

# IESS BDU Readiness Focus Group

Including session notes

Integrating Energy Storage Systems

23 November 2023



# Attendees

Name	Organisation	Name	Organisation
Carlo Polisenno	AGL	Carla Ziser	AEMO
Bree Sandley	Akaysha Energy	Carmel La Spina	AEMO
Nathan Everitt	Akaysha Energy	Darren Gatty	AEMO
Shane Kerr	Amplitude Power	Demi Chau	AEMO
Gerard Dunne	CS Energy	Duncan Swijnenburg	AEMO
Christine Volp	CS Energy	Emily Brodie	AEMO
Gagan Sharma	Energy Australia	Glenn Wrest	AEMO
Ranjan Thakur	Energy Australia	Jesse Goh	AEMO
Annette Domanti	Energy Australia	Karen Clarke	AEMO
Chris Payne	Energy Australia	Lenard Bayne	AEMO
Joseph Giddings	EnergyOne	May Cotoner	AEMO
Michael Woodruff	Fluence	Paul Lyttle	AEMO
Lewis Wand	Iberdrola	Tom McMahon	AEMO
Bruce Miller	Shell Energy	Trent Smith	AEMO
Trent Morrow	Vena Energy	Ulrika Lindholm	AEMO
Alice Michener	Australian Energy Market Operator (AEMO)	Vinodini Dissanayake	AEMO
Basilisa Choi	AEMO		



# 1. Welcome

Ulrika Lindholm



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.**

# Introductions

## Objectives

- This Focus Group aims to promote detailed discussion around how AEMO, battery operators and bidding vendors collaborate on industry readiness. The initial focus is on the development of the BDU Transition plan and detailed cutover plans.
- This session intends to discuss draft elements of the transition and cutover plan, ahead of individual stakeholder conversations and in preparation for release of draft plan to industry by 15 December.

## Ways of collaborating

- Questions and comments are welcome, either in the chat or by raising your virtual hand. AEMO will answer questions throughout the presentation, as well as a at dedicated Q&A time at the end.
- Please introduce yourself (name & organisation) in any interactions.
- Before attending, participants should peruse the appropriate meeting protocol. Please visit: <https://aemo.com.au/en/consultations/industry-forums-and-working-groups>

# 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.

Please visit: <https://aemo.com.au/en/consultations/industry-forums-and-working-groups>

# AGENDA

#	Timing (AEDT)	Topic	Objective	Presenter(s)
1	1:00 – 1:05 PM	<b>Welcome</b>		Ulrika Lindholm
2	1:05 – 1:10 PM	<b>Actions from previous meeting</b>		Ulrika Lindholm
3	1:10 – 1:15 PM	<b>IESS June 2024 timeline</b>		Ulrika Lindholm
4	1:15 – 2:00 PM	<b>BDU cutover and transition planning update</b> <ul style="list-style-type: none"> <li>• Planning process update</li> <li>• Transition risk management</li> <li>• Cutover timing – survey outcome</li> <li>• AEMO Vendor and participant engagement</li> </ul>		Ulrika Lindholm Carla Ziser
5	2:00 – 2:15 PM	<b>Upcoming participant readiness activities</b> <ul style="list-style-type: none"> <li>• Pre-requisite activity for cutover</li> <li>• Indicative scope for market trial</li> <li>• Participant Development Support Environment</li> </ul>		Alice Michener Trent Smith Carla Ziser
6	2:15 – 2:20 PM	<b>Consultations and working groups</b> <ul style="list-style-type: none"> <li>• Dispatch procedure consultation</li> <li>• Industry Testing working group</li> </ul>		Duncan Swijnenburg
7	2:20 – 2:30 PM	<b>Q&amp;A</b>		Ulrika Lindholm
8	2:30 PM	<b>Next steps &amp; close</b>		Ulrika Lindholm

## APPENDICES

A	IESS Glossary
B	BDU Readiness Focus Group participation and administration
C	NEM Reform Program engagement calendar
D	Indicative Bidirectional Unit Cutover Timeline

# 2. Actions from previous meeting

Ulrika Lindholm

A decorative graphic in the bottom right corner consisting of several overlapping purple blocks of various shades and sizes, arranged in a stepped, ascending pattern.



# Actions from Previous Meeting

(Item = Meeting # – Agenda # – Reference)

#	Topic	Action	Responsible	Status
1.4.0.1	Planning for the BDU Transition	AEMO to follow up with SA Water regarding their registration feedback.	AEMO	Closed
1.4.0.2	Planning for the BDU Transition	Participants to provide their feedback to the Transition Survey by Thursday 26 October.	Participants	Closed
1.4.0.3	Planning for the BDU Transition	AEMO to provide participants a list of survey questions.	AEMO	Closed
1.5.0.1	Cutover process (from dual to single DUID)	Participants to provide their views on the BDU cutover process. What issues, omissions or errors do they see in the process? How should these be addressed? Comments to be directed to <a href="mailto:iess@aemo.com.au">iess@aemo.com.au</a> by Thursday 26 Oct 2023	Participants	Closed  (In-session feedback considered in Draft BDU Transition and Cutover Plan)
1.5.0.2	Cutover process (from dual to single DUID)	AEMO to clarify transition arrangements in the case of non-compliance.	AEMO	Closed
1.8.0.1	Next steps & Close	AEMO to confirm next focus group meeting and issue calendar invite.	AEMO	Closed

# Notes

- No feedback was received from participants on the actions from previous meeting.

# 3. IESS June 2024 timeline



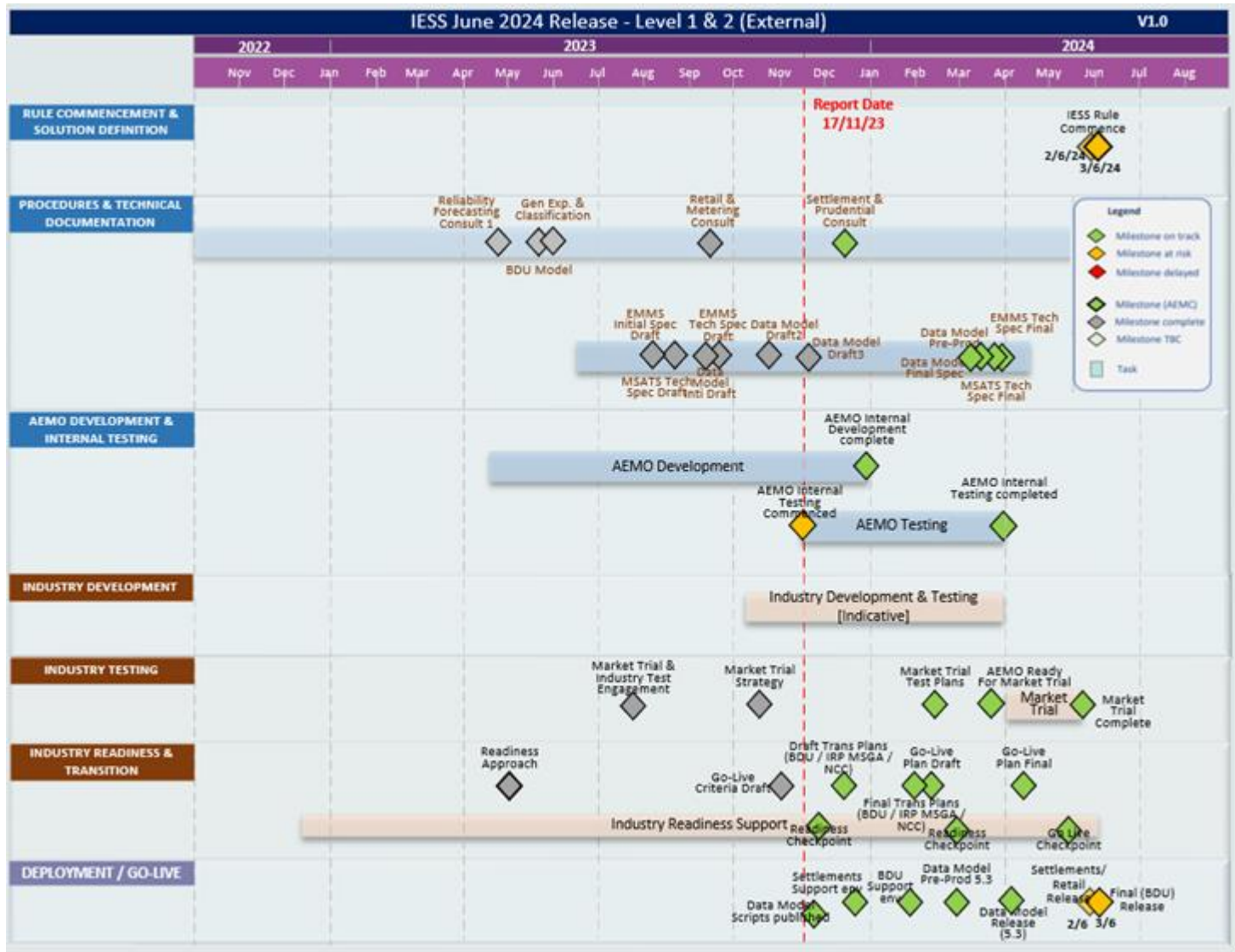
Carla Ziser



# IESS timeline update



Participants can access the latest status on this timeline via the [NEM Reform Program Consultative Forum](#) and [Implementation Forum](#)



## RELEASE

- Overall project status **AMBER** owing to overlapping and compressed development and test phases and overall delivery.
- Project schedule is now baselined to meet the June 2024 IECS rule commencement dates.
- [Procedures consultation](#) in progress via EWCF/ ERCF\* and on track.
- Updated [EMMS tech spec Data Model v5.3](#) published Mon 20 Nov
- PDSE fact sheet and access survey published Tue 14 Nov
- DRAFT BDU transition and cutover plan to be published by 15 December 2023, feedback due 19 January 2024. Final to be published 31 January 2024.

\*Electricity wholesale / retail consultative forums

# Notes

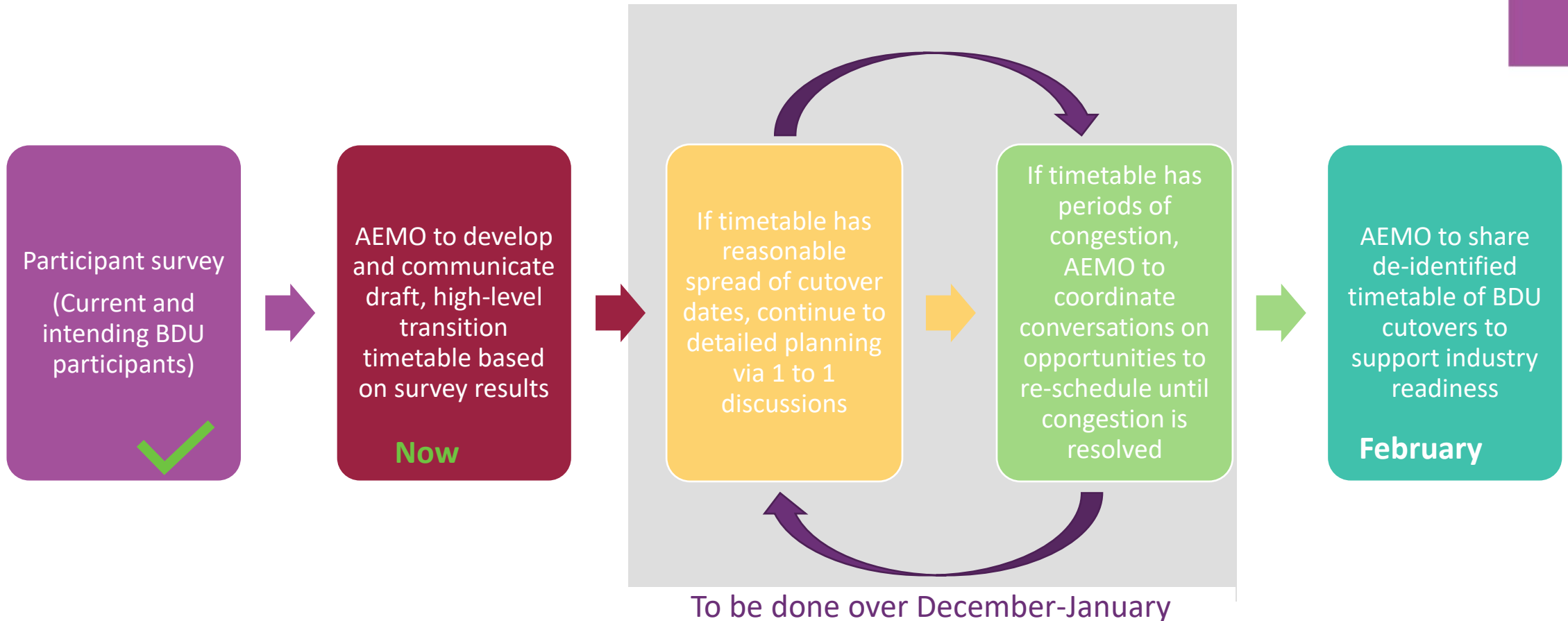
- AEMO advised that the project is progressing to schedule and presented a timeline update.

# 4. BDU cutover and transition planning update

Ulrika Lindholm  
Carla Ziser



# BDU transition plan update



Draft BDU Transition and Cutover plan on track for release by 15 December latest (earlier if possible). Feedback will be due by 19 January 2024.

# Transition risk management

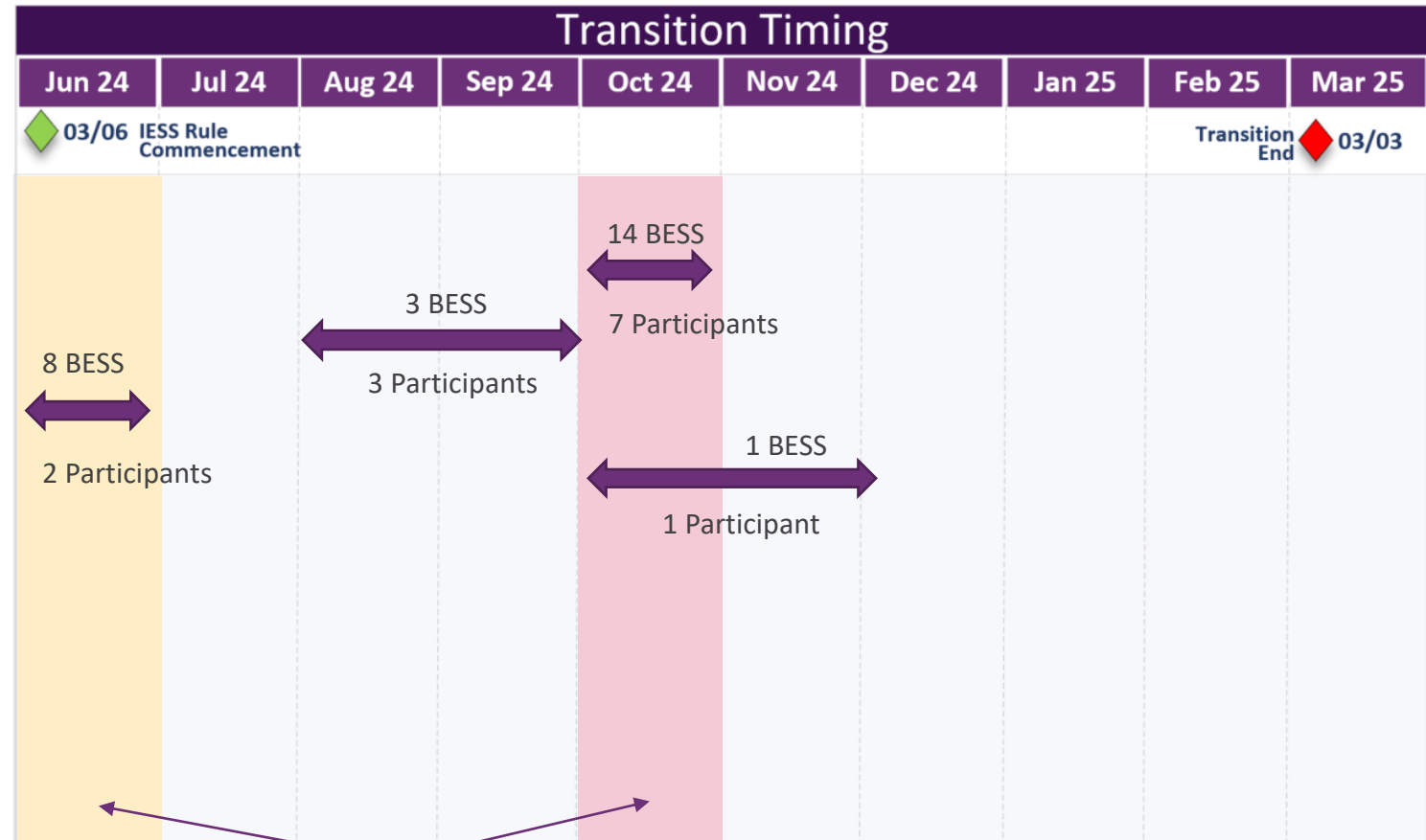
Guidelines around capacity have been developed that ensure AEMO has the capacity to manage cutover activities, and to manage risks associated with cutover execution.

RISK AREA	RISK DESCRIPTION	MITIGATION
<b>Impact on NEM Operations</b>	BDU Cutover activities either directly impact NEM operations, or distract AEMO operational staff from attending to real-time operational issues.	Design cutover activities to make use of existing market scheduling process to reduce cutover risks before arrival at cutover dispatch period (e.g. risk of overlap in 2-DUID and 1-DUID dispatch). Include contingency plan in AEMO’s BDU Transition and Cutover Plan, should NEM Operational matters require a short-notice deferral. Consider the aggregate BESS capacity when determining which BESS are scheduled to cut over within the same day or week, to mitigate risk of scheduling issues.
<b>Operational capacity</b>	Volume of cutover activities exceeds AEMO/vendors/participants’ capacity to manage them.	A spread of dates to capture all 2 DUID to 1 BDU transitions will mitigate the risk of impact to the NEM. AEMO intends to schedule no more than 3/4 cutovers in a given week, and where possible to limit the number of participants involved in cutover activities a given week to 1.
<b>Preparedness</b>	AEMO/Participant/vendor inadequately prepared to execute cutover activities.	Planning cutover date in advance between all parties will be key to arriving at an overall schedule that caters for all transitions.
<b>Staff/Resource availability</b>	Lack of availability of resources prevents/reduces ability to carry out pre and post cutover activities.	Mid-week business days: Tuesdays, Wednesdays and Thursdays are preferred transition days. This allows for pre & post cutover activities to be done during business hours. Reduced cutover volumes will be scheduled on weeks with public holidays. Avoidance of typical December/January office shutdown periods. Actual cutover time tentatively set at 1300hrs market time (AEST).
<b>Cutover delays</b>	Planned cutovers are delayed due to unforeseen circumstances.	Cutover dates to be scheduled prior to February 2025. 1 <sup>st</sup> February to 3 <sup>rd</sup> March 2025 to be set aside for contingency transitions.



# Participant & vendor preferred transition timing

- AEMO thanks participants for strong survey response, and vendors for information provided regards to their dependencies and timing preferences
- AEMO aims to refine the transition schedule over December 2023 and January 2024
- AEMO is aware of new BESS that will also commission throughout this period

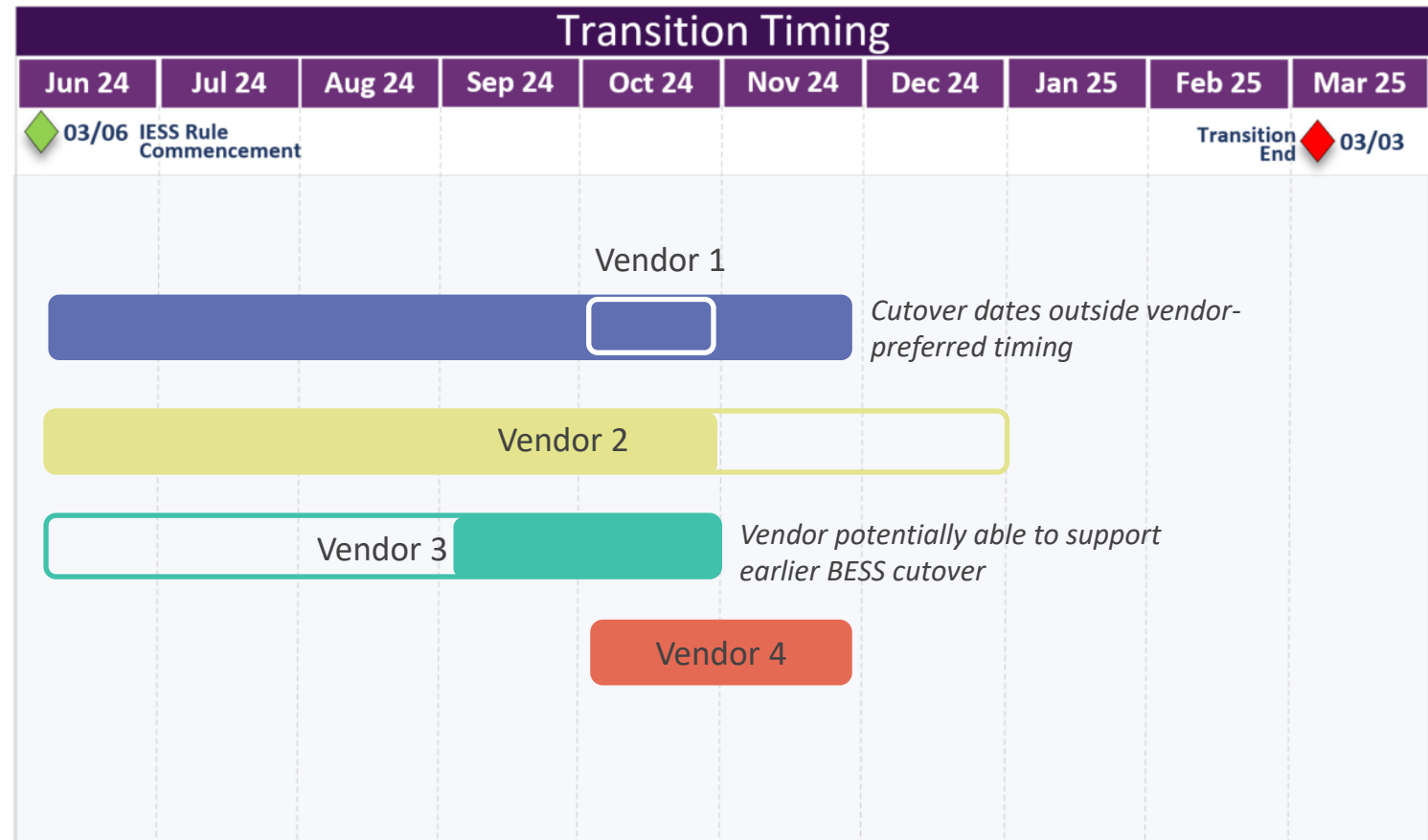


Periods of likely congestion- refer next slide

# Vendor-based view of cutover timing

- Clear preference to complete transition before end November 2024
- Some overlap in vendor capability to support transition is needed for BESS with more than one vendor
- Some mismatch between participant-provided dates and vendor availability

AEMO's current understanding of vendor support for transition



Legend:

Vendor availability to support cutover

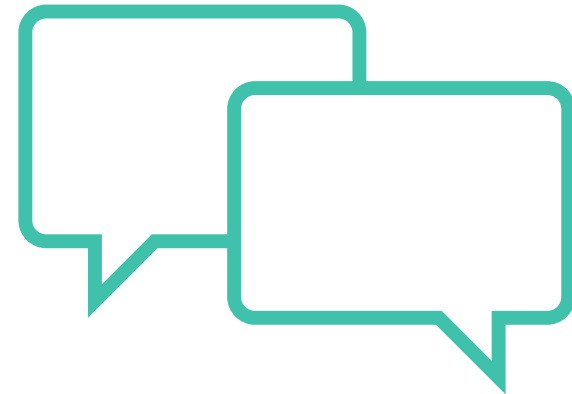
Participant-indicated cutover timing

# Survey observations

There is a need for AEMO to coordinate discussions with vendors and participants in the coming weeks to address the identified periods of congestion.

AEMO's near-term engagement priorities include:

- Completing our understanding of vendor preferences
- Communicate individually with participants where there is a discrepancy between survey timing and vendor-preferred timing
- Engage with participants where > 1 participant is proposing to cutover on the same day or within the same week during either June or October.



# Proposed vendor and participant engagement

## Objectives

- Develop cutover timetable in most efficient means possible, including resolving any points of congestion
- Consider BESS participants general preference for AEMO to coordinate with software vendors where possible
- Ensure final responsibility/ accountability for cutover preparedness rests with Participant (and AEMO)
- Confirm cutover date for all BESS

	AEMO	Participant	Vendor
1 Confirm AEMO-Vendor coordination (refer below)	X	X	
2 Complete understanding of vendor preferences	X		X
3 Resolve timing mismatches with participant/vendor	X	X	X
4 Develop alternative cutover dates to resolve congestion	X		X
5 Confirm suitability of cutover dates	X	X	X

- 1 AEMO seeking permission from participants to:
  - AEMO sharing relevant participant survey results as necessary with their vendor/s for the purpose of Item 4.
  - Where appropriate AEMO and vendors developing **draft** alternative cutover dates based on their understanding of participant preferences

**By Wednesday 29<sup>th</sup> November**

# Notes

- AEMO provided an update on BDU transition plan and outlined the focus for the next two months.
- The draft BDU transition and cutover plan is expected to be released on 15 December with feedback due by 19 January 2024.
- AEMO presented a transition risk management approach for the cutover execution period.
- AEMO thanked members for their feedback to the recent survey and noted that AEMO will refine the transition schedule over December and January period. Further information on participant and vendor preferred transition timing was discussed.
- AEMO presented a vendor-based view of the cutover timing and advised that some overlap regarding vendor capability to support transition was required.
- AEMO presented a proposed vendor and participant engagement plan and outlined the intention to see focus group participants permission to speak with vendors directly regarding the cut over period. AEMO will aim to conduct this by 29th of November.

# Notes

Raised by	Question/Issue Raised	Response
<b>Carlo Poliseno, AGL</b>	Does the bid cut off at 12:30 make the transition process simpler or more complex?	AEMO notes participant feedback received in-session on this, and will take this into account in finalising the BDU Cutover time. Participants are encouraged to provide AEMO with any further feedback in relation to the cutover time.
<b>Ranjan Thakur, EnergyAustralia</b>	Should a risk around last-minute change to participants BDU cutover (i.e. beyond their control).	The DRAFT BDU Transition & Cutover plan considers the possibility of a “no go” decision or a “rollback”.
	The approach doesn't take in consideration internal factors, not necessarily a vendor.	AEMO will be engaging with participants to understand these factors as well as vendor-driven timing.



# 5. Upcoming participant readiness activities

Alice Michener

Carla Ziser

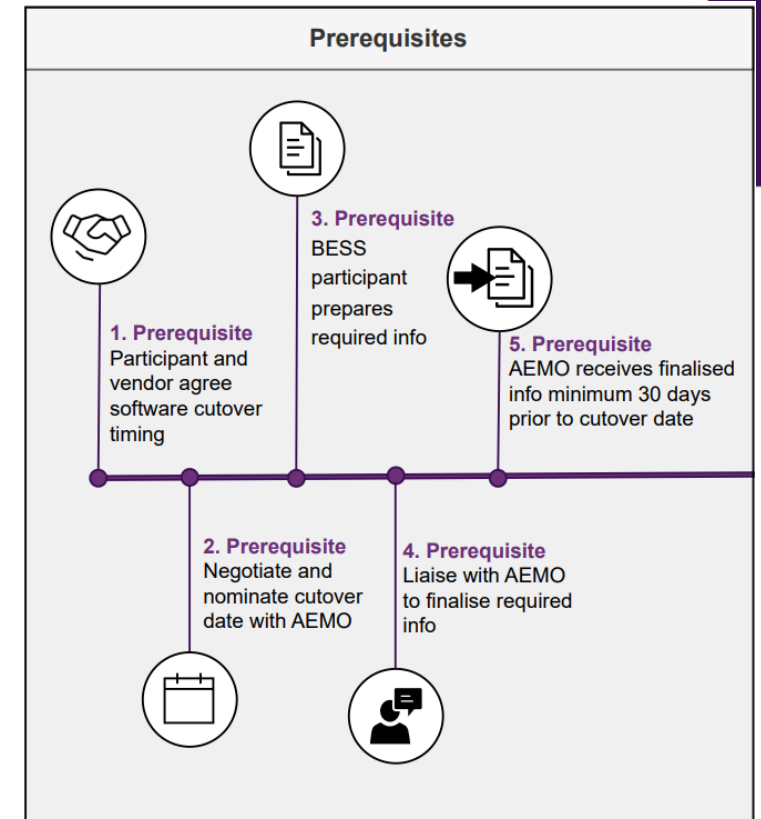
Trent Smith



# Prerequisites for IRP & BDU cutover

Prior to BDU cutover activities commencing, Participants will need to submit finalised Registration information to establish the BDU in production, as early as 8 March 2023 if participating in Market Trial.

ACTIVITY	DESCRIPTION	TIMING
AEMO makes available required form/application	AEMO provide required BDU (and IRP transition*) paperwork to participant	Early 2024
Establish preferred BDU cutover date	Participant agrees tentative software cutover timing with vendor	December/January 2024
Nominate BDU cutover date	Participant and AEMO negotiate and nominate a production cutover date for each BDU.	For Market Trial, by February 2024.
Return paperwork to AEMO	Participant completes required paperwork for BDU establishment (and IRP transition if required) and returns to AEMO. Includes agreed BDU cutover date.	<ul style="list-style-type: none"> <li>➤ <b>For Market Trial:</b> 8th March 2024</li> <li>➤ <b>If not participating in Market Trial:</b> at least 30 days prior to preferred cutover week</li> </ul>
Transition to IRP before BDU cutover	Participant transitions to IRP category.	To take effect before the BDU cutover date, any by the deadlines set out in the IESS Rule.
Engage MDP	Participants engage with their MDPs regarding upcoming cutover**	As early as possible, once cutover date agreed with AEMO, vendor and participant.



\* Further details on IRP transition will be released in the IRP Transition Plan before end of 2023.

\*\* AEMO will share information with all MDPs regarding NMI consolidation in early 2024.

Source: IESS Indicative Bidirectional Unit Cutover Timeline diagram, see Appendix D

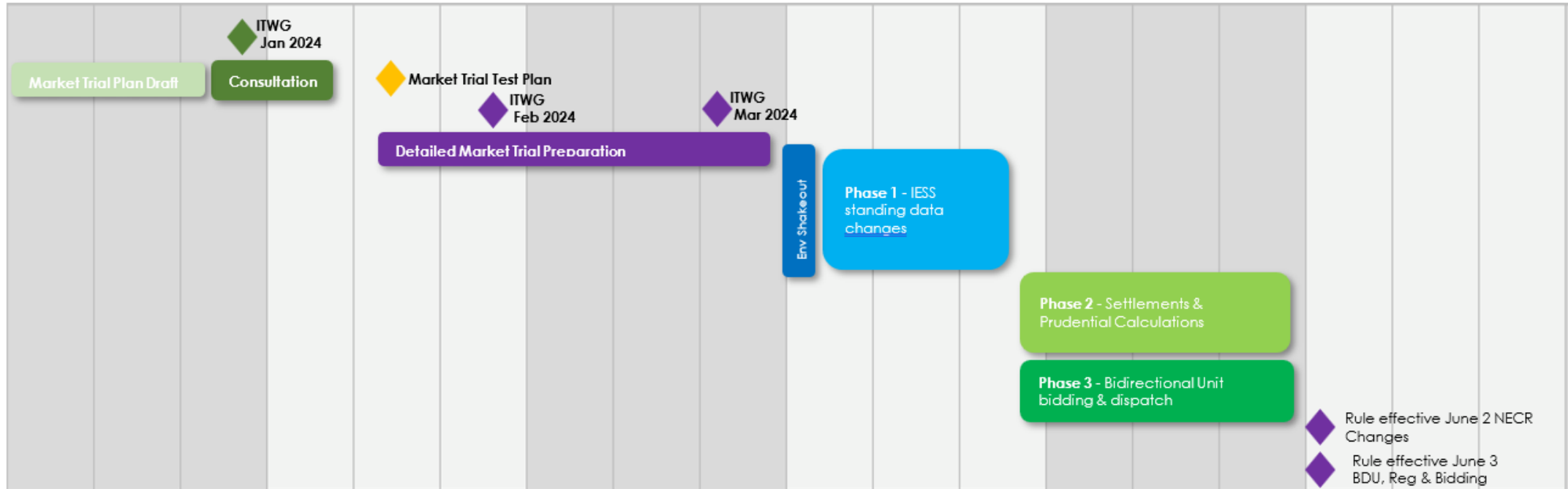


# Market trial

## Overview of IESS industry testing and market trials timeline

2023	2024	2024	2024	2024	2024
JAN	FEB	MAR	APR	MAY	JUN

### IESS Market Trial Planning & Implementation



AEMO encourages Participants interested in Market Trial to attend the ITWG  
 IESS industry testing and market trial strategy can be found [here](#)

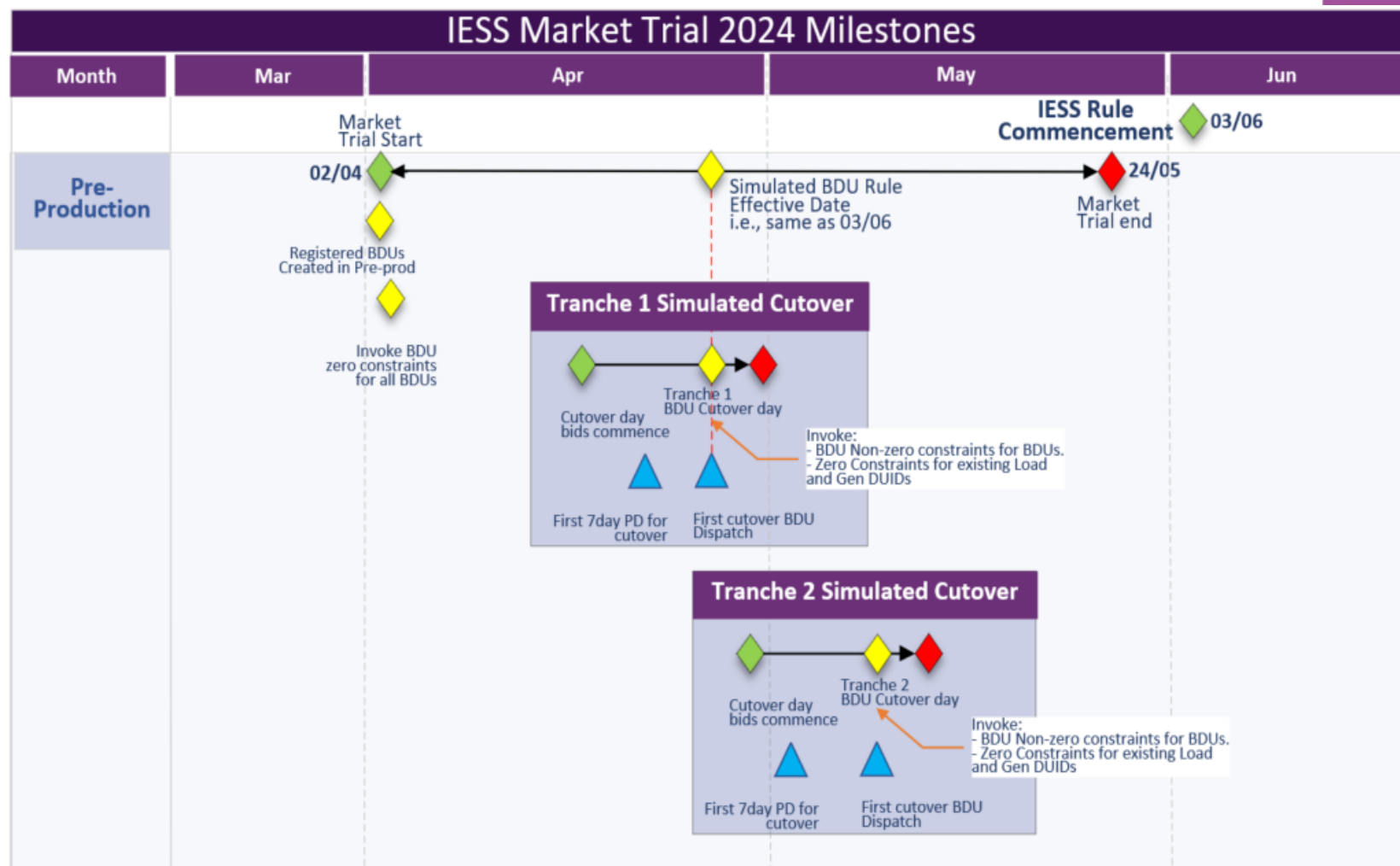
# BDU activities in IESS market trial

**Table 7 Market Trial Phase 3: Bidirectional unit bidding and dispatch**

03 June 2024: BDU bidding & dispatch	
<b>Affected participants</b>	<ul style="list-style-type: none"> <li>• Market Generators (Battery - Gen Only)</li> <li>• Market Customer (Battery – Load Only)</li> </ul>
<b>Description</b>	<ul style="list-style-type: none"> <li>• BDUs with 1DUID can bid and be dispatched.</li> <li>• Existing BESS transition from 2DUID to 1 DUID.</li> </ul> <p><b>Note:</b> The proposed test phase will isolate BDU testing from settlement calculations testing which is handled in Test Phases 1 &amp; 2.</p>
<b>Test objective/s</b>	<ul style="list-style-type: none"> <li>• Confirm ability for 1 DUID BDU to bid and be dispatched.               <ul style="list-style-type: none"> <li>– Enable bidding of BDUs (10 Load Bands and 10 Generation Bands) through FTP, API and web interfaces for Energy and Regulation FCAS.</li> <li>– Enable bidding of BDUs (10 bid bands) through FTP, API, and web interfaces for Contingency FCAS.</li> <li>– Validation of Bids.</li> <li>– Confirm participants can bid within new validation rules for IESS June 2024.</li> <li>– Review submitted bids using NEM Reports, <a href="#">API</a> and web interface.</li> <li>– Confirm dispatch instructions.</li> <li>– Test optional bidding of Energy Storage Limits in <a href="#">Predispatch</a> (PD/7DayPD only)</li> </ul> </li> <li>• Confirm existing bidding and dispatch functionality still works for 2 DUID BDU arrangement.</li> <li>• Test transition of 2DUID BDU to 1DUID BDU</li> </ul>
<b>Market Test Type</b>	<ul style="list-style-type: none"> <li>• Invitational industry testing</li> <li>• Self-initiated industry testing</li> </ul>
<b>Timeframe</b>	<ul style="list-style-type: none"> <li>• BDU test phase commences: April 2024</li> <li>• BDU test phase finishes: May 2024</li> </ul>

# Market trial

- AEMO is planning for several existing BESS's participants to engage in Market Trial
- To manage simulated cutover activities, AEMO will likely simulate 2 DUID to 1 DUID cutovers in two separate tranches, as pictured.
- To give each BESS participant sufficient time to view/test single BDU dispatch, both simulated cutovers should be completed by early-mid May.
- Further details to be provided in AEMO's Market Trial Plan, due for publication 16th February, 2024.



# Participant Development Support Environment

- The PDSE aims to support participant interface development ahead of the IESS pre-production release.
- Available 22 Jan 2024 to support participant BDU development, until 3 June 2024.
- [PDSE Fact Sheet](#) was published on 14 November
- AEMO also released a survey inviting participants to express interest in using the PDSE. Survey closes on 24 Nov 2023 (tomorrow!). **Please register interest ASAP if have not done so already:** <https://forms.office.com/r/dKiZHi1Yqz>

## Dummy BDU DUID setup

- AEMO will largely use load and gen DUID registration information to establish the dummy DUID, for existing BESS's.
- For remaining fields and/or new BESS – Participants can state preferred values if desired. If not received by 05 Jan 2024, AEMO will fill with dummy values.
- **NOTE: None of this information will be transferred into AEMO's preproduction or production systems.**

## New fields for BDU DUID

Field	Units	Definition
<b>Max Storage Capacity</b>	MWh	The rated storage capacity.
<b>Min Operational State of Charge</b>	MWh	The minimum operational state of charge (MWh)
<b>Max Operational State of Charge</b>	MWh	The maximum operational state of charge (MWh)
<b>OP SOC Constraint</b>	Yes or No	Apply the Min and Max Operational SOC constraints.
<b>Storage Import Efficiency Factor</b>	0 ... 1	The storage energy import conversion efficiency. Number from >0 to 1 where 1 is lossless. Calculated as (increase in SOC / imported energy)
<b>Storage Export Efficiency Factor</b>	0 ... 1	The storage energy export conversion efficiency. Number from >0 to 1 where 1 is lossless. Calculated as (sent out energy / reduction in SOC)
<b>Unit Max Storage Capacity</b>	MWh	The unit rated storage capacity (where several physical units comprise the DUID).

# Notes

- AEMO advised the prerequisite that participants will need to submit finalised registration information to establish the BDU in production as early as 8 March 2023 if participating in market trial. Activities for the prerequisites for IRP and BDU cutover are outlined in the accompanying slide pack.
- AEMO presented an overview of the IESS industry testing and market trials timeline and activities. AEMO encouraged participants to join the NEM Reform Program Industry Testing Working Group\*.
- AEMO provided further details on the market trial activities and is outlined in the accompanying slide pack. In addition, it was noted that AEMO's market trial plan is expected to be published on 16 February 2024.
- AEMO provided details on Participant Development Support Environment (PDSE) and advised that a FAQ and fact sheet have been published on AEMO's website\*\*. Participants are encouraged to express their interest in using PSE as soon as possible.

\* <https://aemo.com.au/en/consultations/industry-forums-and-working-groups/list-of-industry-forums-and-working-groups/nem2025-industry-testing-working-group>

\*\* <https://aemo.com.au/-/media/files/initiatives/integrating-energy-storage-systems-project/iess-participant-development-support-environment-fact-sheet.pdf?la=en>

# Notes

Raised by	Question/Issue Raised	Response
Carlo Poliseo	If your date is late in 2024, Will there be any issue with having the asset participating in market trials and continuing for six plus months in preproduction?	Not apart from the potential scenario in the following question.
	If there was some other change that needed to be made to that registration for some other reason, such as a physical reason, would that be an issue?	This may be challenging for AEMO to facilitate, and would depend on the specific type of change.
Matt Grover, Fluence	What will the new storage fields mean for dispatch?	Taken on notice. Additional information about purpose of new fields storage for BDU DUID to be shared with focus group.

## ACTIONS:

- AEMO to follow up regarding conformance monitoring process and just make sure that we're clarifying how that might change when we move into the one DUID model.
- AEMO to share additional information about purpose of new fields storage for BDU DUID.

# 6. Consultations and working groups

Duncan Swijnenburg



# Dispatch Procedure Update

## SO\_OP\_3705 - Dispatch Procedure

Procedure updated to include changes required for IESS. In particular, changes to accommodate the new BDU DUID.

The procedure will be available for stakeholder comment.

AEMO is aiming to publish a draft on the Consultation page in December.

# Industry Testing Working Group



Participants with interest in participating in Market Trial should ensure they are represented at the ITWG. Nominations are welcome via email to [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au).

\*\*Note an update to the [EMMS - Technical Specification - Data Model v5.3 - March 2024](#) was released on 20th November 2023.\*\*

For BESS Participants wanting to participate in Market Trial, ITWG activities include:

- Coordination of AEMO controlled outputs such as settlements runs
- Support any industry participant during the industry testing window
- Q&A sessions during industry test execution periods to support participant testing efforts
- Updates on defects both open at time of deployment as well as defects identified during the industry testing period,
- Assistance with data identification.



# Notes

- AEMO advised that an update will be made to SO\_OP\_3705 – Dispatch Procedure, the draft procedure will be published on AEMO’s website for consultation, timing TBC.
- AEMO noted that ITWG is available to support any industry participant during the industry testing period and noted that Q&A sessions during industry test execution periods to support participant testing efforts.

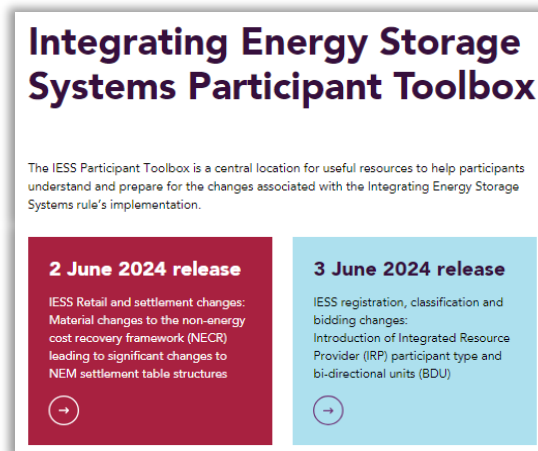
# 7. Q&A

Ulrika Lindholm



# Q&A

Note that FAQs are available through the IESS Participant Toolbox at AEMO's website. These are updated on an ongoing basis.



**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.

<b>2 June 2024 release</b> IESS Retail and settlement changes: Material changes to the non-energy cost recovery framework (NECR) leading to significant changes to NEM settlement table structures	<b>3 June 2024 release</b> IESS registration, classification and bidding changes: Introduction of Integrated Resource Provider (IRP) participant type and bi-directional units (BDU)
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Link: <https://aemo.com.au/initiatives/major-programs/integrating-energy-storage-systems-project/integrating-energy-storage-systems-faqs>

Or contact the project directly at [IESS@aemo.com.au](mailto:IESS@aemo.com.au)

# 8. Next steps & Close

Ulrika Lindholm



# Next steps

## Before holiday period

TIMING	ACTION	RESPONSIBLE
24 November 2023	Expression of interest in using the PDSE (via form <a href="https://forms.office.com/r/dKiZHi1Yqz">https://forms.office.com/r/dKiZHi1Yqz</a> )	Participants
29 November 2023	Endorse AEMO and vendor coordination (via email to <a href="mailto:IESS@aemo.com.au">IESS@aemo.com.au</a> )	Participants
December/January	AEMO, vendors and participants to draft cutover timetable	AEMO and bidding vendors
15 December 2023 (earlier if practicable)	AEMO to publish Draft BDU Transition and Cutover plan	AEMO
December	Optionally provide feedback on updates to SO_OP_3705 Dispatch procedure	Participants

## Early next year

5 January 2024	Optionally provide values for dummy BDU DUID, if participating in PDSE.	Participants
January 2024	AEMO to communicate draft cutover timing to participants	AEMO
19 January 2024	Optionally provide feedback on Draft BDU Transition and Cutover plan due 19 January 2024	Participants and bidding vendors
31 January 2024	AEMO publish final BDU Transition and Cutover plan	AEMO
February 2024	Endorsement of production cutover date for each BDU	Participants
Early 2024	AEMO to provide BDU (and IRP transition) paperwork to participants	AEMO
As early as March 2024 (for Market Trial)	Participant completes required paperwork for BDU establishment (and IRP transition if required) and returns to AEMO	Participants
February/March 2024	Participants engage their Metering Data Provider once cutover timetable finalised	Participants
Anytime	Participants with interest participating in Market Trial may want to nominate to the <a href="#">Industry Testing Working Group</a>	Participants

See you next at: **The first BDU Focus Group in 2024 tentatively Thursday 8 February.**

# Notes

- AEMO outlined the next steps as discussed during the meeting. The next BDU focus group in 2024 has been proposed for Thursday 8 February.
- AEMO advised that an IRP Transition information session is scheduled on 29 November.

# Session close



[iess@aemo.com.au](mailto:iess@aemo.com.au)



[AEMO | IESS Participant toolbox](#)



# APPENDIX A

Glossary





# IESS Glossary

Term	Definition
<b>5MPD</b>	5-minute pre-dispatch
<b>ADC</b>	Aggregated Dispatch Conformance
<b>ADG_ID</b>	Aggregate Dispatch Group identifier for an Aggregate System
<b>AGC</b>	Automatic generation control
<b>ASL</b>	Ancillary service load
<b>ASU</b>	Ancillary service unit
<b>B2B</b>	Business-to-business
<b>B2M</b>	Business-to-market
<b>BDU</b>	Bidirectional unit
<b>BESS</b>	Battery energy storage system
<b>CR</b>	Change request
<b>CRMP</b>	Cost recovery market participant
<b>DRSP</b>	Demand response service provider
<b>DUID</b>	Dispatchable unit identifier
<b>FRMP</b>	Financially responsible market participant
<b>IESS</b>	Integrating Energy Storage Systems rule
<b>IRP</b>	Integrated resource provider

Term	Definition
<b>IRS</b>	Integrated resource system
<b>MSATS</b>	Market settlements and transfer solutions
<b>MSGA</b>	Market small generation aggregator
<b>MT PASA</b>	Medium-term PASA
<b>NCC</b>	NMI classification code
<b>NECR</b>	Non-energy cost recovery
<b>NEM</b>	National electricity market
<b>NEMDE</b>	National electricity market dispatch engine
<b>NMI</b>	National metering identifier
<b>PAE</b>	Profiling and allocation engine
<b>PASA</b>	Projected assessment of system adequacy
<b>PD</b>	Pre-dispatch
<b>PDM</b>	Participant Data Model
<b>PMS</b>	Portfolio management system
<b>SCADA</b>	Supervisory control & data acquisition
<b>SoC</b>	State of charge
<b>UFE</b>	Unaccounted for energy
<b>WDRU</b>	Wholesale demand response unit

# APPENDIX B

BDU Readiness Focus Group participation and administration



# Participation and administration

This Focus Group is open to nominations from participants.

## Participation



- Aimed at participants with existing and planned grid scale batteries and bidding system vendors, that are affected by the IESS rule and will transition from dual to a single DUID.
- Nominees with suitable experience and expertise, for example regulatory managers, trading and product managers.
- A detailed understanding of the IESS reform initiative and authority to participate in discussions about implementation activities is required.
- One primary and one alternative contact to be nominated

## Format



- Short term Focus Group under NEM Reform Implementation Forum (IF)
- Readiness and transition related risks and issues escalated to IF. Outcomes from Focus Group reported back to IF.
- Collaborative and consultative rather than a decision-making group
- Focus on readiness-related matters rather than debating specific policy.

## Meetings



- Video conference
- Monthly cadence (last 2023 meeting in Nov, recommence Feb 2024)
- 1.5hr duration
- Additional meetings as required.

## Administration



- Meeting material distributed prior
- Minutes and presentations made publicly available.

**ACTION:** Feedback and alignment on the approach is welcome.

# APPENDIX C

NEM Reform Program Engagement calendar



# Upcoming engagements

January						
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				

February						
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			

March						
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

April						
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 Fourm	
Reform Delivery Committee	
Reform Delivery Committee Collaborative Workshop	
Program Consultative Forum	
Electricity Wholesale Consultative Fourm	
Implementation Forum	
Industry Testing Working Group	

Other Forums	
Electricity Retail Consultative Forum	

Other	
National Public Holiday	
State/Territory Public Holiday	

AEMO's office closure 26 Dec – 29 Dec 2023.

Note: All NEM Reform related committees, forums and working group invitations for CY2024 have been issued and are referenced on [AEMO's industry calendar](#).

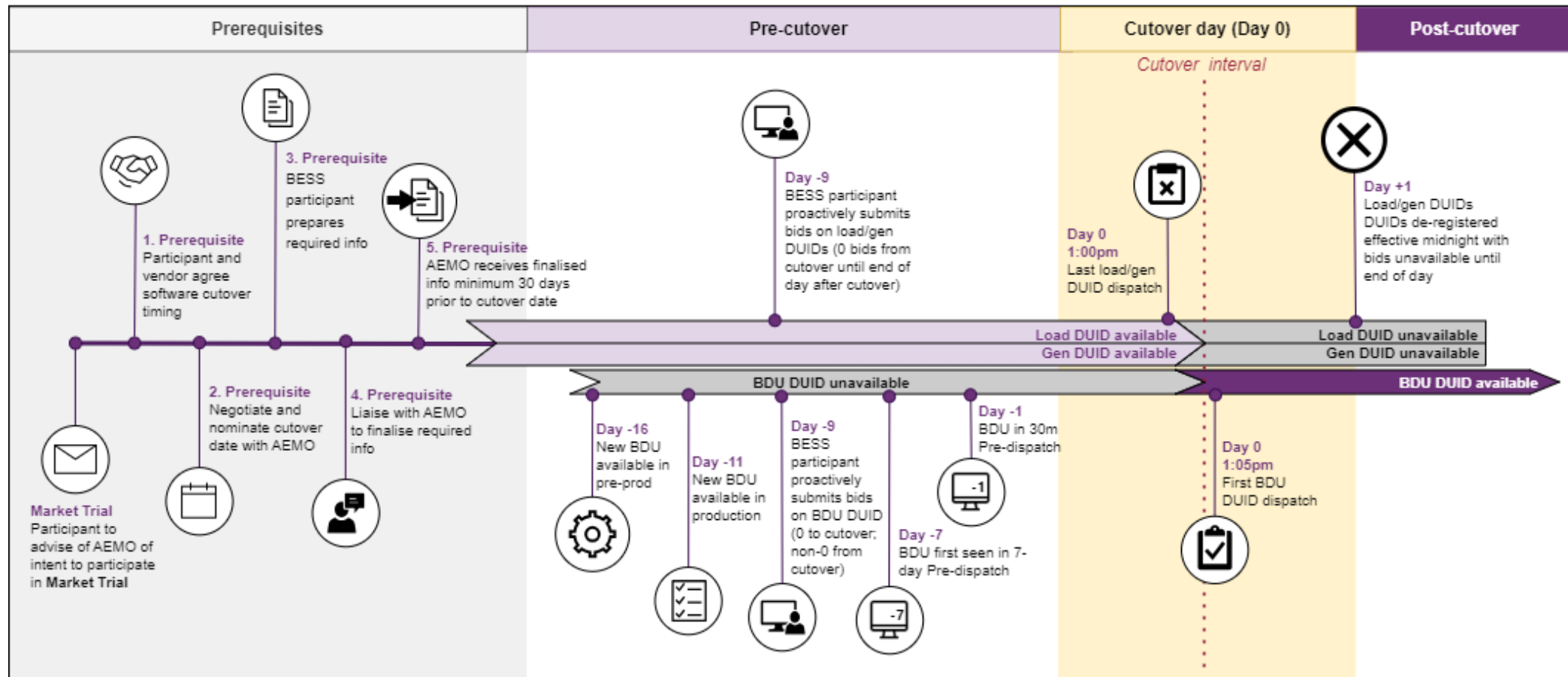
# APPENDIX D

I ESS Indicative Bidirectional Unit Cutover Timeline



## IESS Indicative Bidirectional Unit Cutover Timeline

This diagram outlines the high-level approach AEMO intends taking to cutover existing batteries with dual DUIDs to a new, single bidirectional DUID.



### Process notes:

- Cutover to occur during the transition period: 3 June 2024 - 3 March 2025.
- Days and times depicted are indicative only and are all day types, i.e., not business days.
  - First possible instance of Day -16 is 3rd April 2024 (Market Trial start).
  - First possible instance of Day -11 is 3rd June 2024 (Rule effective date).
- Should BESS participants like to take part in Market Trial, the prerequisites listed above must be complete before Market Trial commences 3rd April 2024.
- AEMO must receive all info (i.e., no further changes required by AEMO or participant to data) necessary to transition no later than 30 days prior to the intended cutover date. Info required will vary per participant and their registration date, details TBC.