

IESS Working Group

Meeting 2
25 MAY 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.

Icebreaker

- Get to know your IESS WG contemporaries a little
- “Round the table” opportunity to briefly introduce yourself to the working group
 - Name, role and company

Agenda

#	Approx. Time	Topic	Presenter/s
1	10:00-10:15	Welcome	Emily Brodie, AEMO
2	10:15-10:20	Notes, actions and feedback from previous WG meeting	Ulrika Lindholm, AEMO
3	10:20-10:30	Project update	Emily Brodie, AEMO
4	10:30-10:45	Procedures update	Gareth Morrah, AEMO
5	10:45-10:55	HLD/implementation strawperson update	Emily Brodie, AEMO
6	10:55-11:05	Potential IESS implementation amendments rule change	Emily Brodie, AEMO
7	11:05-11:15	Forward Plan	Ulrika Lindholm, AEMO
8	11:15-11:30	General questions and close	Emily Brodie, AEMO

Appendix A: Forum and Meeting Expectations and Competition Law Meeting Protocol

Appendix B: Procedures requiring changes

Please note that this meeting will be recorded for the purpose of note taking, and not for publication.

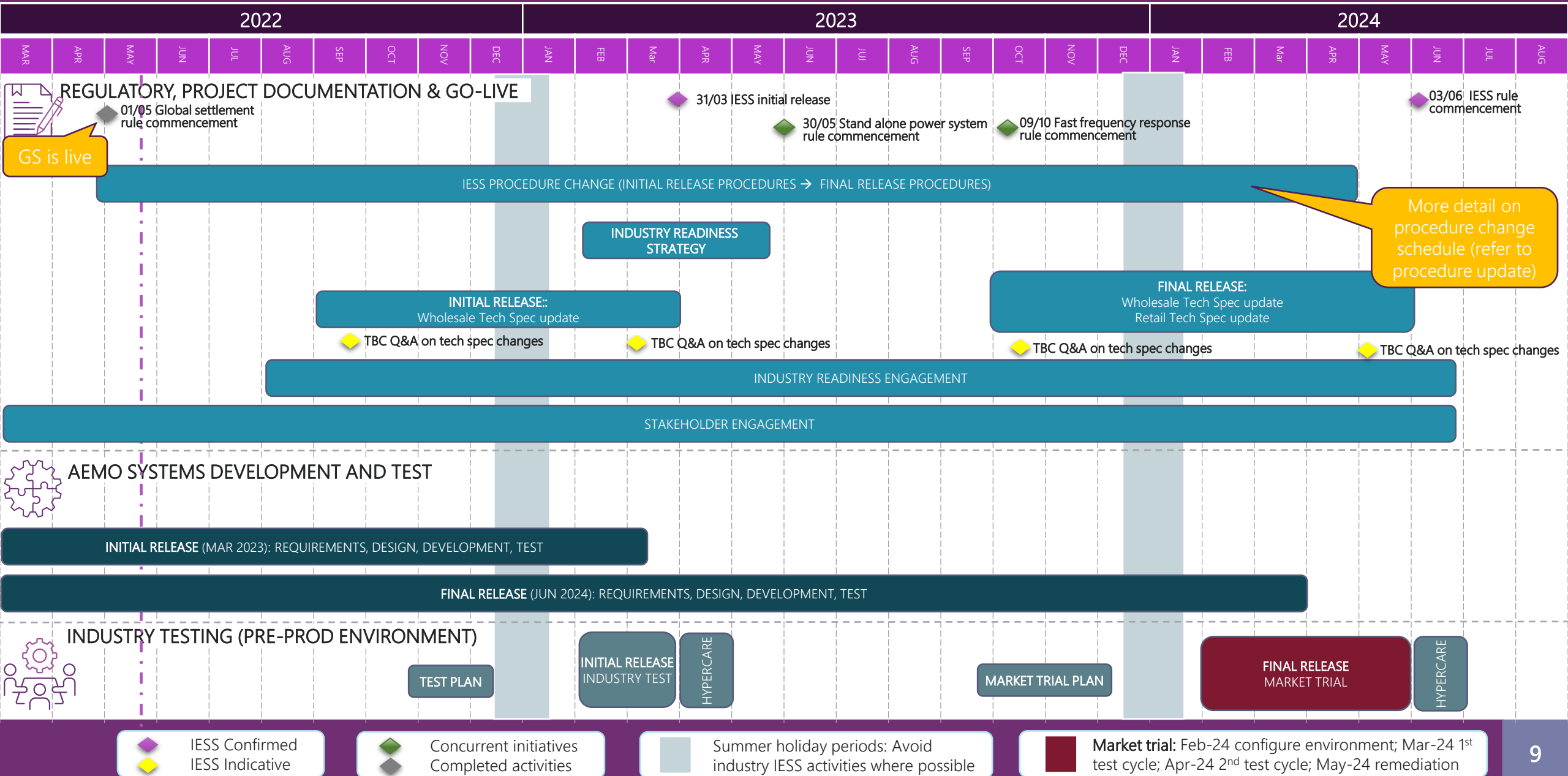
2. Notes, actions and feedback from previous WG meeting

Notes, actions and feedback from previous WG meeting

Item #	Action	Responsibility	Status
1.1	Review the draft Terms of Reference Document and provide any feedback.	Working Group members	No feedback. AEMO will finalise WG Terms of Reference and publish.
1.2	Notify AEMO of any schedule concerns and any early comments on heatmaps.		No feedback at this time. AEMO is happy to take feedback on IESS project scheduling at any stage.
1.3	Provide feedback on proposed procedure change approach, including scope and grouping.		
1.4	Notify AEMO of any interest in pre-consultation on the Power System Dispatch procedure.		
1.5	Complete IESS Working Group survey.		2 responses received with thanks. Along with one-to-one conversations and these WG meetings, AEMO will run a quick survey each quarter to check where IESS engagement is going well and where it can be improved. Next survey will be in July.
1.6	Provide feedback on proposed stakeholder engagement approach.		No feedback at this time. Please provide feedback at any time should there be ways in which we can better support your IESS implementation.

3. Project update

IESS – Indicative Industry Timeline

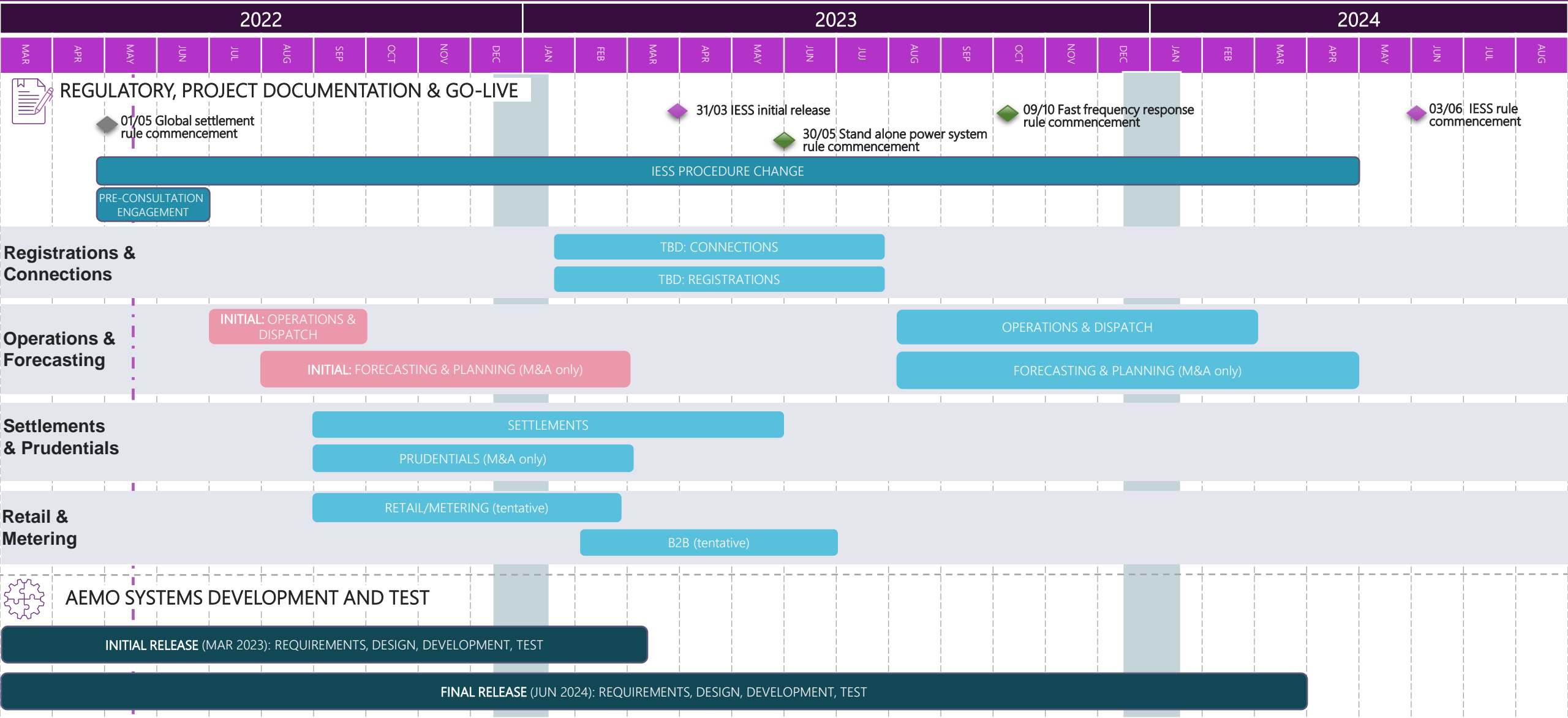


4. Procedures update

Grouping and scheduling procedure changes

- For efficient procedure change grouping and scheduling, need to consider:
 - Initial or final IESS go-live (Mar-23 or Jun-24)
 - System development dependencies (both AEMO and industry)
 - IESS NER requirement
 - Concurrent consultations
 - e.g. *Market Ancillary Services Specification* needs updating for both IESS and Fast Frequency Response in similar timeframes
 - Market operations dependencies e.g. reallocations
 - Procedure development work
 - e.g. B2B updates may have dependencies on B2M updates
 - Special NER consultation obligations
 - Metrology procedures
 - B2B procedures via Information Exchange Committee
 - Emerging NEM2025 initiatives and rule changes

IESS – *INDICATIVE* IESS procedure change timeline



- IESS Confirmed
- IESS Indicative
- Concurrent initiatives
- Completed activities
- Initial release
- Final release
- M&A only = areas that only have minor & administrative changes to procedures
- Summer holiday periods: Avoid industry IESS activities where possible

Retail & Metering procedures

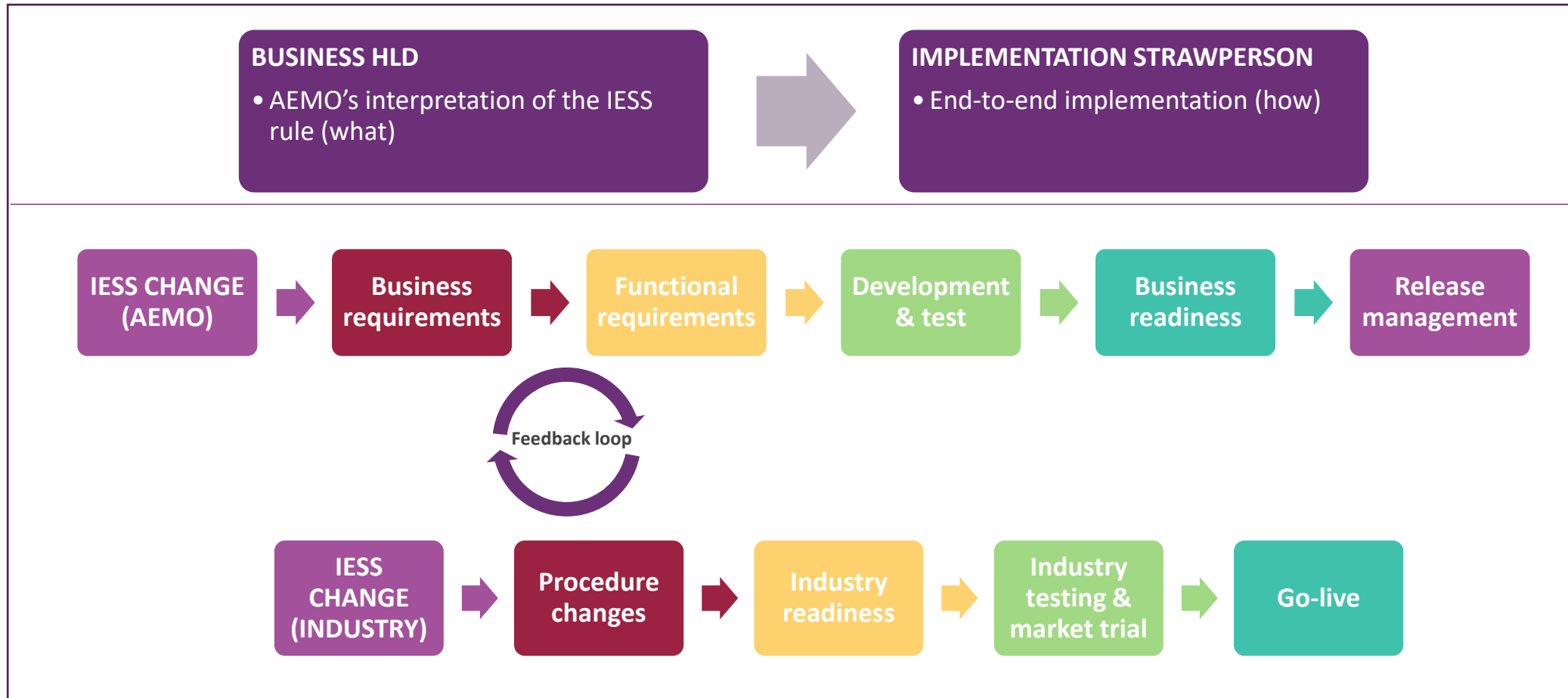
- A range of considerations for industry & AEMO may influence consultation timeframes for Retail & Metering procedures:
 - IT & system change considerations (AEMO and participants)
 - Concurrent rule change projects & potential need to consolidate
 - Whether new NMI Classification Code(s) are required & associated industry implementation timeframes (current assumption of ~12 months)
 - Avoiding consulting over the summer period (Dec & Jan)
- AEMO will seek feedback from the Electricity Retail Consultative Forum (ERCF) on timeframes

Dispatch procedure

- Consultation on changes to the Dispatch procedure SO_OP_3705 is not a requirement of the Rules.
- Early in our development of the procedure we have identified the following key issues:
 - Aggregate conformance for Gentailers, developers/operators of renewables + batteries
 - Energy Management companies that supply bidding and controls software
 - Impacts for Large Consumers
 - Nameplate ratings for registration requirements (how will DC components be aggregated and assessed)
- Consultation approach
 - To be discussed at meeting

5. HLD/implementation strawperson update

Implementation approach



Implementation strawperson update

OUTSTANDING ISSUES UNDER CONSIDERATION

Aggregate dispatch conformance

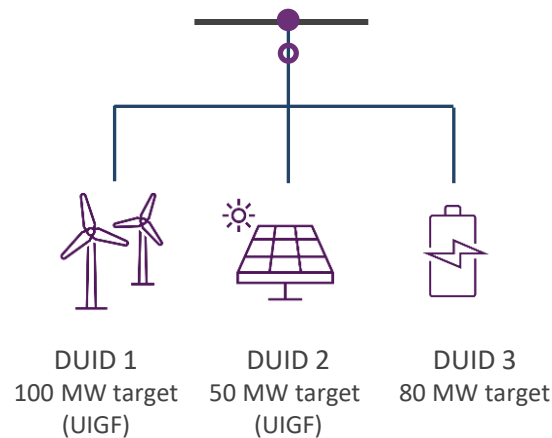
- IESS rule (as written) excludes mono-directional hybrids e.g. wind + solar system
- Management of FCAS enablement and aggregate conformance
- An industry engagement strategy has been developed for this issue:
 - One-to-one technical discussions
 - Consultation on the IESS updates to the Dispatch procedure SO_OP_3705

Settlements

- Identifying transmission and distribution connected facilities
- NMI classification requirement being considered (as discussed in Procedures section)
- Allocation of UFE within embedded networks
- An industry engagement strategy will be developed

Aggregate conformance

- IESS rule allows integrated resource systems (IRS) to be managed for dispatch in aggregate

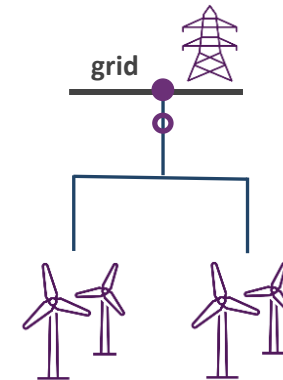
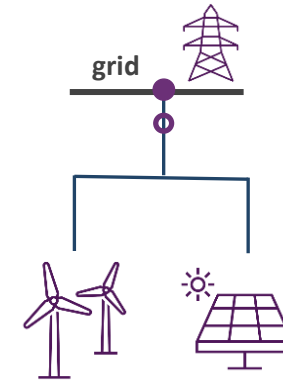


- Individual conformance requires that each DUID meet its individual target (100 MW, 50 MW, 80 MW)
 - Semi scheduled units may exceed or underperform target as dictated by resource availability
- Aggregate conformance requires that the aggregate target, 230 MW in this case, is met.
 - The target is firm and can be delivered from any combination of DUID outcomes.

Aggregate conformance

I ESS rule as written does not allow:

- Non-IRS hybrids to take part in aggregate dispatch conformance
- Multiple DUID mono-technology, mono-directional systems to take part in aggregate dispatch conformance
- Excludes network constrained DUIDs from aggregate conformance but does not consider FCAS management in aggregate
- AEMO is conducting one-on-one technical discussions on these matters with some participants. This early engagement will help inform I ESS updates to and engagement approach for the Dispatch procedure



Timeline update

TIMING	ACTIVITY
Wed 29 June	Discuss draft strawperson at IESS working group
Late June/early July	AEMO to publish draft strawperson
Mid/late July	Industry feedback on draft strawperson due
Late July/early August	AEMO to publish final strawperson late July/early August

6. Potential IESS implementation amendments rule change

Context

- IESS ‘Wash-up’ rule change likely needed to:
 - Clarify aspects of the IESS arrangements
 - Avoid unintended consequences
- A wash-up rule change:
 - Is not intended to revisit the policy decisions made by the AEMC in the IESS rule determination
 - Would likely be non-controversial
- A similar approach was taken for 5MS
 - See [5MS implementation amendments rule change](#)

Proposed approach

- AEMO and industry to log emerging IESS issues that may require an implementation amendments rule change. For example:
 - Clarifying whether “mono-directional” hybrid plant should have the option of aggregated dispatch conformance
 - To address any ambiguities, errors or omissions that are identified (e.g. via internal discussions or engagement via the IESS WG)
- IESS WG to discuss need, scope and timing of rule change at June and/or July meeting
- AEMO to have early discussions on need, scope and timing with AEMC (and AER if appropriate)
- If ‘wash-up’ rule change process goes ahead, AEMO and IESS WG to collaboratively address any timeline impacts to procedure changes, system development and other dependencies (if any)
- AEMO to include potential rule change on IESS industry risk register (to be discussed in June meeting)

Seeking feedback

- What are your views on the proposed approach to considering an IESS implementation amendments rule change?
- Please advise us of any potential implementation amendments on an ongoing basis.

7. Forward plan

Forward plan – IESS Stakeholder engagement

	MAY 2022	JUNE 2022	JULY 2022	BEYOND
Monthly meeting	<ul style="list-style-type: none"> ✓ <u>Mthly meeting (today)</u> • High-level discussion on IESS strawperson • Discussion on potential IESS implementation amendments rule change 	<ul style="list-style-type: none"> <u>Mthly meeting</u> • Draft implementation strawperson discussion • High level introduction to IESS industry readiness • Introduction to and discussion on IESS industry risks and issues register 	<ul style="list-style-type: none"> <u>Mthly meeting</u> • Power System Dispatch procedure • Discussion of potential need, scope and timing or rule change 	<ul style="list-style-type: none"> <u>Mthly meetings</u> • Discussion on approach to updating Technical Specifications • Ongoing procedure consultations
Other IESS engagement	<ul style="list-style-type: none"> • ✓ Publish feedback & responses on initial HLD • ✓ Stakeholder survey on impacts and requirements • ✓ Stakeholder feedback on project, procedure change approach and engagement approach • Early engagement regarding non-rules consultation on Power System Dispatch procedure (aggregated dispatch conformance etc) 	<ul style="list-style-type: none"> • Continued early engagement on non-rules consultation on Power System Dispatch procedure 	<ul style="list-style-type: none"> • HLD update published (late June/early July) • Draft strawperson published (late June/early July) • Industry feedback on draft strawperson due (mid-late July) 	<ul style="list-style-type: none"> • Publish final strawperson (late July/early August)

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

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

8. General questions and close

I ESS project contact



iess@aemo.com.au



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



For more information visit

aemo.com.au

Appendix A: Forum expectations and competition law



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.

AEMO Forum and Meeting Expectations

This charter explains expectations regarding participation and behaviour in the Australian Energy Market Operator (AEMO)'s stakeholder forums.

Meeting Expectations

All participants will:

- Respect the diversity of the group.
- Speak one at a time – refrain from interrupting others.
- Share the oxygen – ensure that all attendees who wish to have an opportunity to speak are afforded a chance to do so.
- Maintain a respectful stance towards all participants.
- Listen to others' points of view and try to understand others' interests.
- Share information openly, promptly, and respectfully.
- If requested to do so, hold questions to the end of each presentation.
- Remain flexible and open-minded, and actively listen and participate in meetings.
- Abide by COVID-Safe workplace guidelines, if attending a meeting on AEMO's premises.

Roles and Responsibilities

Forum stakeholders agree to:

- Be specific and fact-based in their feedback on a specific workstream or emerging issue;
- Review and provide feedback on papers and reports;
- Relay information to their colleagues or constituents after each meeting and gather information/feedback from their colleagues or constituents, as practicable, before each meeting;
- Maintain a focus on solutions or outcomes that benefit all energy consumers.

AEMO agrees to:

- Provide technical expertise in a manner that is considerate of the audience and their level of expertise;
- Assist participants in understanding issues enough to represent their views;
- Provide all participants the opportunity to voice their views.

Appendix B: Procedures requiring changes

May 2022



Initial release – March 2023

TOPIC	PROCEDURE	METHOD
Connections & Registration	Generator application form and generator application guide	Completed
	Australian Wind Energy Forecasting System	Minor and Administrative
Forecasting & planning	AWEFS Energy Conversion Model	Minor and Administrative
	ASEFS Energy Conversion Model	Minor and Administrative
	Guide to Data Requirements for AWEFS and ASEFS	Minor and Administrative
	NEM Operational Forecasting and Dispatch Handbook for wind and solar generators	Minor and Administrative
Operations & dispatch	Dispatch procedure SO_OP_3705	Consultation paper
	Regulation FCAS Contribution Factors Procedure	TBD

Go-live June 2024: Standard procedure consultations (1/2)

TOPIC	PROCEDURE
Connections & Registration	Classifying a DC-coupled System as a Semi-Scheduled Unit – Either a new procedure or included in the Generator Exemption & Classification Guide
	System Strength Impact Assessment Guidelines V1.0
	Power System Design and Setting Data Sheets V1.1
Operations & Dispatch	Guide to FTP Energy, FCAS, and MNSP Bids and Offers (Information/Approach paper)
	Power System Model Guidelines V1.0
	Forward Looking Loss Factor Calculation Methodology (TBD)
	Regulation FCAS Contribution Factors Procedure (TBD)

Go-live June 2024: Standard procedure consultations (2/2)

TOPIC	PROCEDURE
Settlements & Prudentials	NEM Settlements Estimation Policy
	Carbon Dioxide Equivalent Intensity Index Procedures
Retail/Metering and B2B	Retail Electricity Market Glossary and Framework
	MSATS Procedure: CATS
	MSATS Procedure: WIGS
	Standing Data for MSATS

Go-live (June 2024)

Minor/administrative consultations (1/4)

FORECASTING & PLANNING	
Semi-Scheduled Generation Dispatch Self-Forecast – Assessment Procedure	Electricity demand forecasting methodology information paper
Guide to Intermittent Generation	DSP forecasting methodology
Participant Forecasting FAQ	Energy Adequacy Assessment Projection guidelines
Semi-Scheduled Generator Self-Forecast - Application Form	Reliability forecast guidelines
Semi-Scheduled Generation Dispatch Self-Forecast – Assessment Procedure	Reliability standard implementation guidelines
Connection point forecasting methodology	Generation information guidelines
MT PASA process description	Demand Side Participation Information Guidelines
ESOO & Reliability forecasting methodology	Load Forecasting (SO_OP_3710)

Go-live (June 2024)

Minor/administrative consultations (2/4)

OPERATIONS & DISPATCH

Constraint Formulation Guidelines

Market Ancillary Service Specifications

Market Suspension Compensation Methodology

Spot Market Operations Timetable

Intervention Pricing Methodology

SO_OP_3707 Procedures for issue of directions and clause 4.8.9 instructions (Intervention, Direction and Clause 4.8.9 Instructions)

Power System Data Communication Standard V2.0

Go-live (June 2024)

Minor/administrative consultations (3/4)

SETTLEMENTS & PRUDENTIALS

Credit Limit Procedures

Settlements guide to ancillary service payments and recovery

NEM Direction Compensation Recovery

RRO PoLR Cost Procedures

WDR Baseline Eligibility Compliance and Metrics Policy

Go-live (June 2024)

Minor/administrative consultations (4/4)

RETAIL/METERING & B2B	
Metrology Part A National Electricity Market	Guide to Participant Batcher Software
Metrology Part B Metering Data Validation, Substitution and Estimation Procedure for Metering Types 1–7	Guide to User Rights Management
CATS History Model	Guide to MSATS B2B
Technical Guide to Bulk Data Tool	Validation Module
Guide to MSATS and B2B Terms	MSATS Procedure: MDM
Guide to Enterprise Metering Data Management	NEM RoLR Processes - Part A (MSATS)
Introduction to MSATS	MSATS CATS Hints and Tips and NMI Discovery
Technical Guide to MSATS	NMI Procedure
Guide to MSATS Reports	Service Level Procedure: Metering Provider (MP) Services
Guide to MSATS Web Portal	Service Level Procedures: Embedded Network Manager Services
MSATS Ombudsman Enquiry User Interface Guide	Service Level Procedure: Metering Data Provider (MDP) Services
	NMI Standing Data Schedule