

# NEM Reform Industry Testing Working Group

Meeting #12  
24 January 2024



# 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 and present.**

# Agenda

#	Time	Topic	Presenter
1	10:30-10:35am	<b>Welcome</b>	Chris Fleming
2	10:35-10:40am	<b>Actions &amp; Feedback from Previous Meeting</b>	Chris Fleming
3	10:40-10:45am	<b>March 2024 Metering Exemptions Testing Update</b>	Chris Fleming
4	10:45-10:55am	<b>Pre-prod refresh activities and timings</b>	Chris Fleming
5	10:55-11:15am	<b>IESS June 2024 Market Trial Plan Review</b>	Greg Minney / Michael Clements
6	11:15-11:25am	<b>Upcoming Engagements</b> <ul style="list-style-type: none"><li>Stakeholder Sentiment Survey - Verbal Update</li></ul>	Monica Morona
7	11:25-11:30am	<b>General Questions and Other Business</b> <ul style="list-style-type: none"><li>ITWG representation (Verbal update)</li></ul>	Greg Minney

**Appendix A: Competition law meeting protocol**

**Appendix B: Industry Testing Approaches**

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

## 2. Actions & Feedback from Previous Meeting

# Actions & Feedback from Previous Meeting

(Ref: Item = Meeting number/Agenda item number/Ref)

#	Topic	Action	Responsible	Status
11.4.0.1	March 2024 Metering Exemptions Testing Approach	AEMO to confirm when participants can expect the finalisation of the r44 schema definition.	AEMO	Completed
11.5.0.1	IESS June 2024 Market Trial Planning Approach	Participants to provide feedback scenarios and phase scope for the industry test and market trials by mid-January 2024, allow for consideration in the establishment of the IESS Market trial plan.	Participants	Completed

The latest meeting minutes and materials are available on the [NEM Reform Industry Testing Working Group](#) webpage.

# 3. March 2024 Metering Exemptions Testing Update

# Metering Exemptions Industry Testing Update

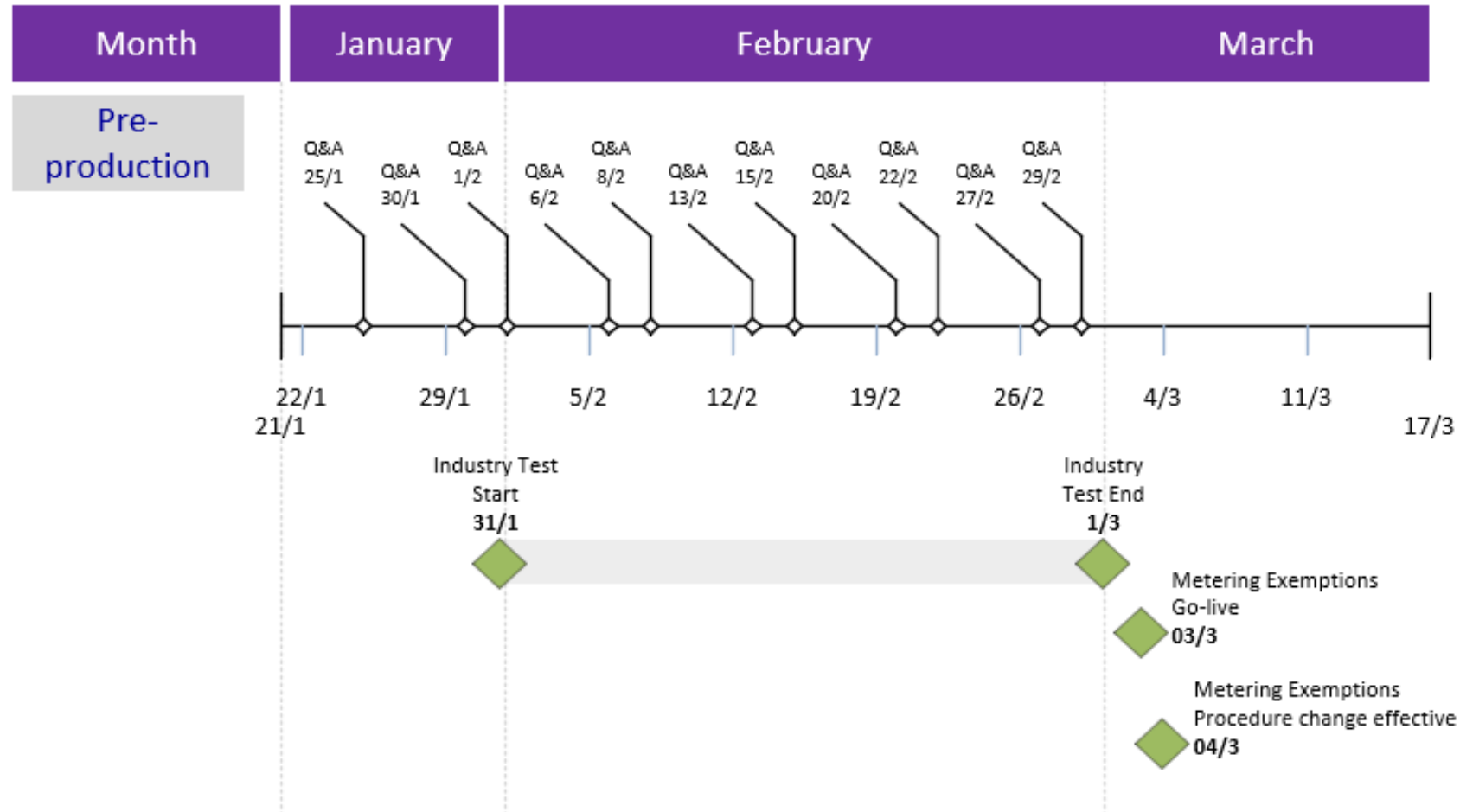
- Final version of the r44 B2M Schema has been published and can be found [here](#).
- MSATS r44 B2M schema changes were deployed into Pre-prod 5/12.
- MSATS defect release in preprod is being planned for 30<sup>th</sup> January.
- Informal Industry Testing
  - Commenced on 04/10/23 and will continue thru to the end of January 2024.
  - Will give participants an opportunity to shakedown their application changes and new business processes supporting the Metering Exemption automation.
- Formal Testing
  - Will run from 31/01/24 to 1/03/24.
  - Twice weekly Q&A sessions will recommence on Thursday 25/01.
  - Testing will not be structured but MCs are encouraged to ensure that they can manage their Metering Exemption processes via the new UI or by the new APIs.
  - Participants can confirm receipt CR5101 notifications.
  - AEMO will support the formal testing by advancing the statuses of exemptions on request.
- A selection of production metering exemption data has been loaded into preprod for each MC. Additional data, based on existing production exemptions, can be loaded on request by email to [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au).



# Metering Exemptions Industry Testing Update

- Industry Test Requirements
  - API users will need to obtain TLS Certificates (Note: Pre-Prod and Prod have separate TLS Certificates) [TLSCertificateManagement \(aemo.com.au\)](https://aemo.com.au/TLSCertificateManagement).
  - A selection of production metering exemption data has been loaded into preprod for each MC. Additional data, based on existing production exemptions, can be loaded on request by email to [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au).
  - Participants who can't see the Metering Exemption functionality in MSATS or the Markets Portal need access to be granted **Meter Exemptions** access to at least 1 of their MSATS role assignments by their MSATS PA (Participant Administrator).
  - Further links and FAQs for Metering Exemptions testing can be found in the Weekly March release Q&A packs. If you aren't currently receiving these, you can request them by emailing [NEMReform@AEMO.com.au](mailto:NEMReform@AEMO.com.au)
- Draft Go-live plan for March 2024 has been distributed to participants for review. Feedback from Participants requested by 22/01/2024. The final version is due 06/02/2024.
- Production effective date for Metering Exemptions 4/03/24.

# Metering Exemptions Industry Test Timeline



# 4. Pre-Prod Refresh

# Pre-Prod Refresh for Market Trial

## Proposed Dates and outage Timings



- Pre-prod Wholesale and Retail to be refreshed from production from 4 March
- Outage window will be 4th March to COB 8th March 2024.
- Two additional outages are being planned for late February (dates TBC) to enable some critical software and infrastructure updates. These outages will each be less 8 hours in duration.

## Effective dates of refreshes

- Pre-prod Wholesale will be refreshed from production as at 7<sup>th</sup> February.
- Preprod Retail will be refreshed from production as at 4<sup>th</sup> March.
- On completion of the refreshes, several settlement runs will be re executed in MSATS to align the data in the Wholesale system.

# 5. IESS June 2024 Market Trial Planning Approach

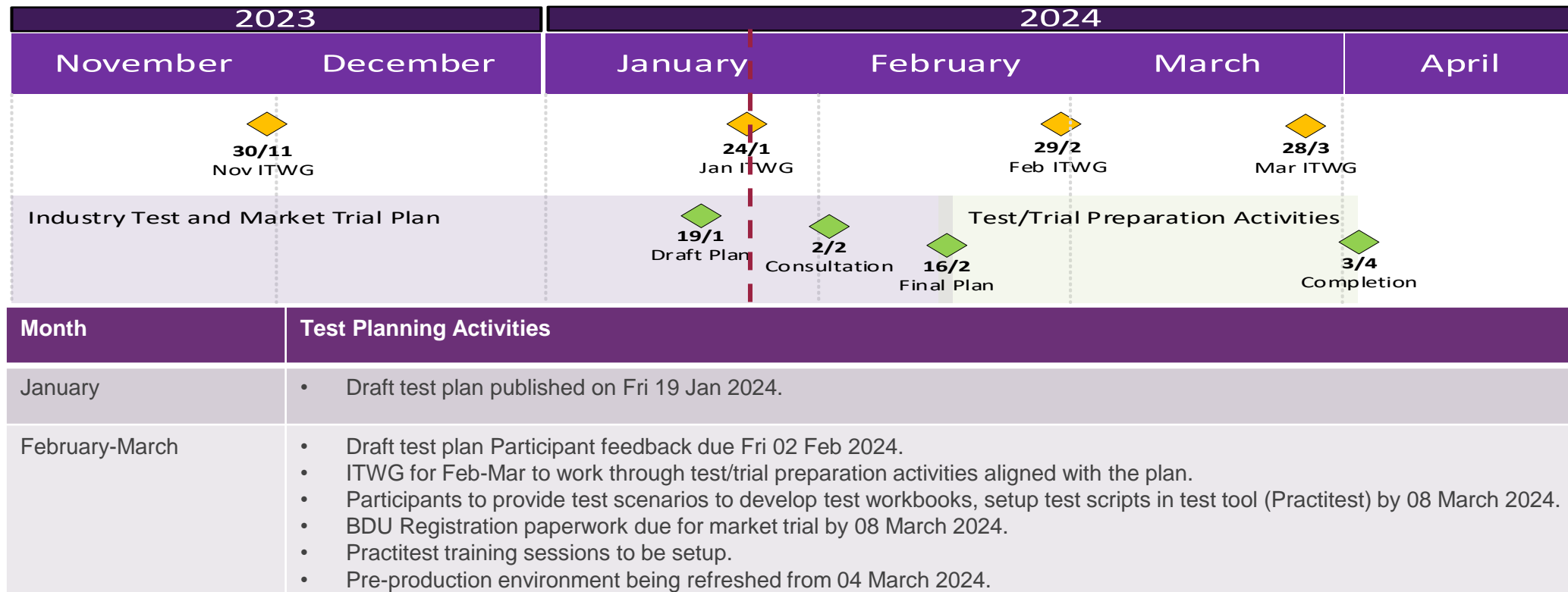
# Integrating Energy Storage Systems (IESS)

Implementation date	Change	Description
Fri 31 Mar 2023	 Small generation aggregators (SGA) providing FCAS	<b>Complete.</b> Aggregators of small generating and storage units can now provide ancillary services (if they choose to do so).
Wed 09 Aug 2023	 Aggregated dispatch conformance (ADC)	<b>Complete.</b> <ul style="list-style-type: none"> <li>Aggregate Systems can choose to register for ADC</li> <li>ADC provides an Aggregate System with the flexibility to conform to its dispatch instructions by dispatching energy at the connection point from any combination of its units (with some restrictions), rather than individually on a unit-by-unit basis</li> <li>Includes minor changes for Battery Energy Storage Systems (BESS). AEMO will temporarily be using the ADC mechanism to monitor net dispatch conformance for a BESS across its scheduled generating unit/scheduled load pair, as a Target Aggregate.</li> </ul>
Sun 02 Jun 2024	IESS retail and settlement changes	Significant changes to the calculation method to be used for Non-Energy Cost Recovery (NECR): <ul style="list-style-type: none"> <li>Recovery calculations are to consider the gross (consumption separate from generation) energy amounts of all participants, rather than current approach using net energy (generation – consumption) of specific participant types</li> <li>Major settlements database structure changes are required to enable the new calculations, these changes will flow into the Data Model and affect: <ul style="list-style-type: none"> <li>Participant reconciliation and reporting activities</li> <li>AEMO data provision</li> <li>Embedded network management changes to ensure that the parent has the appropriate gross energy volumes available for settlement.</li> </ul> </li> </ul>
Sun 02 Jun 2024 (IRP) Mon 03 Jun 2024 (BDU)	Registration, bidding and dispatch changes	<ul style="list-style-type: none"> <li>Introduction of Integrated Resource Provider (IRP) participant type</li> <li>Bidirectional unit (BDU) bidding and dispatch, with impacts for BDU participants and bidding system vendors/developers.</li> </ul>

- On 02 Dec 2021, the AEMC made a Final Determination on the IESS rule. The change seeks to better integrate storage and aggregate systems into the National Electricity Market (NEM).
- IESS rule comprises of 4 distinct high-level changes - the first 2 have been implemented and delivered.
- IESS industry testing and market trials plan relates to the IESS June 2024 rule commencements.
- Final [Industry Testing and Market Trial strategy](#) has been completed and published, in consultation with industry.

# IESS June 2024 Industry Test and Market Trials Planning

- As the draft plan has been sent on the 19/01, we are seeking feedback on the following slides we are going to present.
- Proposed dates and participant considerations of the scope/objectives for each test phase will be provided in the next slides. This will include testing scenarios and workbook discussions. AEMO is asking feedback from participants on this which can be sent through the following channels:
  - [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au) & [IESS@aemo.com.au](mailto:IESS@aemo.com.au)



# IESS June 2024 Industry Test and Market Trials Test Scope

- From the [Industry Testing and Market Trial strategy](#), the scope of testing was divided into 3 phases as detailed in the subsequent table.
- Adjustments have been made to the timings for each of the phases based on previous feedback.

Test Phase	Timing	Test Scope	Participants
<b>Phase 1</b> – IESS standing data changes	02 April	<ul style="list-style-type: none"> <li>• Test registration changes</li> <li>• Test metering standing data changes and related changes</li> <li>• Test that impacted applications can accommodate retrospective changes for dates prior to cut over date</li> <li>• Confirm cutover / commencement processing</li> </ul>	FRMPs, market generators, market customers, IRPs, SGAs, Market ancillary service providers, network service providers, metering service providers, embedded network managers
<b>Phase 2</b> – Settlements & Prudential Calculations	2 April – 24 May 2024	<ul style="list-style-type: none"> <li>• Population of EMMS Data Model 5.3 that will affect participant reconciliation and reporting activities, and AEMO data provision</li> <li>• Confirm existing Net calculation methodology and reporting is not impacted for periods up to 02 June 2024</li> <li>• Confirm shift to new gross calculation methodology and reporting is reflected in settlements for periods post 02 June 2024</li> <li>• Execute a mix of daily, interim, final and revision bill runs</li> <li>• Provide participant RM Reports to support participant settlement reconciliation processes</li> <li>• Provide participants confidential settlement and billing reports for executed settlement runs</li> <li>• Confirm the Direction and Ancillary Service recovery changes under the new NECR logic</li> <li>• Confirm the market fee calculations under the new database structure</li> <li>• Confirm participants can access information in prudential dashboard and forecast dashboard under new methodology</li> </ul>	FRMPs, market generators, market customers, IRPs, SGAs, Market ancillary service providers, network service providers, metering service providers, embedded network managers
<b>Phase 3</b> – Bidirectional Unit bidding and dispatch	15 April – 24 May 2024	<ul style="list-style-type: none"> <li>• Confirm ability for 1 DUID BDU to bid and be dispatched</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>	Market Generations (Battery – Gen Only), Market Customers (Battery – Load Only)



# IESS June 2024 Industry Test and Market Trials Summary – basis for Test Plan Draft

Test Phase	Timing	How we are testing proposed scope	Participants
<b>Phase 1</b> – IESS standing data changes	02 April	<ul style="list-style-type: none"> <li>• Testing cutover process of SGAs to IRP and de-generators using the bulk data tool.</li> <li>• Participants confirming Registration &amp; Market Standing Data Changes are reflected correctly. This will include New Classification Code (NCC).</li> </ul>	FRMPs, market generators, market customers, IRPs, SGAs, Market ancillary service providers, network service providers, metering service providers, embedded network managers
<b>Phase 2</b> – Settlements & Prudential Calculations	2 April – 24 May 2024	<ul style="list-style-type: none"> <li>• Pre mock go-live settlement runs (regression using old settlement method):               <ul style="list-style-type: none"> <li>○ Daily &amp; estimation runs</li> <li>○ 1 Initial run (03/02 - 07/02) to update prudential dashboard.</li> <li>○ 1 Final (WK5)</li> </ul> </li> <li>• Post mock go-live settlement runs (New Settlement Method):               <ul style="list-style-type: none"> <li>○ 1 initial run (03/02 – 07/02) (old settlement method)</li> <li>○ 1 Initial run (08/02 - 12/02) covering old and new settlement method)</li> <li>○ 1 initial run (11/02 - 15/02) covering all new settlement method)</li> <li>○ 2 preliminary settlement run's (Billing week 7&amp;8) using new settlement method.                   <ul style="list-style-type: none"> <li>▪ Participant to confirm direction and ancillary service recovery changes under the new NECR logic.</li> </ul> </li> <li>○ 2 Final settlement runs (Billing week 7&amp;8) using new settlement method.</li> <li>○ 2 R1 settlement runs (Billing week 7&amp;8) using new settlement method.</li> </ul> </li> <li>• Prudential dashboard updated for participants during this period.</li> <li>• Participants to review data model &amp; reports after each settlement run.</li> <li>• Participants to confirm the market fee calculations under the new database structure.</li> </ul>	FRMPs, market generators, market customers, IRPs, SGAs, Market ancillary service providers, network service providers, metering service providers, embedded network managers
<b>Phase 3</b> – Bidirectional Unit bidding and dispatch	15 April – 24 May 2024	<ul style="list-style-type: none"> <li>• Simulated Cutover               <ul style="list-style-type: none"> <li>○ Selected participant transition from 2DUID to 1DUID</li> </ul> </li> <li>• Participants to confirm bidding on new BDU</li> <li>• Participants to confirm dispatch instructions and review submitted bids</li> </ul>	Market Generations (Battery – Gen Only), Market Customers (Battery – Load Only)

# Test Scenarios for Market Trial

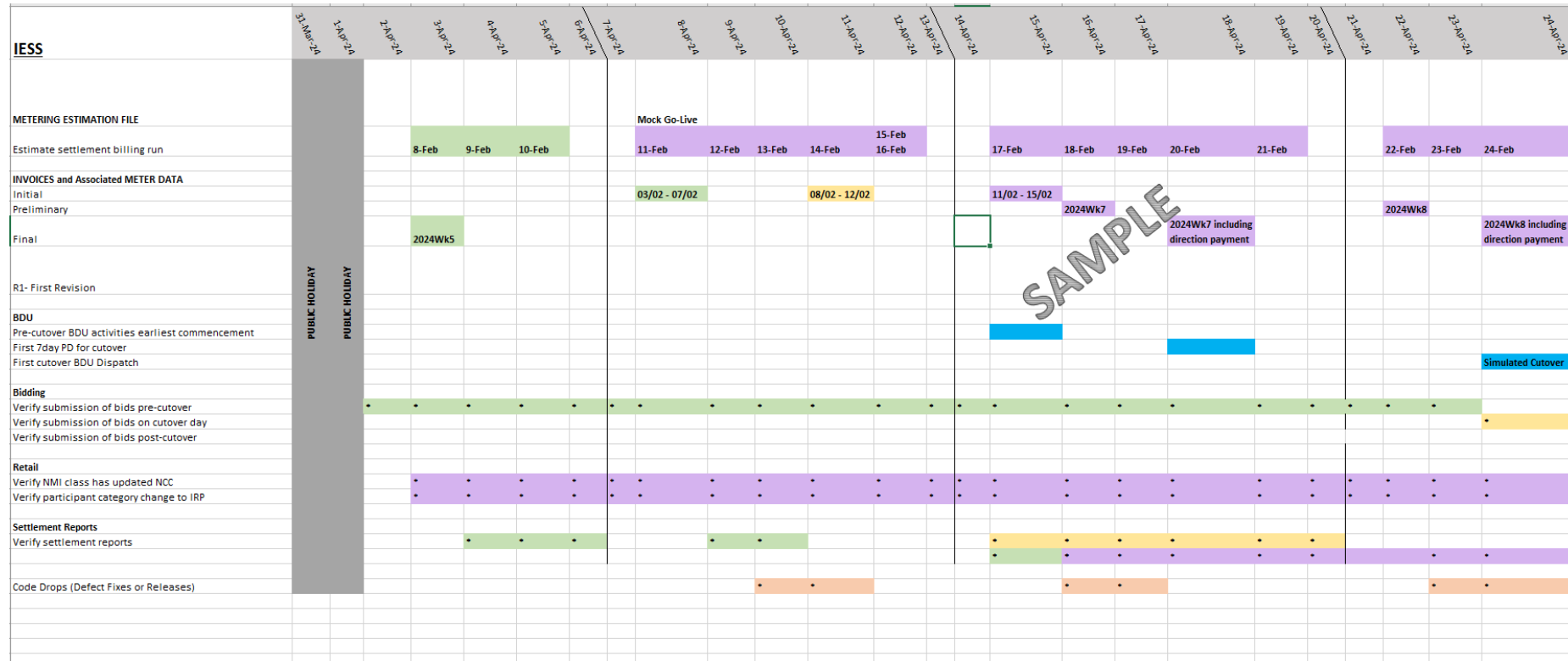
These are the proposed scenarios for each of the phases during market trial. Please review and start thinking which test scenarios you will be executing. This information will need to be used to form the market trial workbook and setup the testing tool (Practitest).

**Feedback on the test scenarios due on Fri 08 March 2024.**

Type	DBs - Reason for Market Trials	TS unique #	Reference Doc	EZE Test Scenario	Market
<b>PHASE 1 (2 APRIL 2024 - 12 APRIL 2024)</b>					
IRP	New IRP customer category	IRP01	4.1.2	Existing Participant converting from SGA to IRP	AEMO, FRMP, Generator
		IRP02	4.2.1, 4.2.2	New IRS Participant converting from IRS to IRP	AEMO, FRMP, Generator
		IRP03	4.3.1	Existing IRS (BESS and pumped hydro) to IRP	AEMO, FRMP, Generator
		IRP04	4.3.1	Existing Non-Customer Load Participants to IRP	AEMO, FRMP, Generator
		IRP05	4.3.2	Non-transitioning generating systems to IRP	AEMO, FRMP, Generator
NCC		NCC01		NCC from GENERATR to DGENERATR.	AEMO, FRMP, Generator
		NCC02		Process transactions with new NCC code	AEMO, FRMP, Generator
<b>PHASE 2 (3 APRIL 2024 - 6 MAY 2024)</b>					
Settlements	Prudential Daily files (estimation)	S01		Process daily settlement runs	FRMP, Generator
	Prelim	S02		Process Preliminary settlement runs	FRMP, Generator
	Final	S03		Process Final settlement run	FRMP, Generator
	Revision 1	S04		Process Revision 1 settlement run	FRMP, Generator
<b>PHASE 3 - (19 APRIL 2024 - 6 MAY 2024)</b>					
		BDU01	Pre-cutover	BESS Participant submit 0 bids on BDU	AEMO, Generator
		BDU02	Pre-cutover	BESS Participant submit real bids on gen DUID's	AEMO, Generator
		BDU03	Pre-cutover	BESS Participant submit real bids on load DUID's	AEMO, Generator
		BDU04	Cutover	BESS Participant submit real bids on load DUID dispatch until cutover time	AEMO, Generator
		BDU05	Cutover	BESS Participant submit real bids on gen DUID dispatch until cutover time	AEMO, Generator
		BDU06	Post-cutover	BESS Participant submit real bids on BDU DUID (2 duid to single bdu)	AEMO, Generator
		BDU07	Post-cutover	BESS Participant submit bids on load DUID to simulate withdrawal from market	AEMO, Generator
		BDU08	Post-cutover	BESS Participant submit bids on gen DUID to simulate withdrawal from market	AEMO, Generator
		PASA01	Pre-cutover	Submit MTPASA offer submission for BDU	AEMO, Generator
		PASA02	Pre-cutover	Submit MTPASA offer submission for DUID	AEMO, Generator
		PASA03	Cutover	Submit MTPASA offer submission for DUID	AEMO, Generator
		PASA04	Post-cutover	Submit MTPASA offer submission for BDU DUID	AEMO, Generator

# Test Schedule

A schedule has been developed that details the testing activities during market trial for all the 3 phases, this includes feedback from participants from the last ITWG.



Feedback on the test schedule due on Fri 08 March 2024.

**Legend:**  
 Green represents old settlement calculations  
 Yellow represents transition period  
 Purple represents new settlement calculations  
 Blue represents bdu testing  
 Version: Draft 0.1 published for discussion for Jan ITWG

# Market Trial – Pre-Prod Mock Go-Live

- 2 weeks of Retail data from post mock go-live date (11 Feb 2024).
- BDUs will be created in line with market trial testing dates. As there is no retail data during this period BDU’s will be included in any settlement runs.
- Refresh of the pre-production environment is currently planned between March 4-10, 2024

Description	Prod rule commencement date	Preprod rule commencement date
IESS Retail & Settlement changes	Sunday 02 Jun 2024	Sunday 11 Feb 2024

IESS June 2024 Data Plan Market Trials										
Retail Snapshot - Mon 04 Mar 2024										
Wholesale Snapshot - Wed Feb 07 2024										
Refresh will be undertaken Mon 04 Mar 2024 - Sun 10 Mar 2024										
Dates	Jan	Jan	Jan	Feb	Feb	Feb	Feb	Feb	March	
	14-Jan-24	21-Jan-24	28-Jan-24	04-Feb-24	11-Feb-24	18-Feb-24	25-Feb-24	04-Mar-24		
Sunday Start of Week										
	Retail Go-Live aligns to Wholesale proposed Sun 11 Feb 2024									
Domain										
Retail	Retail Data				Go Live					
Settlements	Wholesale Data			07-Feb-24	Go Live					
Prudentials										
NEM Scheduling	Pre Go Live		Pre Go Live	Pre Go Live	Pre Go Live	Post	Post			
	-20Wk to -4 Wk		-3 Wk	-2 Wk	-1 Wk	1 Wk	2 Wk			

# BDU Market Trial Milestones

- BDU registration for pre-production concludes 08/03/2024
- Environment refresh 04/03/2024 – 08/03/2024.
- Brownfield BDU units available in pre-production 03/04
- Simulated cutover starting from 15/04/2024.
- Market trial ends 24/05/2024.



# BDU Registration for Market Trial

- Participants who've submitted their BDU registration paperwork by **Fri Mar 08, 2024**, will be able to test BDU market trial activities.
- Please initiate this process before the deadline.
- BDU registration form is due out to participants mid-February.
- AEMO is asking feedback from participants on this which can be sent through the following channels:
  - [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au)
  - [IESS@aemo.com.au](mailto:IESS@aemo.com.au)

# Market Trial Test Plan – Feedback Requested

As the market trial test plan has now been published Fri 19 Jan 2024.

## Test Plan feedback is due Fri 02 Feb 2024

AEMO is seeking feedback for the following areas:

- Workbook scenarios
  - Please let us know which scenarios from the workbook you are intending to execute.
  - Any additional scenarios if applicable.
- Any points clarification
- Scope/Timeline clarification
- Learning & Training
  - Practitests Training will be scheduled early March.

- AEMO is asking feedback from participants on this which can be sent through the following channels:
- [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au)
- [IESS@aemo.com.au](mailto:IESS@aemo.com.au)

# Participant Development Support Environment (PDSE)

- The [Participant Development Support Environment fact sheet](#) was published.
- This environment is additional to AEMO's pre-production and allows market generators, market customers and market small generation aggregators to test their system changes against beta versions of key AEMO system changes in advance of the IESS market testing period.
- The PDSE will be available for participants as follows:
  - Settlements – from 15/12
  - BDU – from 22/01.
- The PDSE has not been built to replicate or replace pre-production. It is a dedicated IESS environment to support participants in the early stages of their development work, particularly the development testing of interfaces to AEMO's updated market systems data models.
- Participants wishing to use the PDSE must be a registered participant/user in pre-production.



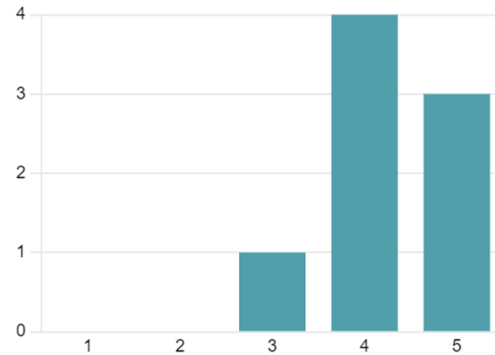
# 6. Upcoming Engagements

# Stakeholder Sentiment Survey

How would you rate AEMOs engagement via the Industry Testing Working Group in 2023?

[More Details](#)

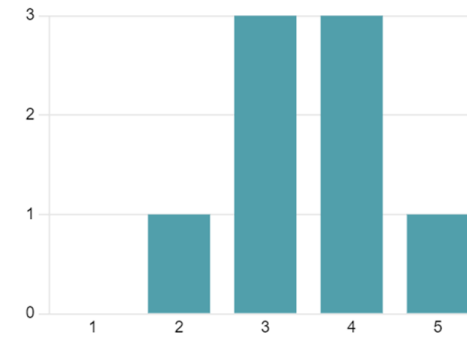
4.25  
Average Rating



Do you feel that AEMO engagement has adequately allowed for industry implementation and readiness actions?

[More Details](#)

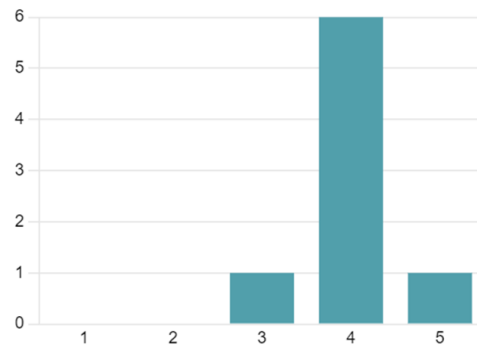
3.50  
Average Rating



Do you feel that AEMO has covered the relevant industry topics and issues?

[More Details](#)

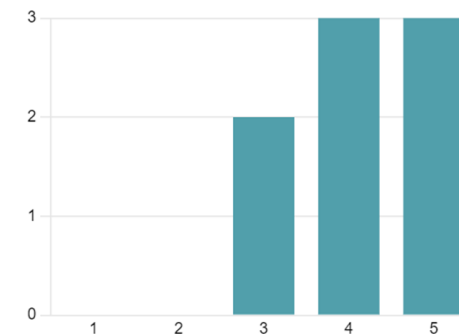
4.00  
Average Rating



Is the agenda and meeting frequency supporting the needs of forum members to understand the Program requirements?

[More Details](#)

4.13  
Average Rating



# 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	

## NEM Reform Initiative Specific

Foudational and Strategic Initaitives Focus Group	
Intergrated Energy Storage Systems BAU Focus Group	

## Other Forums

Electricity Retail Consultative Forum	
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## Other

National Public Holiday	
State/Territory Public Holiday	

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

# Stakeholder Sentiment Survey

# NEM Reform Program 2023 to 2024

Complete



Release	Initiatives	Status
Mar-23	Integrating Energy Storage Systems (Initial release)	Delivered
	Stand Alone Power Systems (SAPS) Market Stand-Alone Power System Resource Provider (MSRP) Registration	Delivered
MAY-23	CDR (excluding LCCD)	Delivered
	B2B v3.8 and other ICFs	Delivered
JUN-23	SAPS	Delivered
AUG-23	Integrating Energy Storage Systems (ADC)	Delivered
	Fast Frequency Response - Dispatch & Reg	Delivered
OCT-23	Fast Frequency Response	Delivered
	5 Minute load profile	Delivered
	Increased MT PASA Information	Delivered
NOV-23	CDR (LCCD), CDR Ph3, MSDR compliance Holiday	Delivered

Release	Initiatives	Status	Impacted Stakeholders
MAR-24	Metering Exemptions (MSDR)	New date On Track	Retailers MC MP/MDP
JUN-24	<a href="#">Integrating Energy Storage Systems [Final]</a>	Amber	IRPs NSPs FRMP MC/MP/MDP MSRPs ENMs Vendors
SEP-24	Retail Market Improvements	TBC	FRMP MDP LNSP
DEC- 24	<a href="#">Frequency Performance Payments</a> (Non-Financial)	On track	Generators, Scheduled Loads
JUN-25	<a href="#">Frequency Performance Payments</a> (Financial Commencement)	On track	Generators Market Customers



Ongoing

# Going beyond engagement

The NEM Reform Program engagement approach has evolved over time. Building on established engagement structures, the program has evolved to deliver integrated planning for participants and prioritise participant facilitation to support participants with the necessary information and artefacts that underpin their own readiness preparations.

## 2024 STAKEHOLDER FOCUS

### Establishing Engagement

#### Establish information channels

Media Releases, Newsroom articles, Newsletters, Website, Mailbox, infographics, Fact sheets & Tailored materials.

#### Establish consultation channels

Industry briefing & information sessions, Consultative forums, One 2 one meetings, Surveys

#### Stakeholder involvement

Establishing working groups and focus groups, to ensure stakeholder perspectives are understood and provide feedback on the outcome of stakeholder contributions.

#### Establish collaborative channels

(via EWCF, ERCF, PCF and Implementation Forum to facilitate and support industry readiness)

### Planning uplift

#### NEM Reform Implementation Roadmap

(Visibility of implementation roadmap, long-term planning, bundling, sequencing and prioritizing of initiatives)

#### Reform Delivery Committee (RDC)

(Leveraging industry insight to maintain the Implementation Roadmap)

#### NEM Reform Program Governance

(manage implementation impacts of policy/rules changes, stage gate, investment commitment)

#### Informed Go-Live Date Process

(High-level implementation design and participant impacts to assist in setting an informed go-live date for the Rule)

### Participant delivery facilitation

#### Participant Impact Assessments & Development Timelines / Requirements

(identify impacts to participants and the timeline needed for their development)

#### Participant technical information

(Provide participants with tech spec and interface information, testing support and environments, etc)

#### Participant self service

(Self-serve videos outlining implementation design, timing and participant impact assessment)

### Industry Readiness

#### Industry readiness requirements

(Establish L1/L2 milestones, Readiness criteria, Readiness monitoring and reporting, Contingency Plans)

#### Industry Test, Transition & Go-Live

(Plan and facilitate industry testing and market trial, define industry transition plans, define/manage industry-wide go-live)

# NEM Reform Program – 2023 Review

## NEM Reform program 2023 – Program Review ‹‹‹

- 2023 has been an intensive, but successful, year for Reform Delivery.
- Collectively, we have successfully deployed a large volume of reforms
- The November 2023 release marks the final delivery release for this calendar year.

## NEM Reform program 2023 – Forward Planning ›››

- This presents us with an opportunity to reflect on our delivery process and look for opportunities to improve the process for our 2024 delivery schedule.
  - Undertaking a review of our 2023 program processes to help inform 2024 delivery
  - The review should leverage industry insights
  - The review should include, but not be limited to a review of our engagement, planning, delivery and readiness process
  - The data collected as part of this review will be used to inform improving our process

# 8. General Questions and Other Business



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[NEM Reform Industry Testing Working Group](#)





# Appendix A: Competition law meeting protocol

# AEMO Competition Law - Meeting Protocol

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

Participants in AEMO discussions **must**:

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

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

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

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

# Appendix B: Industry Testing Approaches

# Approaches to Industry Testing

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

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

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

The approaches to Industry testing are described as:

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

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

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

# Appendix C: Industry Testing Q&A

# Q&A for Industry Testing

Question	Answer
How will the change to the NMI be sequenced in the BDU transition (e.g. would the load NMI be decommissioned first before it becomes the generator NMI)	Details on transition specified in BDU Transition Plan
Where can I find educational material to upskill prior to the Market Trial	Educational materials are available in Participant Toolbox <a href="#">Participant Toolbox</a> BDU Readiness Focus Group also provides information.
Will AEMO have enough contingency to run additional settlement runs if fixes are required?	There will be multiple runs of settlements and code drops in between for fixes. The last week has also been left blank for any additional reruns of settlements. Refer to: 5.2 Test Schedule
Can we remove Initial settlement runs from the Market Trial schedule to free up more time?	AEMO uses initials for prudential dashboard updates and is required for AEMO calculation purposes.
Can regression tests be run on some MSATS standing data changes and notifications that are not impacted by the NCC?	AEMO's plan is to send the notification for the impacted NCC's. Participants will have access to preprod to validate the changes during the market trial period. Participants may need to reach out to a meter data provider for any bilateral testing.

# Q&A for Industry Testing

Question	Answer
How many individual BDU's can be tested by participants as part of market trial	At this stage 1 BDU per participant is the plan.
How many direction payments will be applied during market trial	2 direction payments will be applied.
Is there a possibility in running a final or prelim using the old settlement method	Yes, we have updated the schedule to include a final at the start of market trial, this will use the old settlement method.
Can participants test post market trial for internal testing	Yes, post market trial you can utilise the system for you own testing, however AEMO will not be coordinating or managing any specific market trial testing during this time.
Is it possible to have defect fixes before running the next settlement run (if a problem is detected)	We have updated the schedule to incorporate defect fixes before each new settlement run. This will help the testing go smoothly.

# Appendix D: IESS Test Strategy Participant Feedback



# Participant Feedback

Participant feedback for AEMO's IESS Test Plan

AEMO QUESTION	PARTICIPANT FEEDBACK	AEMO RESPONSE
<b>PHASE 1 - IESS standing data changes</b>		
Is the timeframe sufficient to confirm the standing data changes are successful?	No timeframe has been provided by AEMO in this pack that we can see. The original suggestion of 4 weeks for the month of April would seem more than adequate.	We will run standing data on the first week. Beyond that period, you can confirm standing data changes during entire market trial period. Standing data updates from AEMO perspective will allow settlements from week 2. There is no impact to settlement runs if participants have not ingested the standing data changes into their system. Timeframe is described in test plan. Refer to: 3.2 Detailed Scope 5.2 Test Schedule
Are there any updates any participants want to make during this time?	No plans for Origin to make updates at this stage. But can AEMO confirm what sort of "updates" do you have in mind?  No  Yes - We will update impacted data points in our test environments.	Participants are welcome to make further standing data changes to their own internal testing.   AEMO is expecting updates into participant test systems.

# Participant Feedback

Participant feedback for AEMO's IESS Test Plan

AEMO QUESTION	PARTICIPANT FEEDBACK	AEMO RESPONSE
<b>PHASE 1 - IESS standing data changes</b>		
<p>What timeframe is needed to confirm the standing data changes are successful?</p>	<p>We would require 2 weeks of testing to confirm the standing data changes.</p> <ul style="list-style-type: none"> <li>• If the impacts are only data related then the testing would require 1-2 weeks to enable several rounds.</li> <li>• If the impacts are to data and downstream processes (We are currently assessing) then additional time would be needed of 3-4 weeks.</li> </ul>	<p>We will run standing data on the first week. Beyond that period, you can confirm standing data changes during entire market trial period.</p> <p>Standing data updates from AEMO perspective will allow settlements from week 2.</p> <p>There is no impact to settlement runs if participants have not ingested the standing data changes into their system.</p> <p>Timeframe is described in test plan. Refer to: 3.2 Detailed Scope 5.2 Test Schedule</p>
	<p>The Market Trial duration is enough.</p>	<p>N/A</p>

# Participant Feedback

Participant feedback for AEMO's IESS Test Plan

AEMO QUESTION	PARTICIPANT FEEDBACK	AEMO RESPONSE
<b>PHASE 2-Settlements &amp; Prudential Calculations</b>		
Do participants want to run a settlement run prior to IESS mock go live using the old settlement method (Regression).	<p>Yes (Multiple responses)</p> <p>We would prefer that at least a Prelim settlement run is performed using the old method. We do not use Initial runs.</p> <p>Note: We assume that these settlement runs will be using the same data that production settlement runs used, so a comparison between PreProd and Production settlement runs for the same settlement week and run type (e.g. Prelim) can be made, with AEMO able to account for minor discrepancies (e.g. some differences in meter data)</p>	<p>We have scheduled a prelim &amp; final use the old settlement period for comparison purposes during the first few weeks of Market Trials.</p> <p>Yes the settlement runs will be using the same data as production for the same periods.</p> <p>Refer to: 5.2 Test Schedule</p>
Are there enough settlement runs as we are running an initial, prelim, final and revision?	<p>If there are minimal to no issues, then this will be sufficient. If there are issues, then additional settlement runs may be required.</p> <p>At this stage it looks like enough runs.</p>	<p>Additional rerunning of settlement runs are available.</p> <p>Refer to: 5.2 Test Schedule</p>
Do participants want longer to review results between runs?	<p>The timeline does seem tight to review the results, and if there are issues found there does not seem to be any time for AEMO to make fixes before the next settlement run.</p> <p>Is AEMO's approach to run a settlement, apply any fixes, then run the next settlement, and so on?</p> <p>Based on the market trial calendar there appears to be enough time to identify if there is an issue. However, there is limited contingency for resolution and rerunning if issues are encountered.</p>	<p>There are multiple runs of settlements and code drops in between for fixes. The last week has also been left blank for any additional reruns of settlements.</p> <p>Refer to: 5.2 Test Schedule</p>

# Participant Feedback

Participant feedback for AEMO's IESS Test Plan

AEMO QUESTION	PARTICIPANT FEEDBACK	AEMO RESPONSE
<b>PHASE 2-Settlements &amp; Prudential Calculations</b>		
Do we plan for any re-run of settlements?	Is the question do we plan to re-run the Prelim (for example) again for the same settlement week, or to run it for a new settlement week? We suggest planning for contingency should additional settlement runs be required following any fixes	AEMO will rerun prelims posted as finals for any reruns required for testing. This can be done after a code drop if time permits however, we have the last week of market trial as contingency. Refer to: 5.2 Test Schedule
	Yes - defined 'as needed' for if issues arise.	AEMO will rerun prelims posted as finals for any reruns required for testing. This can be done after a code drop if time permits however, we have the last week of market trial as contingency. Refer to: 5.2 Test Schedule
Do participants want to see any extra settlement runs?	Only if there are issues that are not resolved within the current planned runs	If required, the contingency period will be available for any re-runs. Refer to: 5.2 Test Schedule
	Yes - if possible, within the schedule window.	If required, the contingency period will be available for any re-runs. Refer to: 5.2 Test Schedule
Is one direction payment enough for participants to review?	Origin would prefer two direction payments	Two direction payments incorporated into the schedule Refer to: 5.2 Test Schedule
	No - We would need to see 'one direction' payments as well as 'two direction'.	2 Direction payments have been incorporated into test schedule Refer to: 5.2 Test Schedule

# Participant Feedback

Participant feedback for AEMO's IESS Test Plan

AEMO QUESTION	PARTICIPANT FEEDBACK	AEMO RESPONSE
<b>PHASE 3 - Bidirectional Unit bidding and dispatch</b>		
Is transition of 1 BDU per participant for participants sufficient?	Yes	N/A
Are there other test scenarios participants wish to execute?	No <ul style="list-style-type: none"><li>• End of settlement run (2 BDU: 1 import and 1 export)</li><li>• Second run (1 BDU: both import and export)</li></ul>	N/A We will transition one per type in tranche1. Tranche2 is under consideration



For more information visit

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