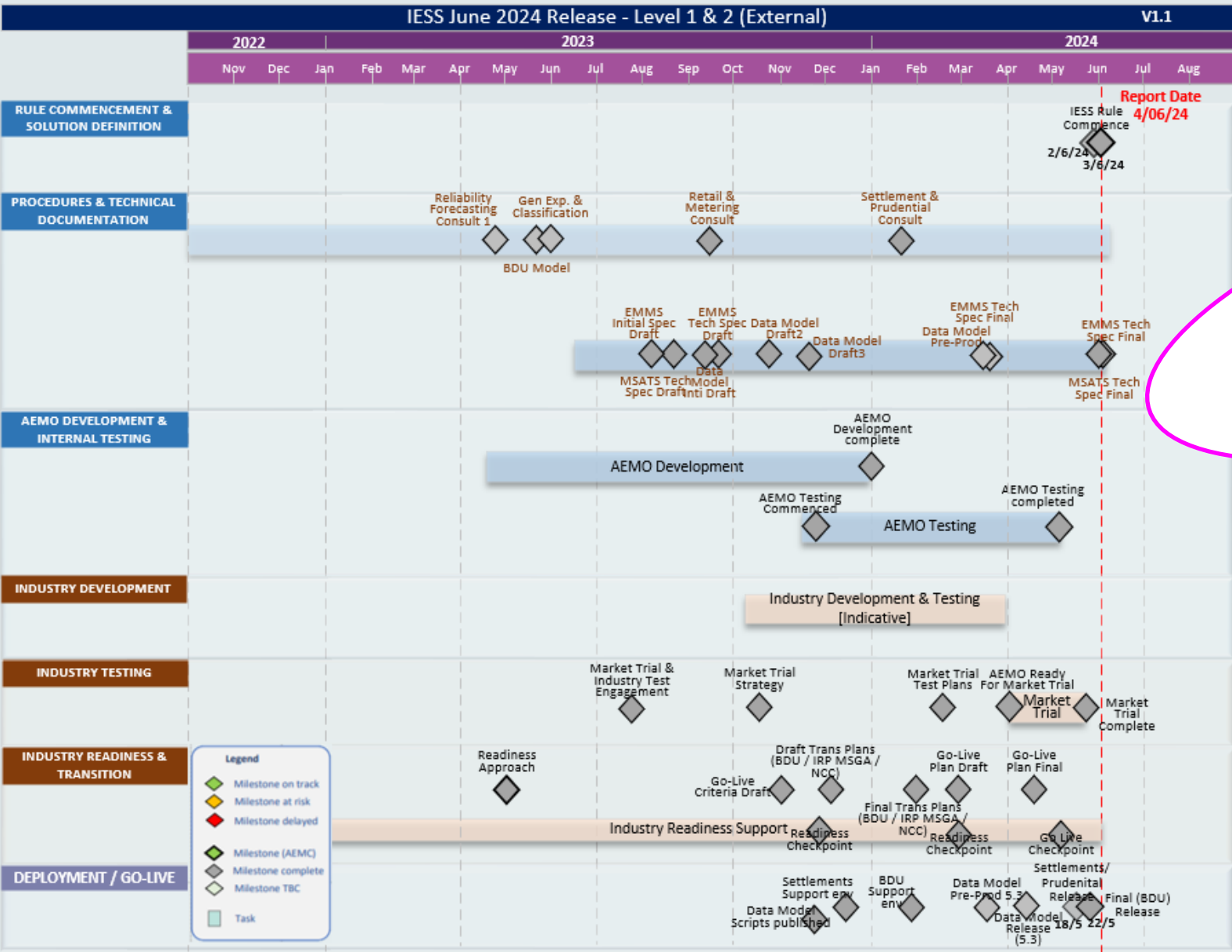
4. Spotlight



June 2024 - IESS Update

Emily Brodie/Greg Minney

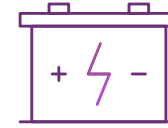
Release update



OVERALL PROJECT STATUS = IESS COMPLETE*

**With hypercare & BDU transition support on track*





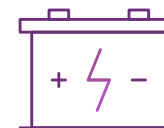
IESS high-level timeline



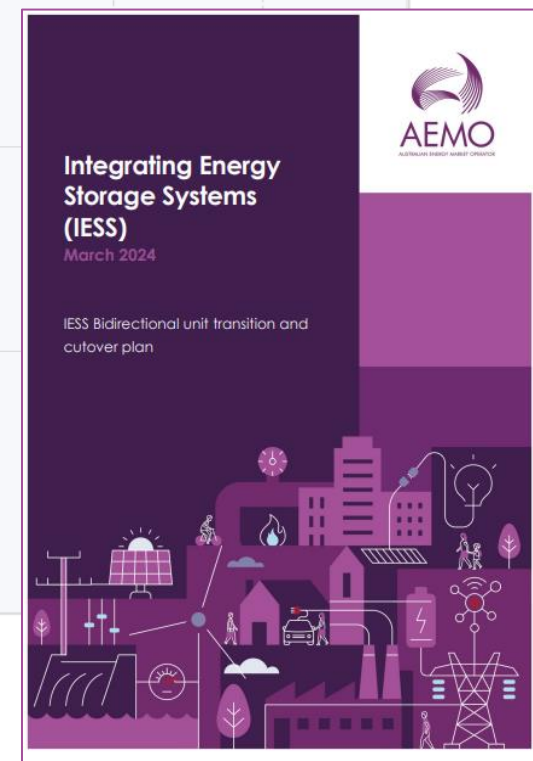
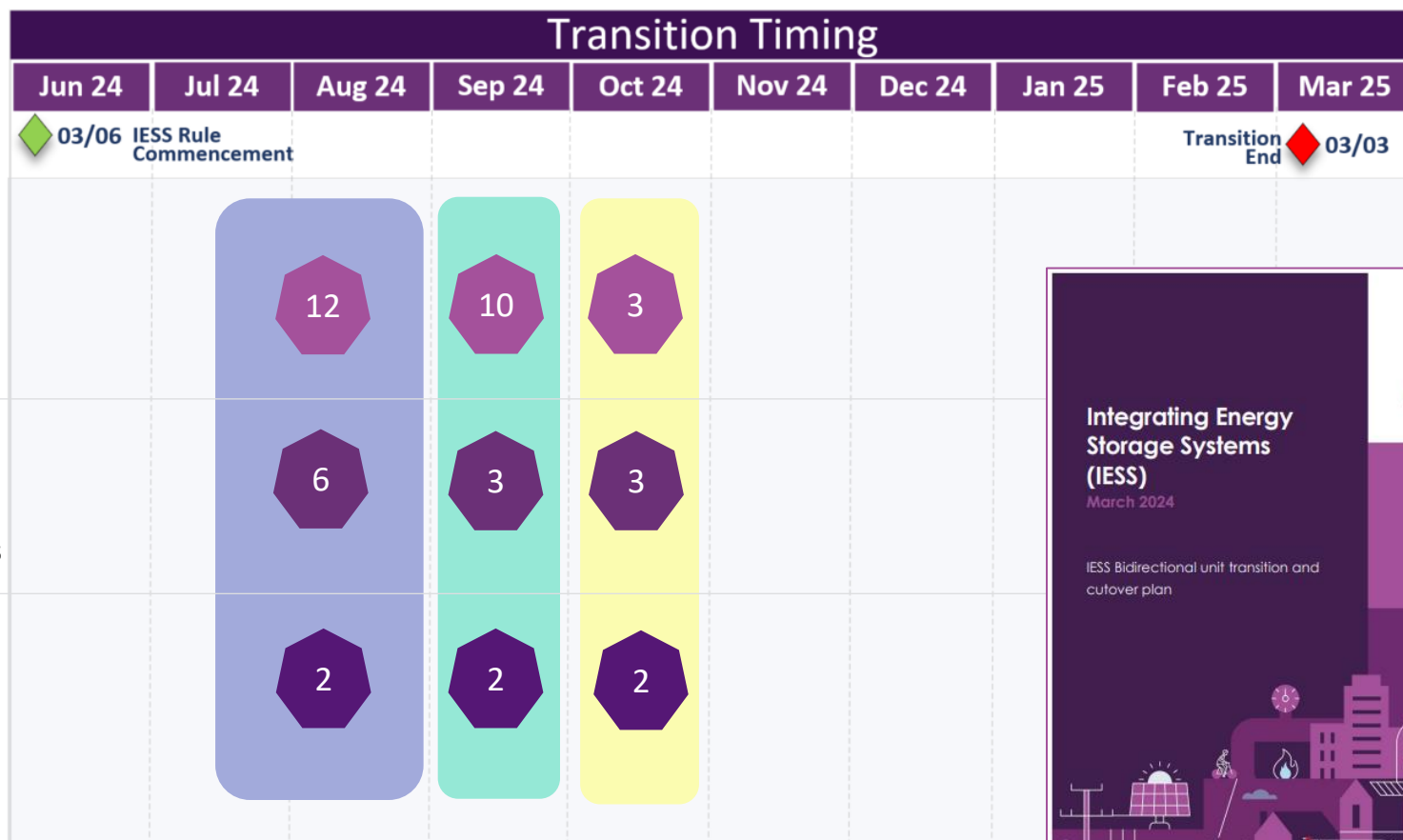
MSGA	Market small generation aggregator
FCAS	Frequency control ancillary service/s
IRP	Integrated resource provider
BDU	Bidirectional unit

- REFERENCES**
- [AEMC IESS rule change](#)
 - [AEMC Implementing IESS rule change](#)
 - [AEMO IESS High Level Design and Implementation Strawperson](#)
 - [AEMO IESS Participant Toolbox](#)

BDU transition on track



- Detailed [BDU cutover plan](#) developed with industry
- Many factors considered in development of cutover schedule e.g.
 - time of day,
 - day of week,
 - region,
 - operational matters,
 - Vendor/ participant preferences etc
- BDU cutover has been successfully tested with a pilot and in market trial
- Dedicated AEMO BDU cutover manager, **Alice Michener**, has been assigned to provide coordination between affected participants and AEMO.



Hypercare & post go-live support



POST GO-LIVE SUPPORT ACTIVITY

Post go-live support

- Post go-live Q&A
 - Tue 04 Jun 2024: Supports NCC and IRP changes
 - Wed 19 Jun 2024: Follows the first Prelim Settlement run after go-live (14 June)
- Please follow BAU processes and raise system issues to support.hub@aemo.com.au
- Hypercare will be in place until 28 June 2024 to provide heightened support if any issues emerge because of the IESS June 2024 release.

BDU transition

- Wed 12 June: BDU readiness focus group session to:
 - Debrief on learnings from Phase 3 of IESS market trial
 - Prepare for BDU cutovers in production
- AEMO will maintain the BDU transition schedule
- Participants are requested to inform AEMO of any changes required to their allocated transition dates as soon as practicable.
- BDU transition and cutover enquiries and communications to be via NEMReform@aemo.com.au

PDSE closure

- PDSE will close on Fri 21 Jun 2024

IESS mailbox

- IESS mailbox IESS@aemo.com.au will remain open for the IESS hypercare period only, noting that:
- BAU enquiries to be via support.hub@aemo.com.au
 - NEM reform program queries to be via NEMReform@aemo.com.au
 - BDU transition and cutover enquiries and communications to be via NEMReform@aemo.com.au

IESS contact and information



Integrating Energy Storage Systems Participant Toolbox

The IESS Participant Toolbox is a central location for useful resources to help participants understand and prepare for the changes associated with the Integrating Energy Storage Systems rule's implementation.

- FAQs**
This page contains frequently asked questions across the IESS June 2024 releases.
- 3 June 2024 release**
IESS registration, classification and bidding changes:
Introduction of Integrated Resource Provider (IRP) participant type and bi-directional units (BDU)
- 2 June 2024 release**
IESS Retail and settlement changes:
Material changes to the non-energy cost recovery framework (NECR) leading to significant changes to NEM settlement table structures
- 9 August 2023 release**
Aggregate systems can opt-in to aggregated dispatch conformance (ADC)

IESS project information

[Participant toolbox](#)

IESS market procedure updates

[Indicative change program](#)

Tech spec information

[IT change & release management](#)

BAU IESS queries

NEMReform@aemo.com.au

General IESS queries

Support.Hub@aemo.com.au

5. NEM Reform Initiative Updates

June 2025 – FPP

Oliver Derum

FPP June update

- The overall FPP project status is amber, due to challenges impacting delivery.
- Development of a path back to green status is well advanced and is undergoing refinement before approval.
- Only certain internal AEMO functionality of the new app will be delayed. AEMO is working to determine exactly when this functionality will be delivered under the revised plan.
- As previously advised, all external milestones, including the start of industry testing and non-financial operation, remain on track.
- The [FPP Industry Test Strategy](#) was published on 7 June, via the [FPP Project Page](#) of AEMO's website.

FPP- External Milestones NFO (as at 31/5/24) - Delivery

FPP Project - Level 1 & 2 Milestones (External)

Level	Milestone ID	Milestone	Project	Target Date	Expected Date	RAG	Tentative / Confirmed	Commentary
Level 2	FPP-221	High Level Technical Design (External)	FPP-NFO	15-Dec-2023	8-Dec-2023		Confirmed	
Level 2	FPP-222	Participant Readiness Approach (incl. Dev Support Reqmts) published	FPP-NFO	1-Feb-2024	1-Feb-2024		Confirmed	
Level 2	FPP-230	Readiness Criteria available (NFO)	FPP-NFO	29-Feb-2024	29-Feb-2024		Confirmed	
Level 2	FPP-217	Data Model 5.4 Tech Spec (FPP Reports)	FPP-NFO	15-Apr-2024	15-Apr-2024		Confirmed	Project resource to deliver confirmed
Level 2	FPP-227	Industry Test Strategy (NFO) published	FPP-NFO	7-Jun-2024		Green	Confirmed	
Level 2	FPP-212	AEMO Internal Testing commenced (NFO)	FPP-NFO	3-Jul-2024		Green	Confirmed	Delays in completion of components of internal functionality. Internal testing commencement not impacted
Level 2	FPP-229	Industry Test Plan published (NFO)	FPP-NFO	2-Sep-2024		Green	Confirmed	
Level 2	FPP-231	Industry Development finish (NFO)	FPP-NFO	1-Oct-2024		Green	Tentative	
Level 1	FPP-103	AEMO Internal Development & Testing complete (NFO)	FPP-NFO	22-Oct-2024		Green	Confirmed	
Level 2	FPP-225	Pre-Production Release (NFO)	FPP-NFO	25-Oct-2024		Green	Confirmed	
Level 2	FPP-233	Data Model 5.4 available in Pre-Prod	FPP-NFO	25-Oct-2024		Green	Confirmed	
Level 1	FPP-104	Industry Test start (NFO)	FPP-NFO	25-Oct-2024		Green	Confirmed	
Level 2	FPP-236	Readiness Checkpoint - Go-Live (NFO)	FPP-NFO	8-Nov-2024		Green	Confirmed	
Level 2	FPP-235	Industry Go-Live Plan published - final (NFO)	FPP-NFO	18-Nov-2024		Green	Confirmed	
Level 2	FPP-238	Data Model 5.4 available in Prod	FPP-NFO	9-Dec-2024		Green	Tentative	
Level 2	FPP-246	Production Release (NFO)	FPP-NFO	28-Nov-2024		Green	Confirmed	
Level 1	FPP-105	Non-Financial Operations commences	FPP-NFO	9-Dec-2024		Green	Confirmed	

FPP- External Milestones FO (as at 31/5/24) - Delivery

FPP Project - Level 1 & 2 Milestones (External)								
Level	Milestone ID	Milestone	Project	Target Date	Expected Date	RAG	Tentative / Confirmed	Commentary
Level 2	FPP-218	Data Model (FO) Tech Spec (Settlement Reports)	FPP-FO	22-Sep-2024		Green	Confirmed	
Level 2	FPP-214	Participant Readiness Approach published (Financial Operation)	FPP-FO	1-Oct-2024		Green	Confirmed	
Level 2	FPP-237	AEMO Internal Testing commenced (FO)	FPP-FO	28-Nov-2024		Green	Tentative	
Level 2	FPP-223	Market Trial Strategy published (Financial Operation)	FPP-FO	31-Jan-2025		Green	Tentative	
Level 2	FPP-224	Readiness Criteria available (Financial Operation)	FPP-FO	31-Jan-2025		Green	Tentative	
Level 2	FPP-239	Industry Go-Live Plan published - draft (Financial Operation)	FPP-FO	28-Feb-2025		Green	Tentative	
Level 2	FPP-242	Data Model (FO) available in Pre-Prod	FPP-FO	15-Mar-2025		Green	Tentative	
Level 2	FPP-226	Pre-Production Release (Financial Operation)	FPP-FO	14-Mar-2025		Green	Tentative	
Level 1	FPP-108	Market Trial start (Financial Operation)	FPP-FO	17-Mar-2025		Green	Tentative	
Level 2	FPP-243	Industry Go-Live Plan published - final (Financial Operation)	FPP-FO	28-Mar-2025		Green	Tentative	
Level 1	FPP-107	AEMO Internal Development & Testing complete (Financial Operation)	FPP-FO	31-Mar-2025		Green	Confirmed	
Level 2	FPP-244	Readiness Checkpoint - Financial Operation	FPP-FO	9-May-2025		Green	Tentative	
Level 1	FPP-109	Production Release (Financial Operation)	FPP-FO	4-Jun-2025		Green	Tentative	
Level 1	FPP-106	FPP Project Go-Live / Rule Commencement	FPP-FO	8-Jun-2025		Green	Confirmed	

June 2025: Frequency Performance Payments

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, Industry Testing for NFO, market Trial for FO
Overall Status	Project Delivery Status = AMBER with focus on AEMO internal Capability, All External milestones on track

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> Final Primary Frequency Response Requirements procedure published 4 May. Final Frequency Contribution Factor Procedure published 1 June, along with the related Tuning Parameters and Input Sources document. 	<ul style="list-style-type: none"> Data Model Technical Specification with updates for FPP reporting – April 2024 issued, initial release is current Data Model Technical Specification with updates for FPP Settlements reporting – Sept 2024 	<ul style="list-style-type: none"> AEMO development in Progress, certain internal functionality will now be delivered later than planned All External capability on track AEMO Internal Testing will commence on schedule Data integration Jun to Dec 2023 (NFO) Settlements system development Jul to Dec 2024 (FO) 	<ul style="list-style-type: none"> Readiness Criteria for NFO published and will form basis of readiness checkpoints and readiness tracking 	<ul style="list-style-type: none"> FPP calculation testing Dec 2024 (non-financial operation) Industry test Strategy to be issued 7 June 24 – On track NFO Industry Test Period 25 Oct – conducted as Industry Test Subsequent FO Settlements testing scheduled for April 2025 	<ul style="list-style-type: none"> NFO Production commencement scheduled for 9th December Prod release end May 2025 for 8th June 2025 Rule commencement

Relevant links

- [AEMO | Frequency Contribution Factors page \(Contains Frequency Contribution Factors Procedure and Tuning Parameters\)](#)
- [AEMO | Frequency Contribution Factors Procedure Consultation Page](#)
- [AEMO | Frequency Performance Payments project](#)

Retail Market Improvements September / November Release



Blaine Miner

September 2024: Retail Market Improvement

Retail Market Improvements: NSLP Update, Metering substitutions

Key Date(s)	NSLP Effective Date 29 September 2024, Metering Substitutions and Reason Codes effective date 4 November 2024
Likely impacted stakeholders	FRMP, ENLR, DNSP, MDP
Industry testing anticipated	Industry Testing
Overall status	Overall Green , AEMO Development in Progress

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> Retail/Metering Procedures final report published 15 December 2023 ICF_072 – new NSLP methodology, applying a minimum (non-zero) ‘floor’ to NSLP values ICF_054 – The addition of seven new substitution types and 10 new Reason Codes; the obsolescence of substitution type 16. 	<ul style="list-style-type: none"> Initial Tech Spec to support ICF_054 was issued 2 April Updated Tech Spec issued 20 May 	<ul style="list-style-type: none"> Design completed AEMO development in progress, completion extended to 26 June and tracking to revised milestone. AEMO to absorb within Internal Test period with no impact to completion milestone. AEMO internal testing continues and is on schedule. 	<ul style="list-style-type: none"> Initiative Readiness Approach and Draft Go-Live Criteria published. Feedback requested from Implementation Forum (IF) Members Criteria will form basis for readiness checkpoint reporting 	<ul style="list-style-type: none"> Industry Test Approach scheduled to be published end-June for IF and ITWG Feedback Expectation that AEMO will facilitate Industry Testing for NSLP change in similar way as the recent. 5MLP testing (TBC) Industry Testing for ICF_054 to be supported up to procedure effective date. 	<ul style="list-style-type: none"> NSLP methodology system deployment date and procedure effective date 29 September 2024 date Substitution Types and Reason Codes procedure effective date 4 November 2024.

Relevant links

[AEMO | July 2023 REMP Consultation](#)

September – Retail Improvements – milestones

September 2024 - Level 1 & 2 Milestones (External)								
Level	Milestone ID	Milestone	Target Date	Expected Date	Status	RAG	Tentative / Confirmed	Commentary
Level 2	RMI-201	Retail Procedures draft issued	5-Oct-2023	5-Oct-2023	Complete		Confirmed	
Level 2	RMI-202	Retail Report final report	15-Dec-2023	11-Dec-2023	Complete		Confirmed	
Level 2	RMI-211	MSATS Tech Spec initial	27-Mar-2024	2-Apr-2024	Complete		Confirmed	Issued for publication. Published on 2/4. No participant impact.
Level 2	RMI-207	AEMO Internal Testing start	1-May-2024	26-Apr-2024	Complete		Confirmed	
Level 2	RMI-203	Readiness Approach published	26-Apr-2024	2-May-2024	Complete		Confirmed	
Level 2	RMI-204	Go-Live Criteria published	29-Apr-2024	16-May-2024	Complete		Confirmed	Publication deferred to 16th May.
Level 2	RMI-212	MSATS Tech Spec final	27-Sep-2024			Green	Confirmed	
Level 2	RMI-206	AEMO Internal Development complete	31-May-2024	26-Jun-2024		Amber	Confirmed	Development timeframe extended. No impact to testing timeframe.
Level 2	RMI-205	Industry Test Strategy published	28-Jun-2024			Green	Confirmed	
Level 2	RMI-208	AEMO Development & Testing complete	30-Aug-2024			Green	Confirmed	
Level 1	RMI-101	Industry Test start	2-Sep-2024			Green	Confirmed	
Level 2	RMI-209	Retail Market Improvements Go-Live checkpoint	29-Aug-2024			Green	Confirmed	
Level 2	RMI-210	Industry Go-Live Plan published	9-Sep-2024			Green	Confirmed	
Level 1	RMI-102	Retail Market Improvements Go-Live	29-Sep-2024			Green	Confirmed	
Level 1	RMI-103	Net System Profile - Procedure Effective Date	29-Sep-2024			Green	Confirmed	
Level 1	RMI-104	Metering Substitution - Procedure Effective Date	4-Nov-2024			Green	Confirmed	

Enhancing Reserve Information (ERI)

Oliver Derum

ERI June update

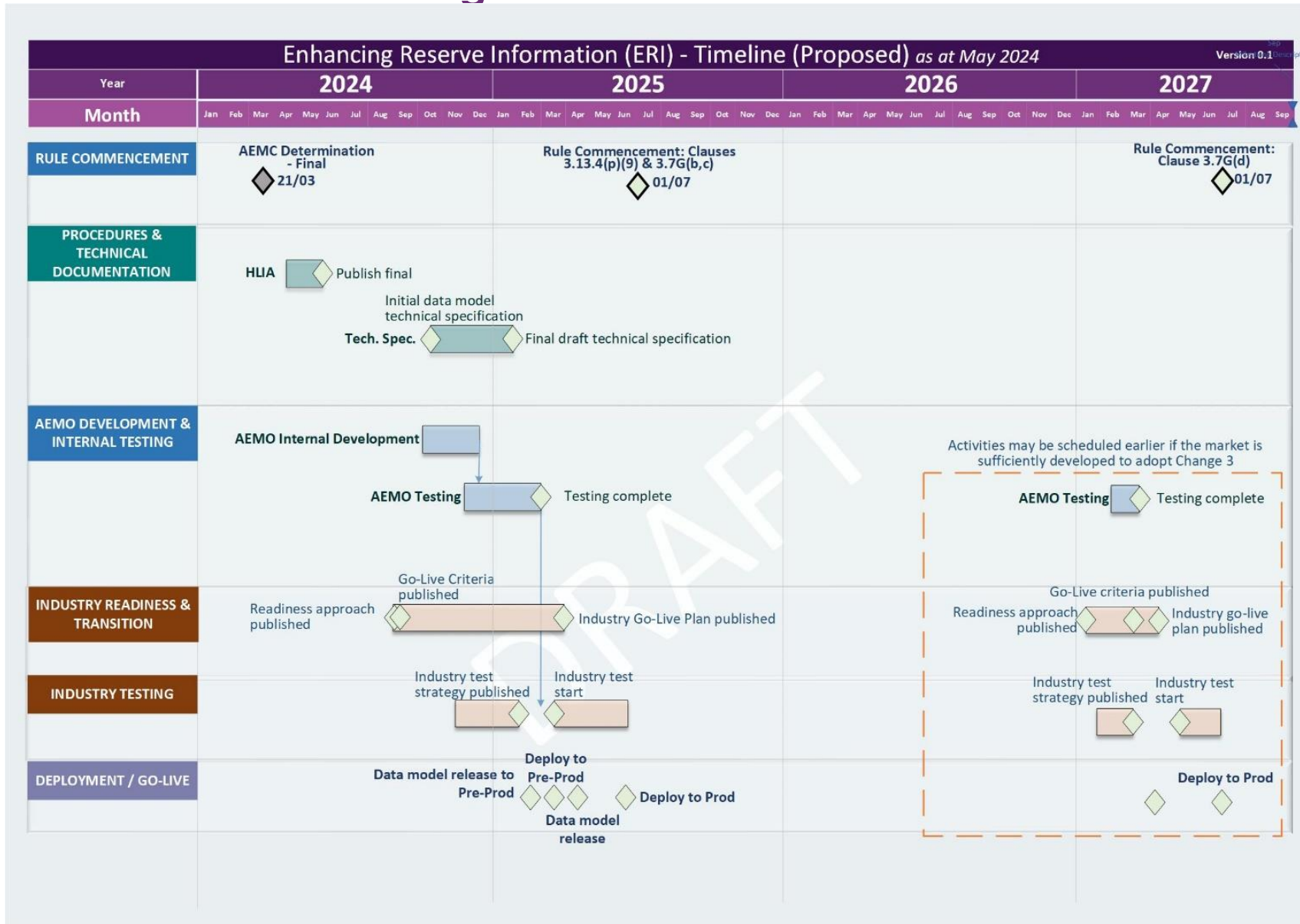
- The [Draft ERI High-level Implementation Assessment \(HLIA\)](#) was published on 7 June, with **comments invited for two weeks, until Friday 21 June.**
- The HLIA includes:
 - How AEMO intends to implement the changes, such as:
 - By publishing scheduled generator energy availability figures as part the Pre-Dispatch process, meaning more frequent and granular publication than the rules requirement, covering two days instead of one.
 - That AEMO intends to explore the commencement of real-time state of charge for batteries before 1 July 2027 in regions with enough competitors to enable aggregation to not reveal individual positions.
 - The changes to the participant data model (EMMS) and NEM Reports that will be made to publish the new data feeds.
 - Changes required (or to be further explored) to accommodate the concept of Maximum Storage Capacity in AEMO systems and processes.
 - Indicative key implementation dates.

Next steps

- Following the consideration of feedback, AEMO will publish a final HLIA.
- AEMO will continue to refine the design of the reform. Further engagement will be conducted via the PCF and other NEM Reform forums.

ERI development and testing timeline

Subject to confirmation following comments received on the HLIA



July 2025: Enhancing Reserve Information

Key Date(s)	Go-live 1 July 2025 (energy availability of scheduled generators and previous day’s state of charge for batteries) Go live 1 July 2027 (latest commencement of real time state of charge of batteries)
Likely impacted stakeholders	Generators, grid-scale batteries
Industry testing anticipated	Industry testing to precede go-live of first changes in 2025. Battery state of charge to initially be tested at the same time as other functionality, with appropriate re-testing before the commencement of operation in each region (which will occur in July 2027 at the latest)
Overall Status	Project Delivery Status = Green. AEMO design work in progress

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> Currently, no procedures are considered to require updating. 	<ul style="list-style-type: none"> Data Model Technical Specification with updates for ERI to be published in late 2024. 	<ul style="list-style-type: none"> AEMO development to occur in Q4 2024 (indicative) AEMO testing to occur in early 2025 Feb-Mar (indicative) 	<ul style="list-style-type: none"> Readiness Criteria for commencement published and will form basis of readiness checkpoints and readiness tracking. 	<ul style="list-style-type: none"> Industry testing from Mar 2025 (indicatively). Appropriate re-testing to precede the commencement of near real-time battery state of charge, on 1 July 2027 at the latest. 	<ul style="list-style-type: none"> Deployment of all functionality to occur in June 2025, including for features that will commence out to 1 July 2027. AEMO is exploring the costs and benefits of commencing operation of the final functionality earlier than 1 July 2027.

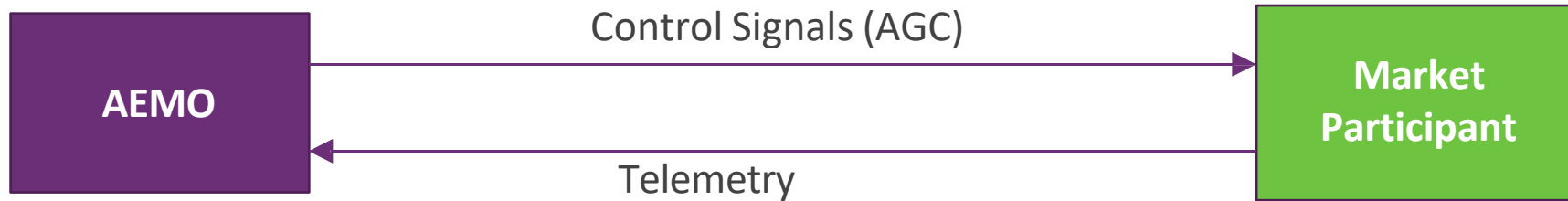
Relevant links
AEMO Enhancing Reserve information project page



SCADA Lite

Luke Barlow

Initiative summary: SCADA Lite release



Provide a new capability for a market participant to establish a bi-directional communication path to exchange telemetry data and control signals with AEMO such that they can participate in the wholesale market. Specifically:

- Demand Response Service Providers (DRSP) providing Wholesale Demand Response (WDR).
- Generators or Integrated Resource Providers not able to exchange information or controls with AEMO via an NSP.

AEMO proposes to implement this capability via a pilot test with a selected participant to prove the service option. When working correctly the SCADA Lite service will be made available in Production to all eligible participants.

AEMO will report on progress against the established milestones – via implementation forum and PCF. No broader working groups are envisaged during the implementation process

October 2024: SCADA Lite

SCADA Lite

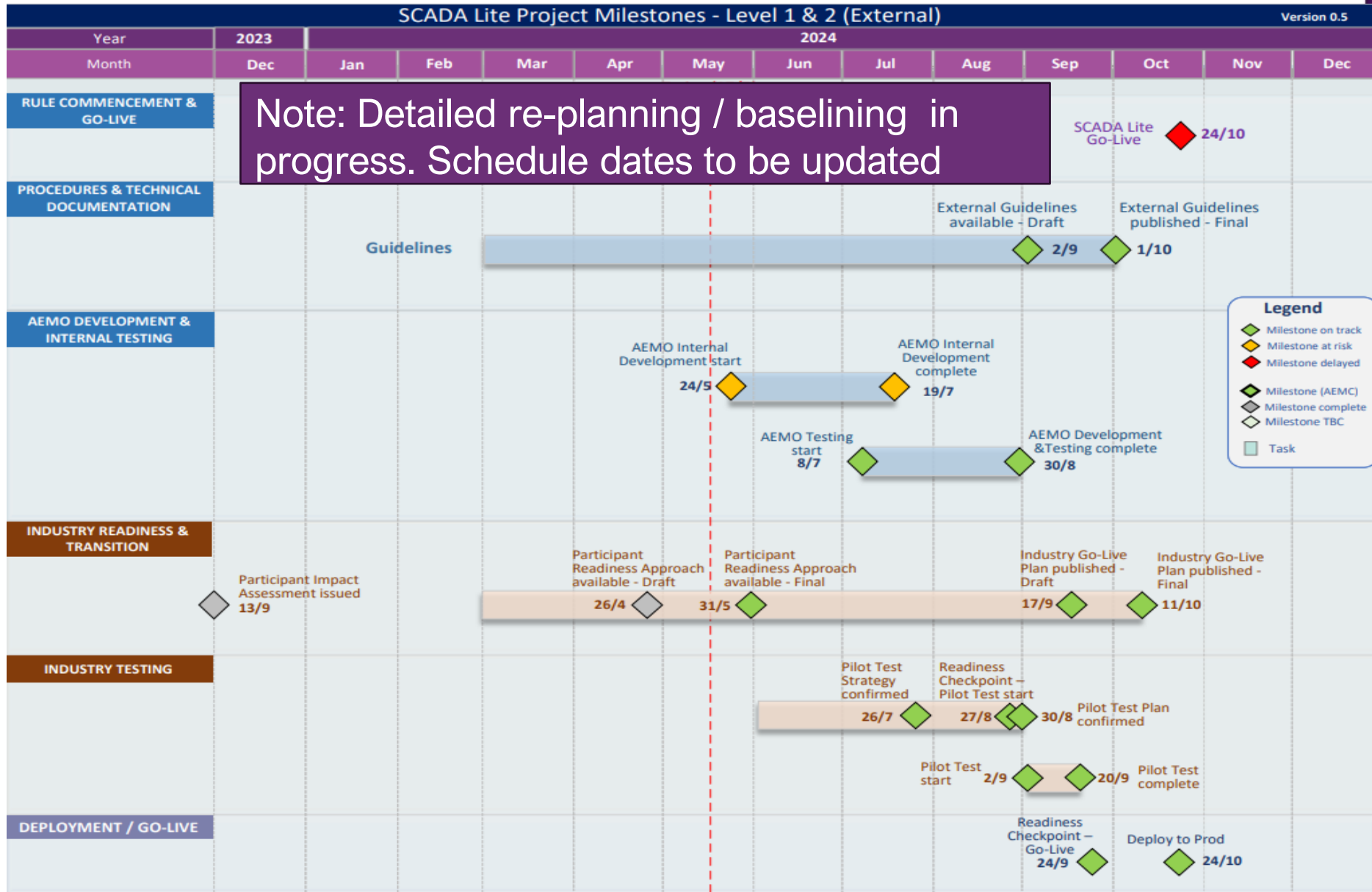
Key Date(s)	Go-live 24 October 2024;
Likely impacted stakeholders	DRSPs, IRPs, Small Generators
Industry testing anticipated	Pilot Test with selected participant

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> Wholesale Demand Response (WDR) Guidelines published 25 Mar 2021 effective 24 June 2021. Power System Data & Communication Standard v3.0 published 24 Nov 2022, effective 3 Apr 2023. <p>No further procedure updates required</p>	<ul style="list-style-type: none"> Technical “How-To” Guideline – prior to go-live, Document Availability dates being revised in line with Development schedule No changes to Data Models 	<ul style="list-style-type: none"> AEMO detailed design completed which has identified further development requirements AEMO Delivery timeline undergoing detailed planning exercises to accommodate the additional development requirements 	<ul style="list-style-type: none"> Readiness Approach to be finalised in line with re-baselined delivery timeframes Readiness Criteria published and will form basis of readiness checkpoints and readiness tracking 	<ul style="list-style-type: none"> Pilot Test with selected participant in AEMO internal environment – Preprod not required. Testing approach to be confirmed with pilot participant, with timing to be confirmed. Solution available in Production once successfully tested. Configuration data required to establish SCADA Lite connection BAU registration process 	<ul style="list-style-type: none"> Deployment and Go-live dates currently being re-baselined. Final go-live date to be determined by 14 June

Relevant links

- [AEMO | Wholesale Demand Response Guideline](#)
- [AEMO | Power System Data & Communication Standard v3.0](#)
- [AEMO | SCADA Lite project](#)

SCADA Lite Timeline



SCADA Lite – milestones

SCADA Lite Project - Level 1 & 2 Milestones (External)

ID	Level	Milestone	Project	Target	Start	End	Status	Confirmed	Notes
SCL-201	Level 2	Participant Impact Assessment issued	SCADA Lite	13-Sep-2024					
SCL-202	Level 2	Participant Readiness Approach available - Draft	SCADA Lite	23-Apr-2024	26-Apr-2024	Complete		Confirmed	
SCL-203	Level 2	AEMO development and internal testing commences	SCADA Lite	24-May-2024			Amber	Confirmed	PoC outcomes may impact the timeframes for build/configuration tasks
SCL-203	Level 2	Participant Readiness Approach available- Final	SCADA Lite	31-May-2024	28-Jun-2024		Amber	Confirmed	Milestone dates included in Readiness Approach will be confirmed when timeframes for delivery confirmed
SCL-204	Level 2	Participant Readiness and Go-live Criteria published	SCADA Lite	31-May-2024			Green	Confirmed	
SCL-205	Level 2	Pilot Test Strategy confirmed with participant	SCADA Lite	26-Jul-2024			Green	Confirmed	
SCL-101	Level 1	AEMO development and internal testing complete	SCADA Lite	30-Aug-2024			Green	Confirmed	
SCL-206	Level 2	Readiness Checkpoint - Pilot Test Start	SCADA Lite	27-Aug-2024			Green	Confirmed	
SCL-207	Level 2	External Guidelines available - Draft	SCADA Lite	2-Sep-2024			Green	Confirmed	
SCL-208	Level 2	Pilot Test Plan confirmed with participant	SCADA Lite	30-Aug-2024			Green	Confirmed	
SCL-102	Level 1	Pilot test period commences	SCADA Lite	2-Sep-2024			Green	Confirmed	
SCL-209	Level 2	Industry Go-live Plan published - draft	SCADA Lite	17-Sep-2024			Green	Confirmed	
SCL-103	Level 1	Pilot Test Complete	SCADA Lite	20-Sep-2024			Green	Confirmed	
SCL-210	Level 2	Readiness checkpoint - Go-live	SCADA Lite	24-Sep-2024			Green	Confirmed	
SCL-211	Level 2	External Guidelines published - Final	SCADA Lite	1-Oct-2024			Green	Confirmed	
SCL-212	Level 2	Industry Go-live Plan published - final	SCADA Lite	11-Oct-2024			Green	Confirmed	
SCL-104	Level 1	Production Release	SCADA Lite	24-Oct-2024			Red	Confirmed	Prod release at risk of delay due to PoC outcome impacts on build/config timeframes

Note: Detailed re-planning in progress.
Schedule dates to be updated by June 14

SCADA Lite: High-level impacts - DRAFT

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 TECHNOLOGY & PROCESSES	INDICATIVE PARTICIPANT CHANGE IMPACTS	AFFECTED PARTICIPANTS				
		IRP	GEN	DRSP	TNSP	DNSP
REGISTRATION	<ul style="list-style-type: none"> Required: DRSPs seeking to register >5MW of WDR from a single site/aggregation who do not provide telemetry via an NSP will require a SCADA lite connection Optional. IRPs or Generators seeking a transitional SCADA Lite connection where the NSP does not support the service. <p>MEDIUM</p> <ul style="list-style-type: none"> Provide required data and undergo required certification Direct annual fees for a SCADA Lite connection 	0	0	✓		
DISPATCH	<p>MEDIUM:</p> <ul style="list-style-type: none"> OPTIONAL - Operational systems could be upgraded to receive/respond to instruction signals from a SCADA Lite feed. 	0	0	0		
TECHNOLOGY	<p>MEDIUM for non-NSP participants:</p> <ul style="list-style-type: none"> Potential for new technology and hardware will be required to enable the bidirectional communication link with AEMO to provide telemetry and optionally receive instruction signals. 	0	0	✓		

* Refer to [SCADA Lite Stakeholder Workshop Presentation – 23 August 2023](#) for technical overview

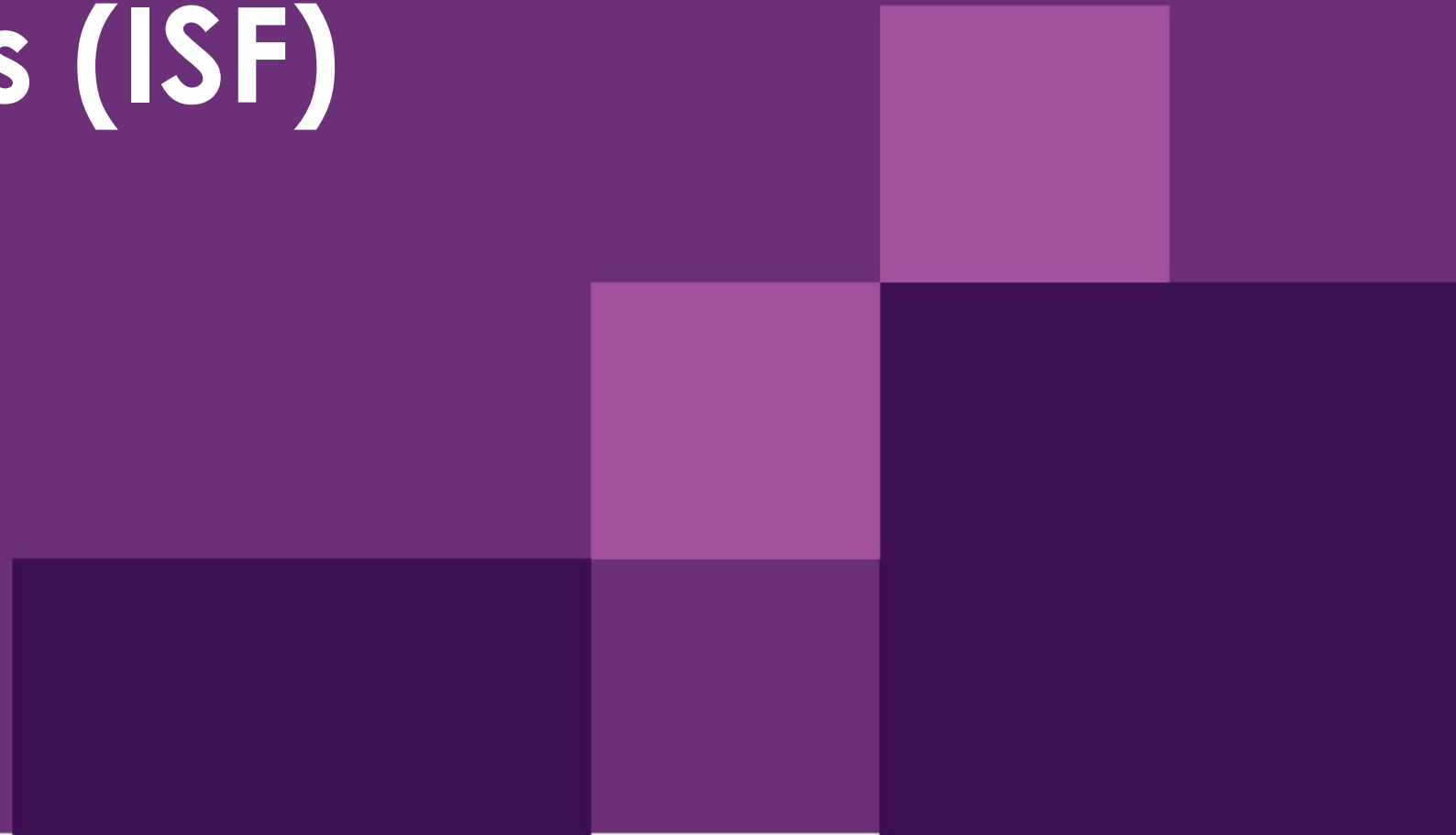
DRSP	Demand Response Service Provider
GEN	Scheduled Generators
IRP	Integrated Resource Providers

TNSP	Transmission network service provider
DNSP	Distribution network service provider



Improving Security Frameworks (ISF)

Carla Ziser



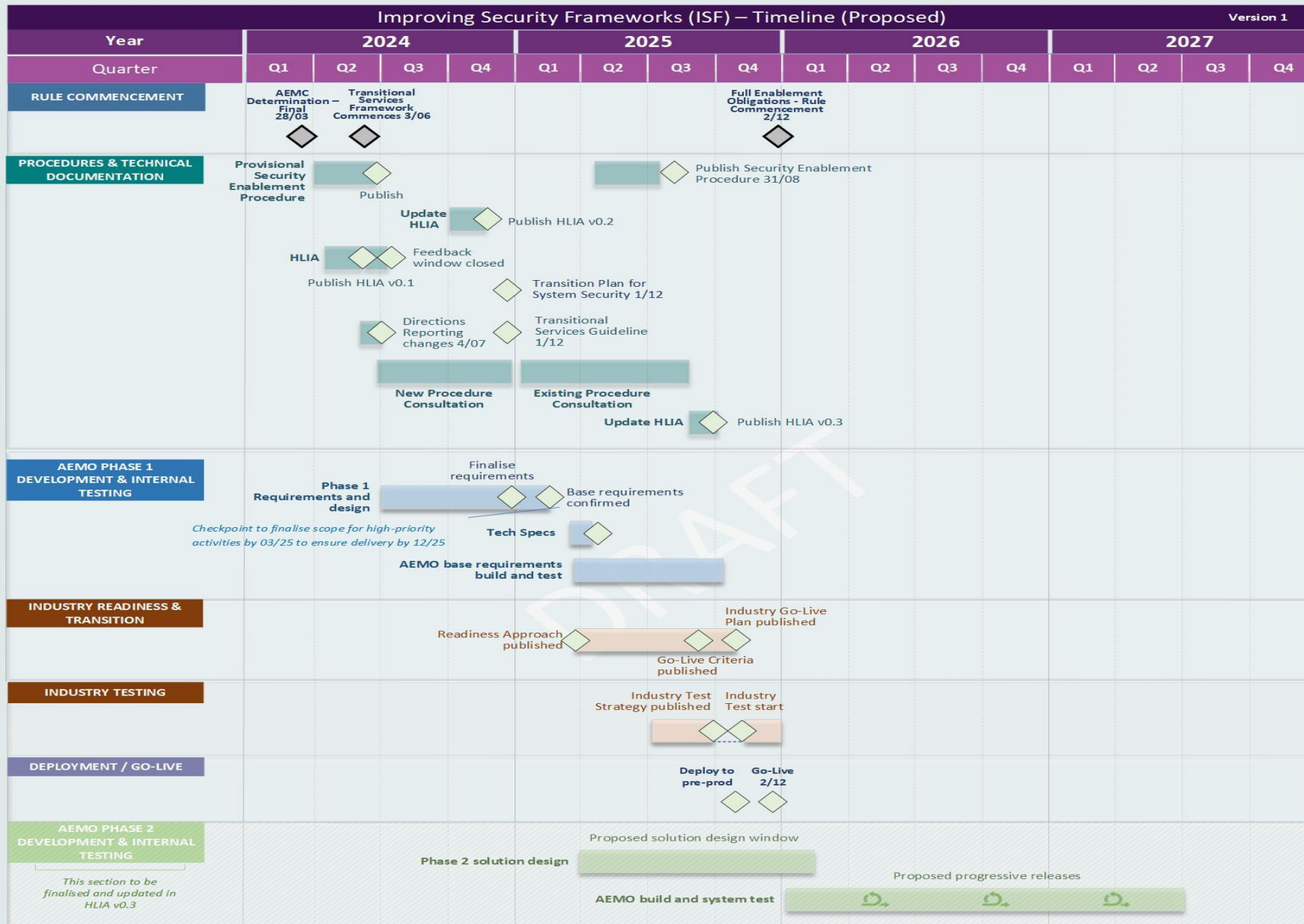
ISF June update

- The first version of the ISF High-level Implementation Assessment (HLIA) was [published](#) on 31 May, with **comments invited by 14 June**.
- The HLIA includes:
 - Likely impacted procedures.
 - High level system impacts.
 - Indicative key implementation dates
- Consultation commenced for [AEMO's operating procedure for Directions](#) to include a new section which outlines the content that will be included in direction market notices as required by the ISF Rule.

Next steps

- AEMO will release a provisional version of the Security Enablement Procedure by 30 June 2024.

ISF indicative timeline



Improving Security Frameworks

Key Date(s)	Go-live 2 December 2025 (Security enablement obligations on AEMO will commence)
Likely impacted stakeholders	Generators, Integrated Resource Providers, other security service providers
Industry testing anticipated	Industry testing to precede go-live date.
Overall Status	Project Delivery Status = Green. AEMO project mobilisation work in progress

Procedures	Technical documentation	AEMO Development and Internal Testing	Industry readiness and Transition	Industry testing	Deployment and go-Live
<ul style="list-style-type: none"> Several new procedures to be developed under the ISF Rule. Existing procedures require update to align with the ISF Rule – refer HLIA for indicative list. 	<ul style="list-style-type: none"> Technical Specification with updates for ISF to be published in Q2 2025. 	<ul style="list-style-type: none"> AEMO development to occur in Q1 2025 (indicative) AEMO testing to occur in late 2025 	<ul style="list-style-type: none"> Readiness Criteria for commencement published and will form basis of readiness checkpoints and readiness tracking. 	<ul style="list-style-type: none"> Industry testing in Q4 2025 (indicative). 	<ul style="list-style-type: none"> Deployment of all functionality to occur in time for 2 December 2025 go-live.

Relevant links
AEMO Improving Security Frameworks project page



Foundational & Strategic Initiatives IDX, IDAM & PC

Andrew Bell

FaSI Status update

- AEMO notes and thanks industry for the significant contribution in co-developing the FaSI Business Case.
- AEMO's internal governance has now endorsed the FaSI Business Case to proceed.
- This endorsement along with the support confirmed at the Executive Forum completes the process guided by the NEM Reform Investment Governance Framework, agreed with the RDC and published in September 2022
- AEMO will now progress the next stages of planning for these initiatives:
 - Progress planning activities for IDX and IDAM
 - Establishing technical working groups for IDX and IDAM
 - Updated plan on a page is being prepared
 - Updates to the Final Business Case and close out
- AEMO will seek industry input in terms of structure, participation and timing



Metering Services Review (MSR)

Justin Stute

Metering Services Review (MSR)

Consultation timeframes

Package 1*:

Business To Business Issues paper published 29 May covering Defects, LMRP and Shared Isolation
Business to Market Issues paper published 29 May covering Defects and LMRP

Package 2:

~ August covering Malfunctions and Asset Management Strategy guideline

Package 3:

TBC waiting Final Rule determination

*Responses to Issues Paper(s) due 11 July

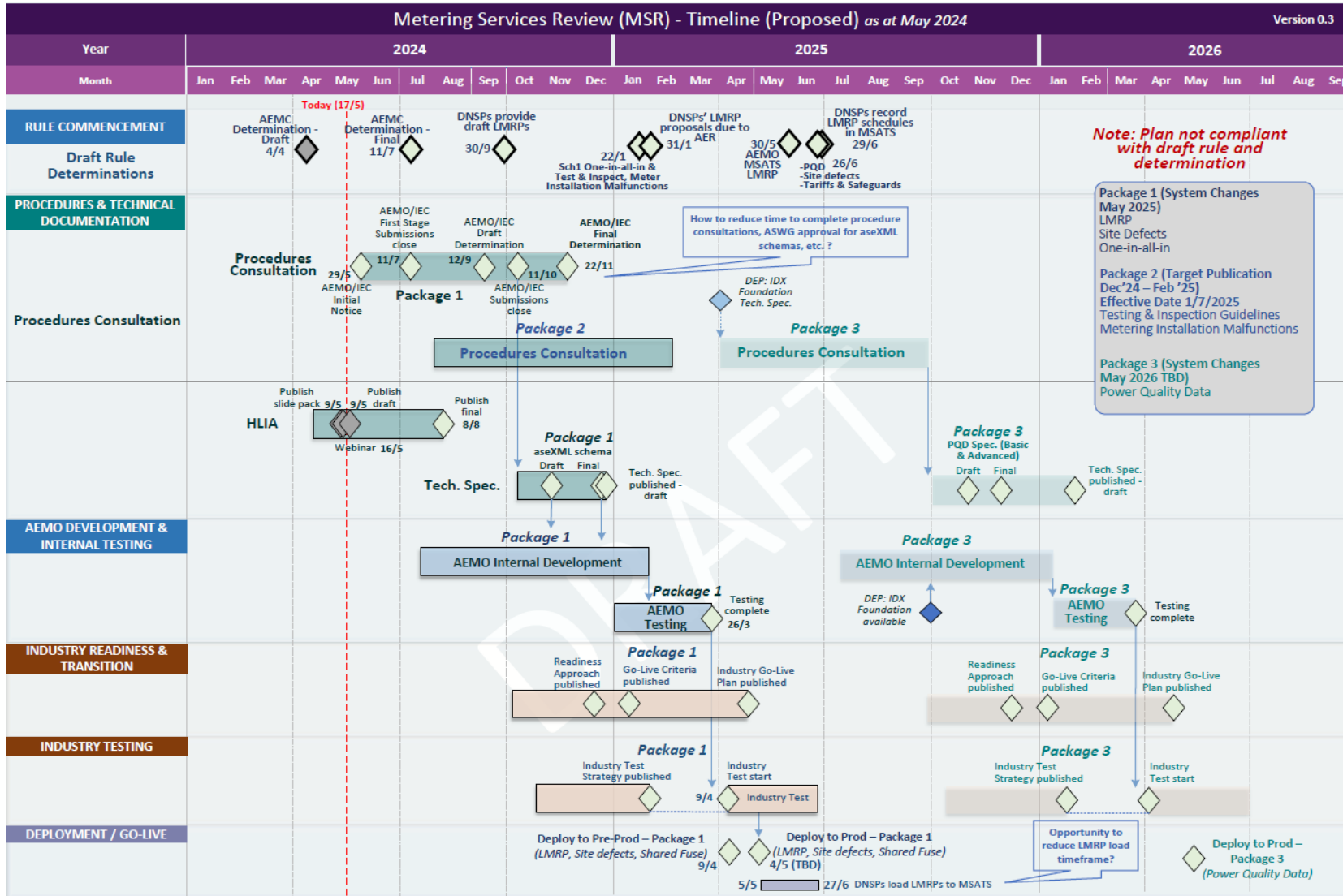
Metering Services Review (MSR)

Feedback on HLIA

- Benefits for participants to see an overall picture of the timeframes and AEMO's thinking
- Challenges identified include other reforms, such as FTA, occurring at the same time
- Power Quality Data was mentioned from several participants as a key issue under the current draft rule timeframes
- AEMO presented the HLIA as meeting the draft rule only and not considering other potential changes to consider changes that may reduce participant impacts

Metering Services Review (MSR)

AEMO HLIA Plan on a Page



Key Dates

May 2025: LMRP, Defects and One-in-all-In

July 2025: Testing and Inspection and Malfunctions

~March 2026: Power Quality Data

6. NEM Reform – Forward Plan

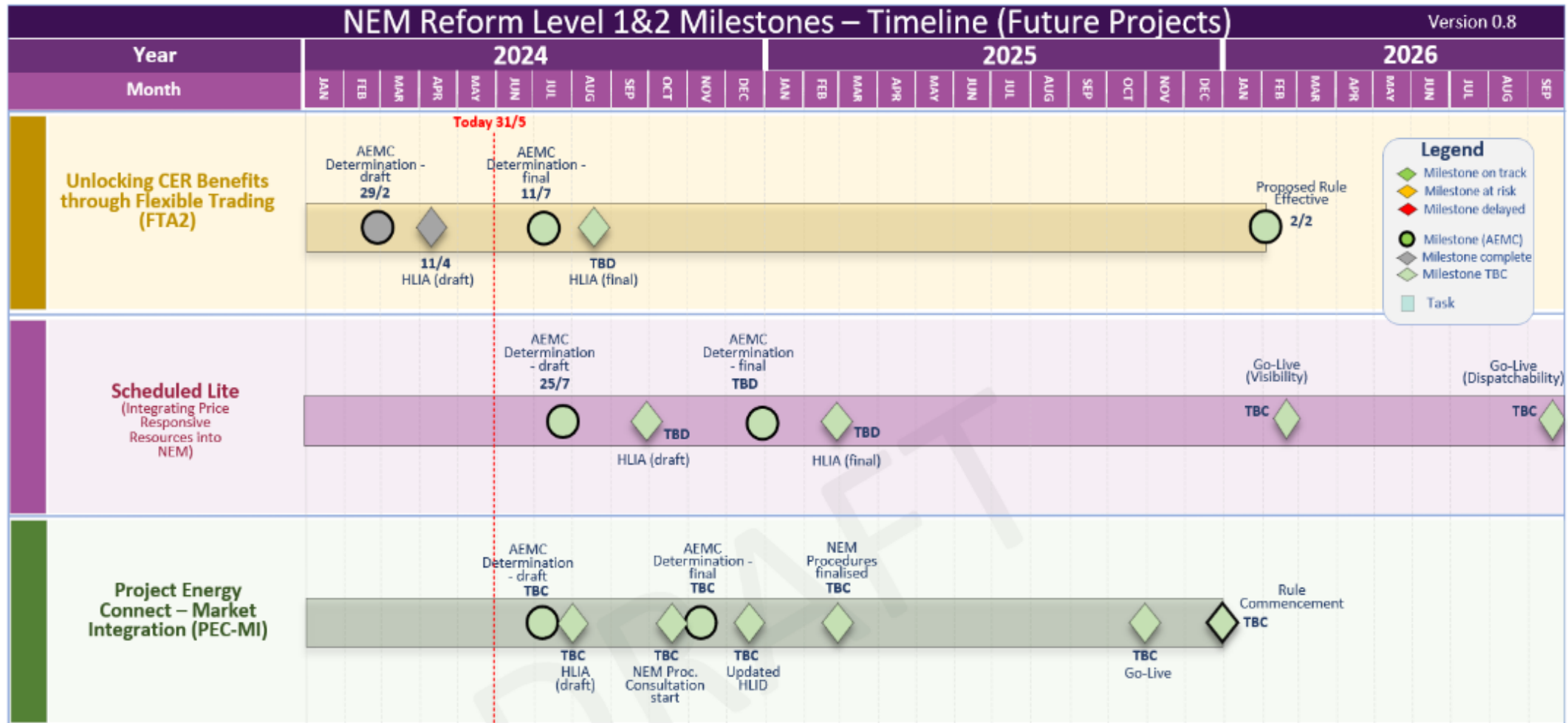


Upcoming Initiatives

Greg Minney



Upcoming Initiatives





Unlocking CER Benefits through Flexible Trading

Justin Stute

Unlocking CER Benefits through Flexible Trading

- AEMC has issued Draft Determination
 - Sets Proposed Rule Commencement Date of 2 Feb 2026
 - Stakeholder submissions on Draft due 11 April 2024
 - Final determination due 11 July 2024
- AEMO held HLIA/ PIA briefing on April 5th and published the HLIA/ PIA on 10th April
 - Initial views of impacts provided based on AEMC's Draft Determination
 - Informed Go-Live process with RDC will include updated approach to timing based on participant feedback
 - RDC session held 3rd May and agreed to the updated timeline proposal of 2 November 2026.
 - AEMC have received feedback from the RDC session .
 - RDC Minutes and updated HLIA will be published on AEMO's website in due course.
 - Final decision on timing with AEMC.



7. High Level Implementation Assessment (HLIA) Process

Dominic Mendonca

General Process

AEMC's "Unlocking CER benefits through flexible trading arrangements" draft determination (DD) provides an opportunity to test the Informed Go-Live process

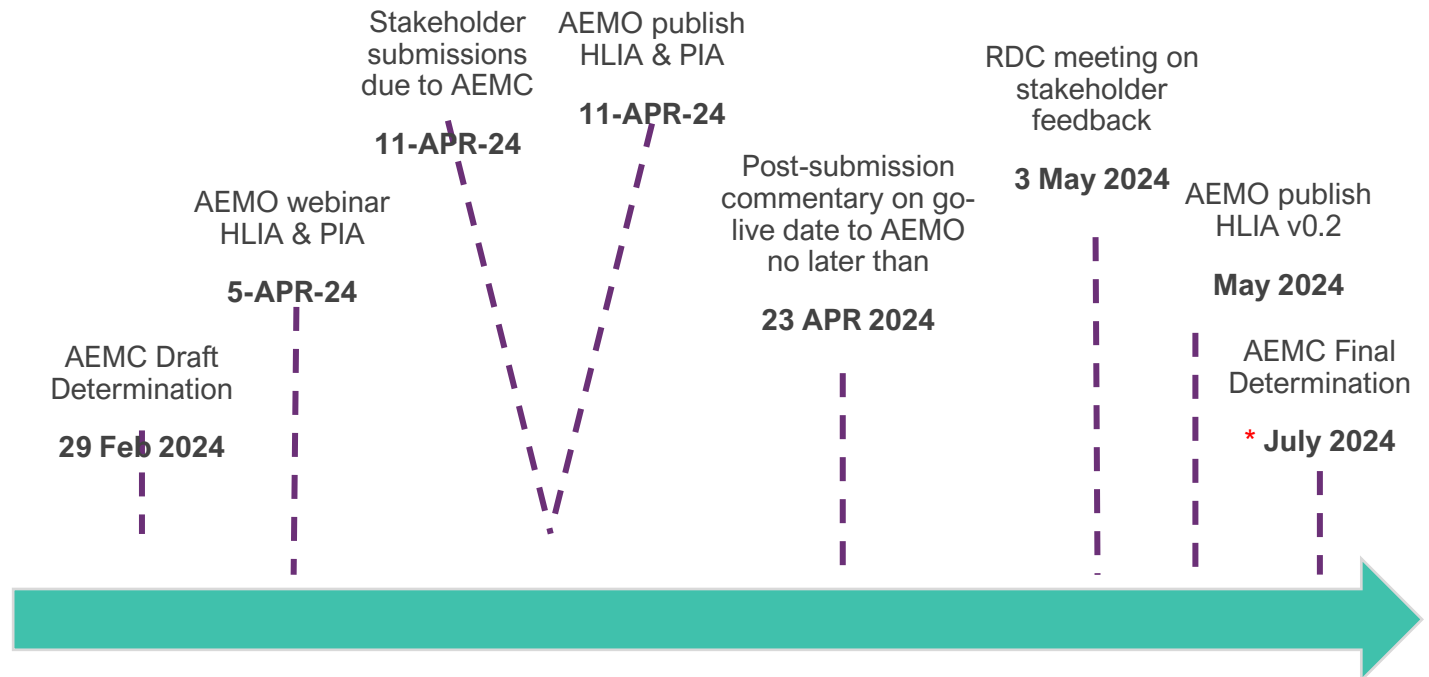
What is the informed go-live process ?

- Post issue of a Draft Determination, AEMO will provide industry with initial views on implementation approach and impact
 - This is subject to sufficient policy direction contained in draft determination
 - As determination delivery dates are confirmed, scheduled timeframes for High Level Implementation Assessment (HLIA) / Participant Impact Assessment (PIA) timeframes will be assessed

Objectives

- Improve visibility and increased participant planning timeframe
- Provide initial view of anticipated implementation timings and contention in lead up to final Determination
- Provide participants opportunity to respond in AEMC process to any proposed implementation timeframes

Process undertaken



* Subject to change

HLIA / PIA content

Information included based on information in Draft Determination

- Key Proposed Commencement dates
- Impacts to Market Systems, systems interactions, Procedures at level of H/M/L and Heatmap
- Participant Impacts (Who, H/M/L) to extent known
- Potential Industry Test approach
- Assessment of Congestion and Contention
- High Level Implementation and Delivery Schedule
- Go-Live date recommendation

Information will be reviewed based on Final Determination

- There remains a high potential for changes to occur from the Draft to the Final Determination which will impact the initial implementation information provided by AEMO
- Implementation milestones updated to form baseline delivery plans for project establishment and industry engagement
- Where initial assessment not performed based on Draft Determination, AEMO will provide HLIA/PIA as first deliverable in the implementation process

Candidates: Informed go-live process

To be discussed further with the RDC

Initiatives	Status*	Next steps	Candidate
Improving security frameworks	Final Determination: 28/03/24	<ul style="list-style-type: none"> AEMO HLIA / PIA published 31/05/24 Go-live various dates including December 2025 	No – Final determination made
Enhancing reserve information	Final Determination: 21/03/24	<ul style="list-style-type: none"> AEMO HLIA / PIA to be published imminently Go-live 1 July 2025 & 1 July 2027 	No – Final determination made
Unlocking CER benefits through flexible trading	Draft Determination: 29/02/24 Final Determination: 07/24	<ul style="list-style-type: none"> AEMO HLIA / PIA published alongside submission to DD Proposed go-live (Nov 26) subject to AEMC final determination 	Yes – Informed go live process completed
Accelerating smart meter deployment	Draft Determination: 04/04/24 Final Determination: 07/24	<ul style="list-style-type: none"> Fast track rule change AEMO HLIA / PIA published 16 May 2024 Proposed go-live (May 2025, July 2025, May 2026) subject to AEMC final determination 	No – Fast track rule change, substantial consultation already completed through MSR
Integrating price responsive resources into the NEM	Draft Determination: 25/07/24 Final Determination: 12/24	<ul style="list-style-type: none"> AEMO HLIA / PIA to be published post DD Proposed go-live TBD 	Yes – Subject to draft determination
IDAM, IDX and PC	Stakeholder consultation complete. Draft Business Case awaiting final internal approval	<ul style="list-style-type: none"> Executive Forum member endorsement received March 2024. AEMO's internal governance has now endorsed business case Proposed go-live multiple tranches / releases, refer to bus. Case 	No – ongoing consultation already planned
Shortening Settlement Cycles	Draft Determination: 13/06/24	<ul style="list-style-type: none"> AEMO HLIA / PIA to be published post DD Proposed go-live TBD 	Maybe – TBC Subject to draft determination

* Items in bold highlight either next stage of reform process and / or estimated go-live date. HLIA = High Level Implementation Assessment. PIA = Participant Impact Assessment

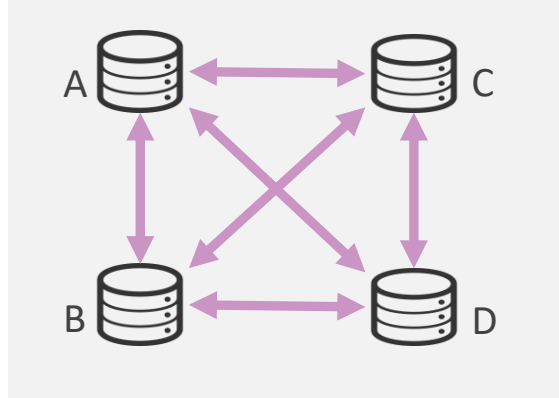
8. CER Data Exchange Industry Co-design Project

Nick Regan/Rachel Rodrigues McGown, AEMO

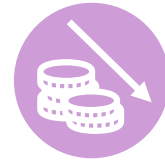
How could a CER Data Exchange help?

“Streamlined data exchange between organisations is an identified enabler for maximising customer value from CER, what is the best design for Australia?”

What we have now

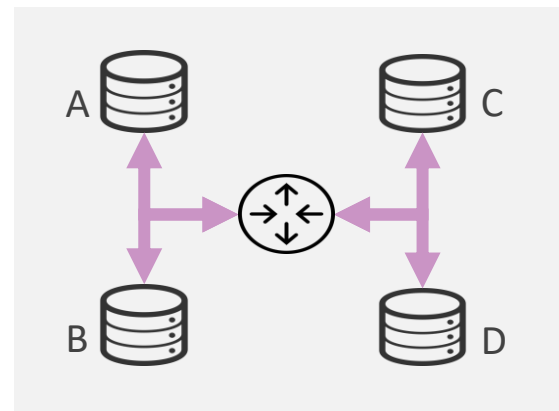


Improve data accessibility and transparency



Reduce cost of data access among organisations

What we could have



Enables improved CER coordination



Supports product innovation

Enables reduced energy system costs for all consumers

How does this project fit into Australia's CER integration journey? What comes after?



1 Underway or Complete

- Trials demonstrated the value of a CER data exchange approach.
- Learnt from other industry and international trials.
- Case for a larger scale investment positive

2 Stage 2: This Project (Jun – Nov 2024)

- Industry alignment on high-level design
- Implementation roadmap
- Complimentary to in-train trials

3 Scaling beyond this project (2024-2027+)

- A phased approach for a CER Data Exchange based on participant readiness, priority and value of use cases.

What questions will we seek to answer in our outputs?

Questions

What are the **use cases**?

How should data be **governed**?

How will it be **funded**?

Who **owns and operates** it?

What is our **implementation approach**?

Outputs



Industry alignment
on high level design



Implementation
Roadmap

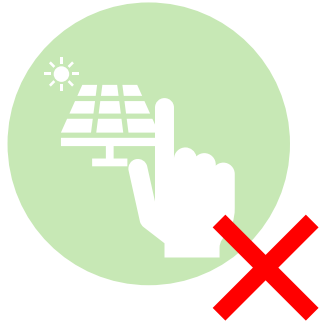


Indicative
Implementation
Costs



Knowledge sharing

What the CER Data Exchange project does not do



Directly control customer devices

The CER Data Exchange is an organisation-to-organisation concept



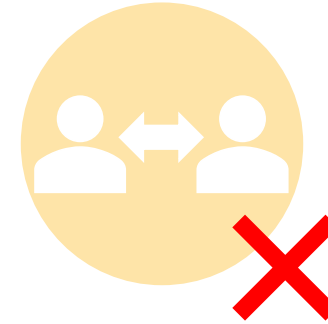
Take over existing market participant functions

E.g. Retailers remain FRMP, VPPs coordinate CER, DNSPs continue to manage DOEs



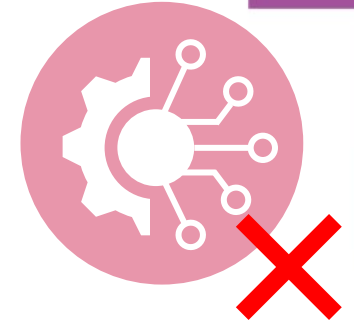
Create a single repository of CER data

Data and information reside with organisations creating it



Not the only way to exchange data

This is not intended to be a data 'monopoly'



Decide technology choices

This process will develop high level design

Numerous options for participation and input

Email

I'd like to keep abreast of issues & project updates

Public consultation

I'd like to provide input, but don't have a lot of time

Industry workshops

I'd like to provide input, but don't have a lot of time

Expert Working Group

I have significant expertise that I would like to contribute

Register here:

<https://forms.office.com/e/fDx6rVPxb7>



Email: cerdataexchange@aemo.com.au

Website: search "[AEMO CER Data Exchange Industry Co-design](#)"

9. NEM Reform Stakeholder Update



Upcoming Engagements

For Noting



Upcoming Engagements

June						
M	T	W	T	F	S	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

July						
M	T	W	T	F	S	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				

August						
M	T	W	T	F	S	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	

September						
M	T	W	T	F	S	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						

NEM Reform Program Committees/Forums

- Executive Forum
- Reform Delivery Committee
- Reform Delivery Committee Collaborative Workshop
- Program Consultative Forum
- Electricity Wholesale Consultative Forum
- Implementation Forum
- Industry Testing Working Group

NEM Reform Briefings

- Information session and Q&A: IESS Bidirectional unit (BDU) pre-prod and production cutover
- IESS Post Go-live Q&A

Other Forums

- Electricity Retail Consultative Forum

Other

- National Public Holiday
- State/Territory Public Holiday

Note:

- RDC and Executive Forum are in the process of being rescheduled with new invitations issued soon.

NEM Reform Program Stakeholder Briefing (Recap)



Ulrika Lindholm / David Reynolds

NEM Reform Program: Stakeholder Briefing

22 May 2024 – Feedback

- On 22 May AEMO held [a briefing on the NEM Reform Program](#) and the upcoming release of the NEM Reform Implementation Roadmap v.4.
- Feedback on the sessions outlined below following our participant survey.

What did participants find useful at this session?

Feedback received

- *“The slides on each of the upcoming initiatives were excellent with the overview and who is impacted was very helpful for industry to understand in a snapshot the impacts.”*
- *“Provided the right level of information.”*
- *“Both sessions were informative.”*
- *“Inclusion of benefits for each initiative in the pack.”*
- *“Having slides summarising the natures of the changes of the updates (e.g. scope, timeline, etc.).”*
- *AEMO introducing the informed go-live process and communicating it in today's session.*



What could we do better?

Feedback received

- *“With so many initiatives another 30 min would have been good to have so it was not so rushed.”*
- *“All good. It will be even better if it's possible for AEMO to circulate the materials a little bit earlier instead of just one day before.”*
- *“Nothing Obvious. Thanks for the sessions”*
- *“Please provide an estimated timeline for deferred components such as DOEs etc.”*



Do participants have any further feedback?

NEMReform@aemo.com.au

10. General Questions and Other Business



NEMReform@aemo.com.au



[NEM Reform 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, all participants agree to adhere to the CCA at all times and to comply with appropriate protocols where required to do so.

AEMO has developed meeting protocols to support compliance with the CCA in working groups and other forums with energy stakeholders. Before attending, participants should confirm the application of the appropriate meeting protocol.

To access the full protocol at AEMO's website, visit: <https://aemo.com.au/en/consultations/industry-forums-and-working-groups>



For more information visit

aemo.com.au