

IESS Working Group

Meeting #7
26 October 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

#	Approx. Time	Topic	Presenter
1	10:00 – 10:05	Welcome	Emily Brodie - AEMO
2	10:05 – 10:10	Notes, actions and feedback from previous WG meeting	Ulrika Lindholm - AEMO
3	10:10 – 10:20	NEM2025 program mobilisation	Ulrika Lindholm - AEMO
4	10:20 – 10:30	Aggregated Dispatch Conformance update	Ross Gillett - AEMO
5	10:30 – 10:40	Project Update	Damien Banky - AEMO
6	10:40 – 10:50	Procedures Update	Nicole Nsair - AEMO
7	10:50 – 11:00	Initial release industry readiness update	Greg Minney - AEMO
8	11:00 – 11:10	IESS Risk and Issues Register update	Emily Brodie - AEMO
9	11:10 – 11:15	IESS Forward Plan	Ulrika Lindholm - AEMO
	11:15 – 11:30	General questions and close	Emily Brodie - AEMO

Appendix A: AEMO Competition Law & Meeting Protocol

Appendix B: IESS Risk management approach

Please note: This meeting will be recorded for the purpose of compiling meeting minutes.

2. Notes, actions & feedback from previous IESS WG meeting

Notes, actions & feedback from previous IESS WG meeting 31 August

#	Topic	Action	Responsible	Status
6.1	Procedure Update	Nicole Nsair to include an update on the Carbon Dioxide Equivalent Intensity consultation date to on the IESS procedure changes Indicative change program page	Nicole Nsair	Closed
6.2	Q&A Aggregated Dispatch Conformance	AEMO will explore the alternative Aggregated Dispatch Conformance approach further.	AEMO	Open

3. NEM2025 Program Mobilization & Opportunities to get involved

IESS working group transition

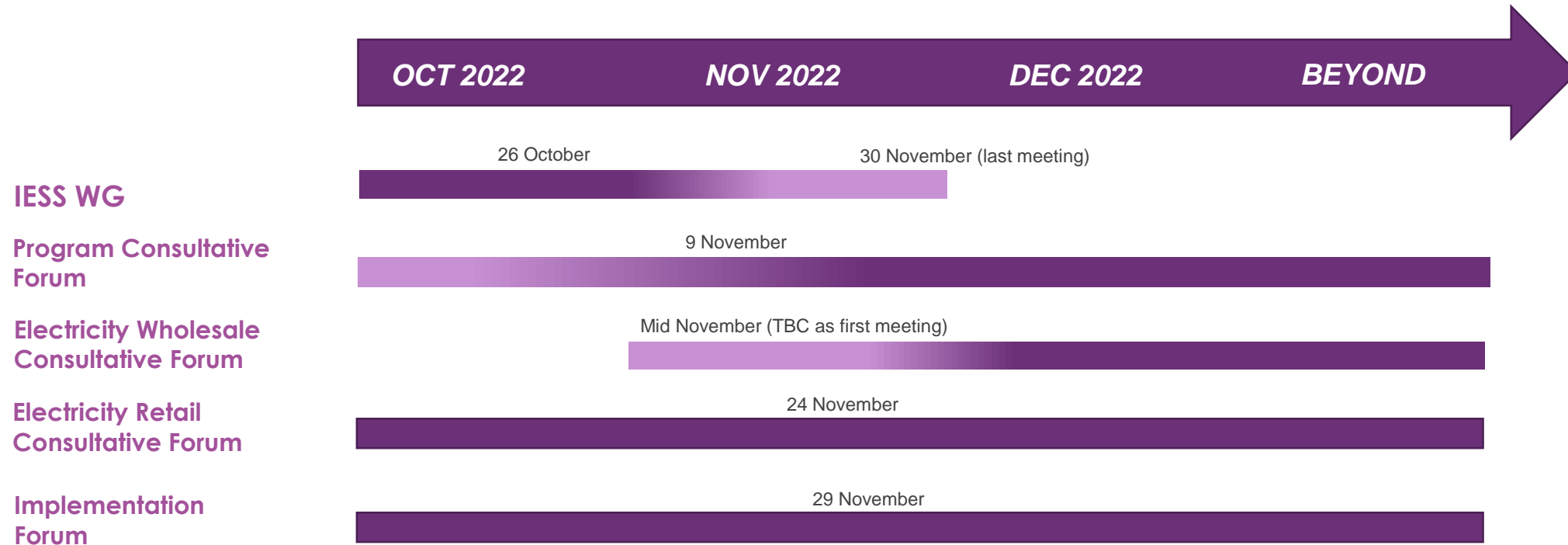
Current WG topics → Transition to NEM Reform program forums

- Standing agenda - monthly meetings**
- Notes, actions and feedback from previous WG meeting
 - Project update
 - Procedures update
 - Industry readiness
 - Industry Risk and Issues register
 - Forward Plan

- Temporal topics**
- Aggregated dispatch conformance
 - Wash-up rule change

Channel	Purpose	Cadence & transition timeline
Program Consultative Forum	To collaborate with participants and intending participants on matters relating to the planning, coordination and implementation of the NEM2025 Program. <i>Incl IESS topics:</i> <ul style="list-style-type: none"> - Project update - Industry risk and issues - Forward plan 	Monthly Transition: 9 November
Electricity Wholesale Consultative Forum (EWCF)	To collaborate with participants and intending participants on the coordination, and the development of amendments to wholesale related procedures, guidelines and documentation required for implementation of reforms. <i>Incl IESS topics:</i> <ul style="list-style-type: none"> - 'Wholesale' procedures updates and consultations - Aggregated dispatch conformance - Wash-up rule change 	Monthly Transition: 3 November (TBC as first meeting)
Electricity Retail Consultative Forum (ERCF)	To collaborate with participants and intending participants on the coordination, and the development of amendments to retail related procedures, guidelines and documentation required for implementation of reforms. <i>Incl IESS topics:</i> <ul style="list-style-type: none"> - Retail/metering procedures updates and consultations (engagement well underway for IESS) 	Monthly Transition: 24 November
Implementation Forum	To collaborate with participants and intending participants on matters relating to the planning, coordination and implementation of the NEM2025 Program. Includes sub working groups for IT, Testing and Readiness. <i>Incl IESS topics:</i> <ul style="list-style-type: none"> - Industry readiness - Testing 	Monthly Transition: 29 November

Transition timeline – key dates



Participation in the NEM Reform forums

Attendance of these forums is optional, participants are welcome to nominate to receive updates.

Forum	Audience
PCF	<ul style="list-style-type: none"> • Project Director or Senior Business Sponsor role with broad reform implementation focus • Understand that some Participants may not group all reforms under single program • Implementation focus rather than regulatory engagement.
Implementation Forum	<ul style="list-style-type: none"> • Project Manager / release business owner • Consideration of initiative readiness and implementation progress • Expect membership to vary for some participants based on initiative impacts.
ERCF / EWCF	<ul style="list-style-type: none"> • Open to interested parties, regulatory managers in particular.
Industry information session	<ul style="list-style-type: none"> • Open to interested parties, to be run on a quarterly basis.

- Questions and nominations received through NEM2025@aemo.com.au
- For ERCF enquiries, please contact ERCF@aemo.com.au.

4. Aggregated Dispatch Conformance update

Alternative ADC approach

- A stakeholder proposed an alternative ADC implementation after the ADC consultation had closed.
- AEMO believes this new idea has merit because compared to what is proposed, it will likely:
 - deliver greater benefits to participants which will encourage uptake
 - be an incremental change in AEMO's implementation.
- In relation to the alternative approach, AEMO is currently considering impacts to:
 - Those facilities providing regulation FCAS via AGC
 - AER's compliance systems and processes – discussing with AER
 - ADC delivery timeline (31 March 2023)
- If there are no 'show-stoppers' and appetite from industry for the change, then AEMO would need to:
 - Discuss with IESS WG and wider industry
 - Make further changes to the Dispatch Procedure and re-consult on those changes, with potential need to re-consult on the Causer Pays procedure
 - Consider appropriate change control for ADC implementation.

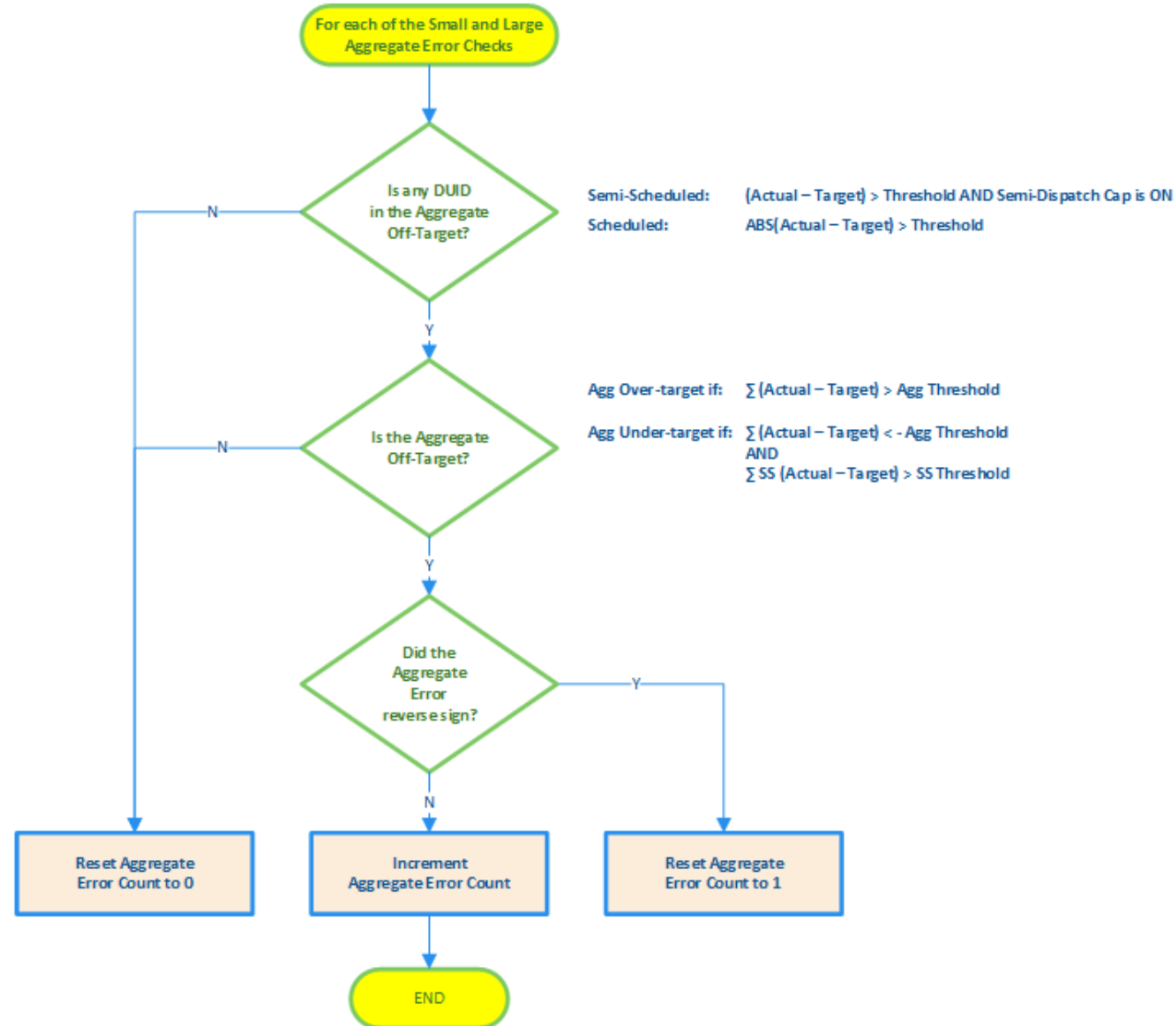
Alternative ADC for Target Aggregate

- Participant chooses in real-time to conform in aggregate by deliberately sending one or more units off-target
- Unit off-target is assessed based on its classification (as now, or if AEMO requires individual unit dispatch conformance ie Conformance Mode=2)
- Deemed as “participating in ADC” if:
 - **Any scheduled units, or any semi-scheduled units with SDC on, are over-target**
 - participant indicating their intention for those units to offset the under-target of other units (eg firming the semi-scheduled shortfall)
 - OR
 - **Any scheduled units are under-target**
 - participant indicating their intention for those units to be offset from the over-target of other units (eg charge conservation or additional charging from the semi-scheduled excess)
- AEMO would report the aggregate is participating in ADC via Dispatch Conformance Report
- This alternative is different to the original approach, which always requires participation in ADC, and effectively forces a scheduled unit (eg BESS) to go above its target to fully firm a semi-scheduled unit that is below its target due to a drop in its available energy source

Alternative ADC for Target Aggregate

- **Aggregate over-target error → non-conforming:**
 - For example, the scheduled BESS is not permitted to go over-target more than the semi-scheduled solar is under-target due to cloud cover (the firming limit) otherwise the aggregate system would export the excess to the grid
- **Aggregate under-target → non-conforming:**
 - For example, the scheduled BESS is not permitted to go under-target more than the semi-scheduled solar is over-target due to its under forecast (the charging limit) otherwise the aggregate system would import the shortfall from the grid

Alternative ADC for a Target Aggregate



Next steps

1. AEMO to confirm alternative approach is possible/appropriate
2. If so, AEMO to hold an industry conversation in mid to late November and establish next steps.

5. Project Update

Project Update

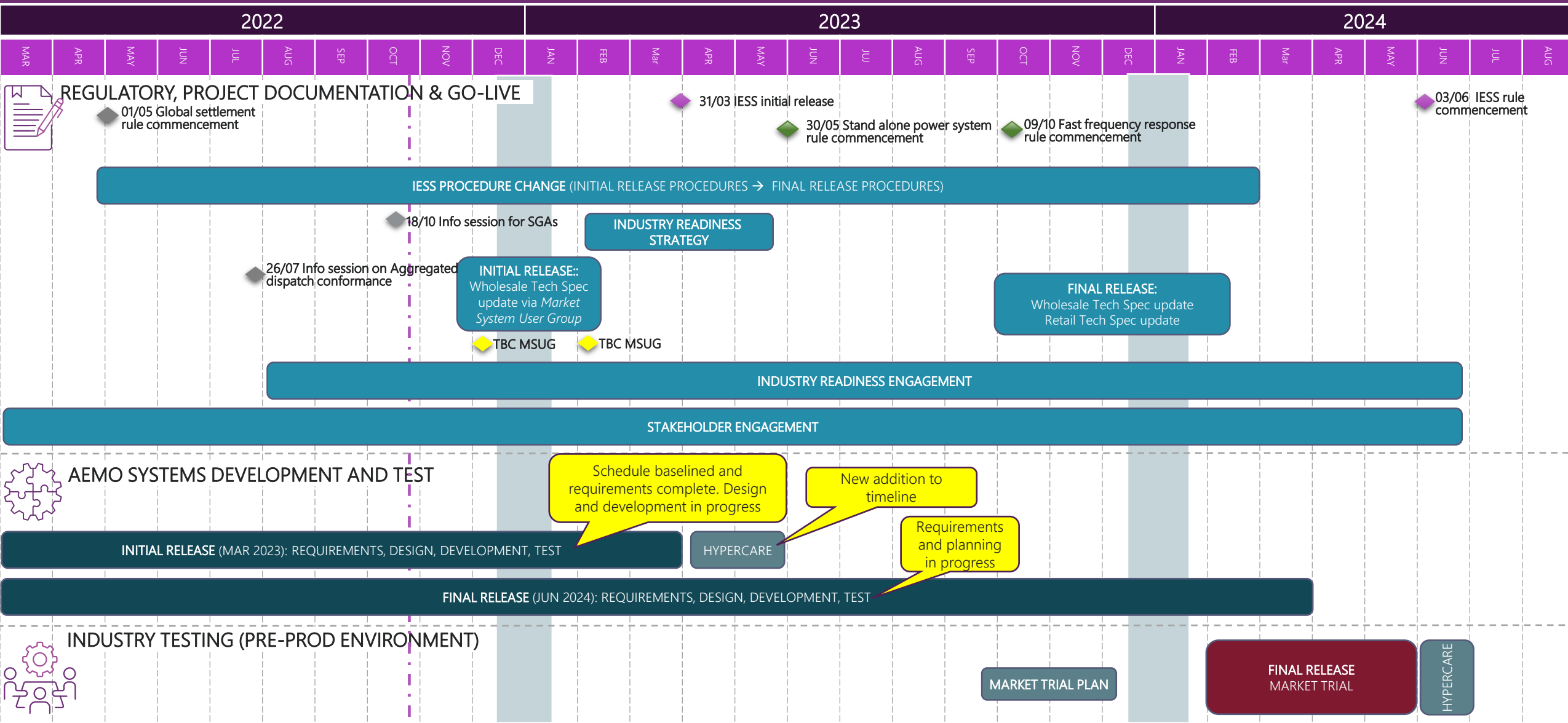
31 March 2023 release

- AEMO's delivery schedule (design/build/test/deployment) has been baselined
- Business and functional requirements complete
- Business readiness assessment complete
- Design and development for AEMO's affected applications in progress.
 - **NOTE:** Any change to Aggregate Dispatch Conformance will be considered via change control.

03 June 2024 release

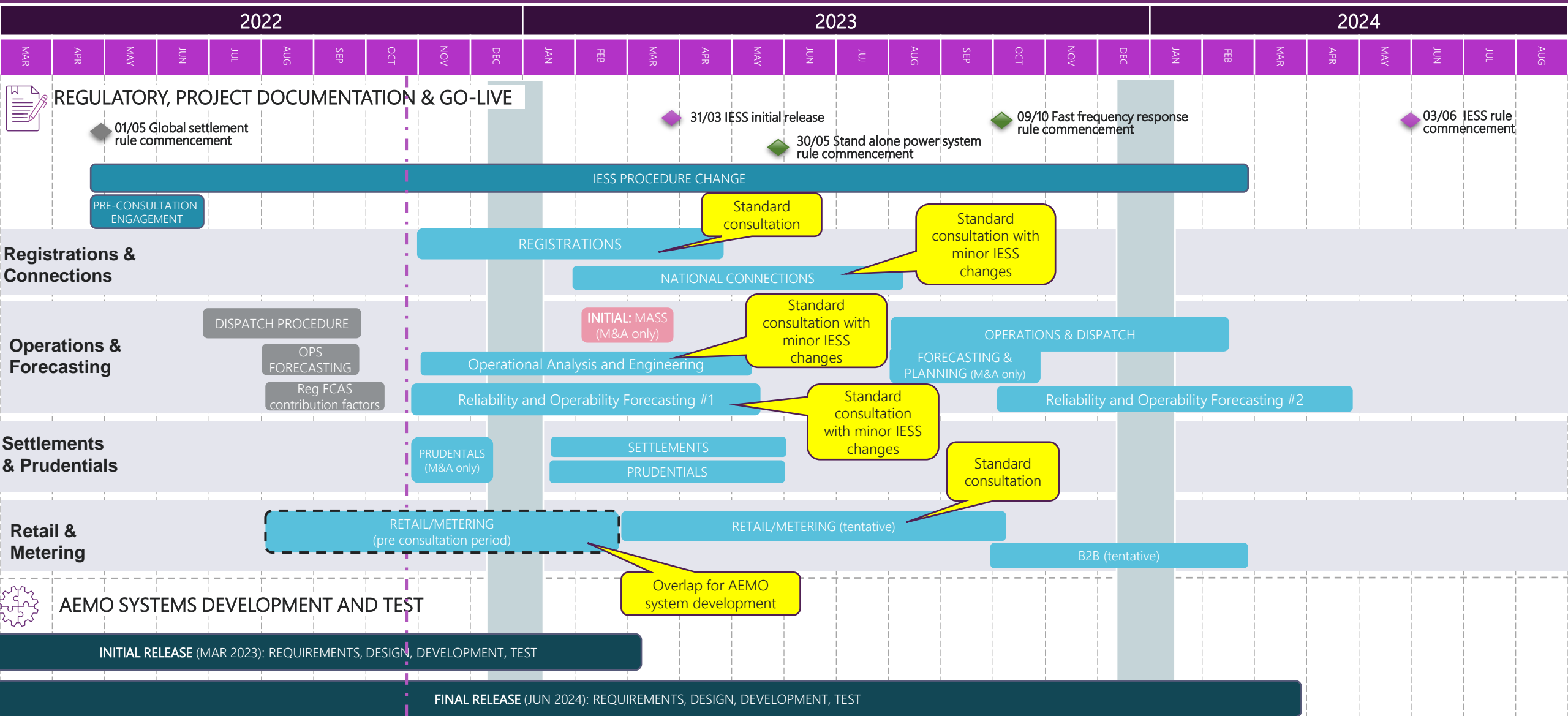
- Finalising business requirements that will affect AEMO's applications
- Delivery planning has commenced.

IESS – Indicative Industry Timeline



6. Procedures Update

IESS – *INDICATIVE* IESS procedure change timeline



Changes to timelines

Commencement dates	Workstream	Documents
31 Oct 2022 Standard Consultation (With minor IESS changes)	Reliability and Operability Forecasting	<ul style="list-style-type: none"> • Connection point forecasting methodology • Demand Side Participation Information Guidelines • DSP forecasting methodology • Electricity demand forecasting methodology information paper • Reliability forecast guidelines
1 Nov 2022 Standard Consultation	Registration	<ul style="list-style-type: none"> • Guide to Generator Exemptions and Classifications of Generating Units
4 Nov 2022 Standard Consultation (With minor IESS changes)	Operational Analysis and Engineering	<ul style="list-style-type: none"> • Power System Modelling Guideline • Power system design and setting data sheets • Releasable User Guide (RUG)
7 Nov 2022 Minor or Administrative	Prudentials	<ul style="list-style-type: none"> • WDR Baseline Eligibility Compliance and Metrics Policy • RRO PoLR Cost Procedures
Q1 – Q2 2023 Standard Consultation (With minor IESS changes)	National Connections	<ul style="list-style-type: none"> • System strength impact assessment guidelines

Retail and Metering Update

- AEMO and Electricity Retail Consultative Forum (ERCF) are discussing the IESS retail/metering procedure consultation period to manage the impacts:
 - of concurrent consultation processes and
 - AEMO system design and development timelines.
- AEMO is providing the ERCF with a program of pre-consultation engagement on key IESS topics:
 - Oct 27: NMI Classification Code changes
 - Nov 24: Embedded network calculations and RM report changes
- These topics have been chosen to give participants time to identify any issues prior to consultation commencing.

Procedure Consultation Summary

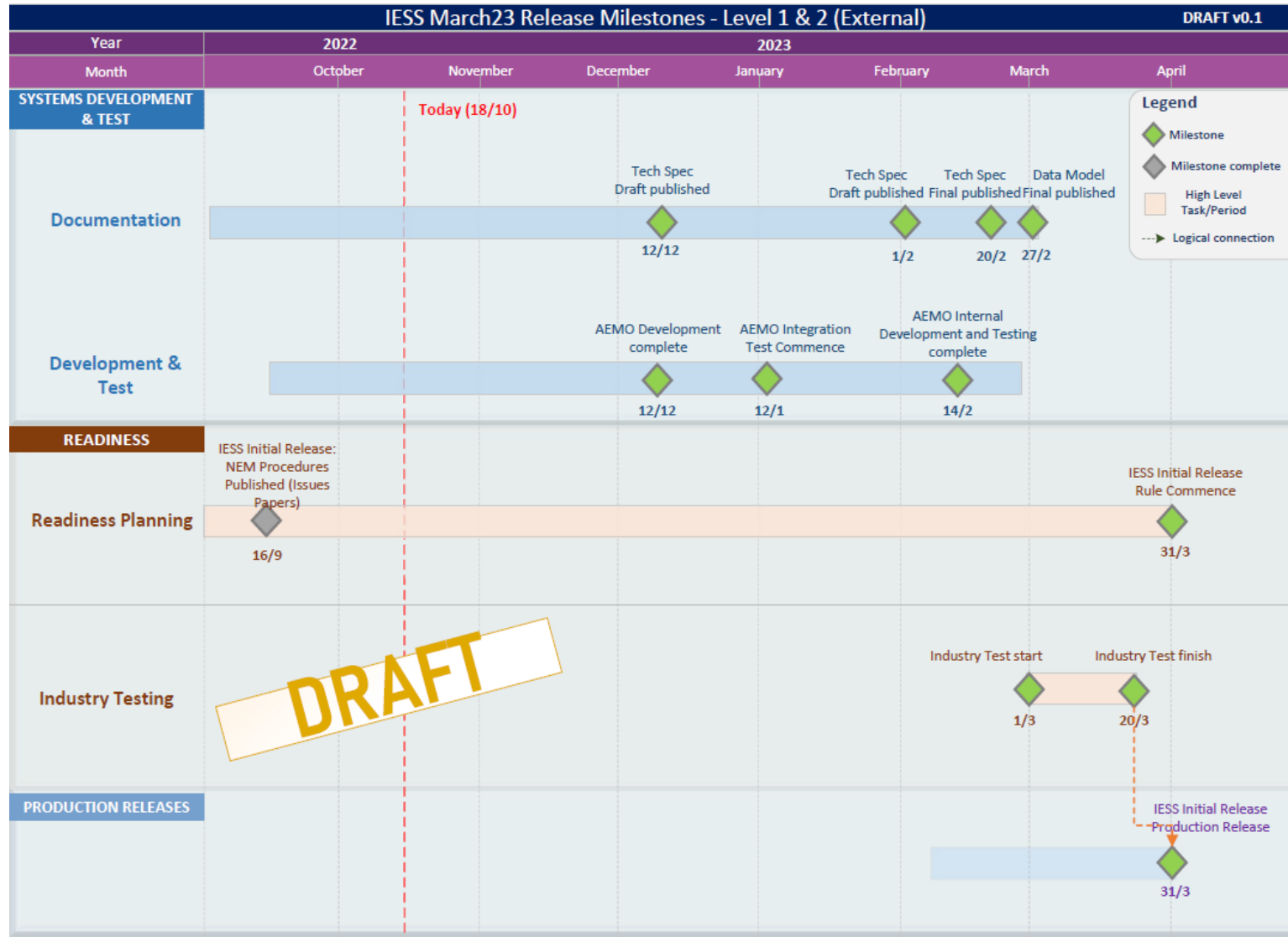
Package/Procedure	Issues paper/ change marked procedure	Submissions due (Issues/Information paper)	Final docs
NEM Reliability Forecasting Guidelines and Methodology	Mon 31 Oct 22	Mon 28 Nov 22	30 Apr 23
Guide to Generator Exemptions and Classifications of Generating Units	Wed 2 Nov 22	Tue 20 Dec 22	14 Apr 23
Power system model guidelines	Fri 4 Nov 22	Fri 16 Dec 22	Fri 21 Apr 23
<ul style="list-style-type: none"> WDR Baseline Eligibility Compliance and Metrics Policy RRO PoLR Cost Procedures 	Mon 7 Nov 22	Fri 18 Nov 22	Mon 5 Dec 22

- Continuing engagement with AEMC on outcomes for wash-up rule change proposal
- IESS web page for all document changes

<https://www.aemo.com.au/initiatives/major-programs/integrating-energy-storage-systems-project/integrating-energy-storage-systems-procedure-changes>

7. Initial Release Industry Readiness Update

Initial IESS Release- Readiness Approach



Initial IESS Release: Readiness Support for Participant Preparations

- Milestones reflect current baseline schedule
- Engagement has commenced to establish intending participants
- Procedure Updates have been finalised and available – noting M&A changes
- Tech Specs and Data model changes relate to changes to support Initial Release capability. Data Model Release may include updated tables for SAPS settlement requirements. Will support scoping of interfaces to market systems by intending participants
- Industry testing to follow BAU processes for registration etc, milestone indicates availability of capability in Pre-prod Environment.
 - Note: Capability remains in pre-prod for participant test / registration on ongoing basis. Registrations accepted from SGA's from 31/3
- AEMO will report progress against Development and Test Milestones for AEMO readiness
- Updates to schedule will include timing development of Industry Go-Live plans for deployment requirements (if required)

8. IESS Risk and Issues Register

IESS Risk and Issues Register

Items for discussion October 2022

Category	Comment
New risks/issues	None identified by IESS Working Group or AEMO
Existing risks/issues for consideration	
Current issues	
Risks with 'high' or 'critical' rating	

- Updated risk register:
 - Published on the [IESS Working Group page](#)

- Please raise proposed changes to the risk register via iess@aemo.com.au
- Risk register will be transitioned over Oct – Nov 2022 to the NEM2025 Program Consultative Forum to manage.

9. IESS Forward Plan

Forward plan – IESS Stakeholder engagement

	OCT 2022	NOV 2022	DEC 2022	BEYOND
Monthly meeting	<ul style="list-style-type: none"> ✓ <u>Mthly meeting (today)</u> • Aggregated Dispatch Conformance update • NEM2025 program mobilisation 	<p>FINAL <u>Mthly meeting</u></p> <ul style="list-style-type: none"> • Debrief on feedback received on procedure consultations • Aggregated dispatch conformance update • Discussion on approach to updating Technical Specifications 	<p><u>Fully transitioned to NEM 2025 forums</u></p>	
Other IESS engagement	<ul style="list-style-type: none"> ✓ Publication of final documentation Inter-network test guidelines (3 October) ✓ Stakeholder information session for SGAs on optional FCAS participation (18 October) ✓ Ongoing 1to1s readiness conversations with WG members and broader industry 	<ul style="list-style-type: none"> • Standard Consultation commences on <ul style="list-style-type: none"> • Guide to Generator Exemptions and Classifications of Generating Units (1 November) • Standard consultation on Power System Model Guidelines (4 November) • M&A consultations commences on <ul style="list-style-type: none"> • Wholesale Demand Response Baseline Eligibility Compliance and Metrics Policy (7 November) • Retailer Reliability Obligation – Procurer of Last Resort Cost Procedures (7 November) • Ongoing 1to1s readiness conversations with WG members and broader industry 	<ul style="list-style-type: none"> • Discussion on Technical Specifications at Market System User Group (MSUG) • Submissions due on Guide to Generator Exemptions and Classifications of Generating Units information paper (20 December) 	<ul style="list-style-type: none"> • Consultation on Carbon Dioxide Equivalent Intensity Index Procedures (Q1 2023)

Stakeholder enquiries may be sent to the IESS mailbox: IESS@aemo.com.au

Standing agenda - monthly meetings

- Notes, actions and feedback from previous WG meeting
- Project update
- Procedures update
- Industry Risk and Issues register
- Forward Plan (this page)

Legend
 Black text = stakeholders are invited to participate
 Purple text = action by AEMO

10. General Questions & Close

IESS project contact



ieess@aemo.com.au



<https://aemo.com.au/initiatives/major-programs/integrating-energy-storage-systems-project>



For more information visit

aemo.com.au

Appendix A: AEMO 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: IESS Risk management approach

IESS risk management regime

Regular evaluation of risks and issues at IESS WG meetings (or out of session when necessary)

TIMING	ACTIVITY	RESPONSIBILITY
Prior to monthly IESS WG meeting	AEMO to: <ul style="list-style-type: none"> • Seek feedback (internally and from IESS WG) on existing and new risks/issues • Consolidate and distribute marked up risk/issues register as part of meeting pack 	AEMO
At monthly IESS WG meeting	IESS WG to review and discuss by exception: <ul style="list-style-type: none"> • New or existing risks/issues that have been identified as requiring consideration • Current issues • “High” or “critical” risks: <ul style="list-style-type: none"> ➤ Check probability and impact ➤ Discuss additional mitigations ➤ Discuss actions 	IESS WG
After monthly IESS WG meeting	AEMO to: <ul style="list-style-type: none"> • Update register considering input from IESS WG • Post updated register on its website 	AEMO

IESS Risk Matrix

RISK MATRIX									
1 LIKELIHOOD	Likelihood	Probability	Qualitative Description						
	Almost Certain	>90%	Will occur in most circumstances						
	Likely	51% - 90%	Can be expected to occur in most circumstances						
	Possible	11% - 50%	May occur, but not expected in most circumstances						
	Unlikely	1% - 10%	Conceivable, but unlikely to occur						
	Rare	<1%	Will only occur in exceptional circumstances						
				LIKELIHOOD	CONSEQUENCE				
				Almost Certain	Immaterial	Minor	Moderate	Major	Extreme
				Likely	Medium	Medium	High	Critical	Critical
				Possible	Low	Medium	High	Critical	Critical
				Unlikely	Low	Medium	High	High	Critical
				Rare	Low	Low	Medium	Medium	High
2 CONSEQUENCE	Consequence	Qualitative Description							
	Immaterial	Minor issue of little concern							
	Minor	Isolated case, some small disruptions							
	Moderate	Requires attention, inconvenience							
	Major	Requires urgent attention, impact days							
	Extreme	Wide damage, lasting weeks, impact high							
				TREND KEY					
				↑	IMPROVING				
				↔	NO CHANGE (STABLE)				
				↓	WORSENING				